



# HOENDEROP

Technische groothandel



# Catalog 2021





# Welcome to Hoenderop

Hoenderop is the maritime specialist that supplies and assists its international network of shipping industry dealers. As wholesalers, we are committed to keeping an up-to-date stock of wide-ranging marine supplies and ensuring their fast delivery. Thanks to our professional team of maritime experts, we can support dealers and provide personal advice. This ensures the end user is always guaranteed to receive the right item.

## Wide product range, fast delivery

The product range is constantly changing. Since our founding in 1975, customer demand has been our primary focus and it remains so to this day. This approach has propelled Hoenderop's growth to becoming the market leader in quality products for the commercial shipping industry. The fact that we have a permanent stock of over 10,000 items means our customers in inland shipping, maritime shipping and offshore sectors can count on fast delivery. Hoenderop takes care of orders heading for dealers in the Netherlands, Belgium, Germany, France and the United Kingdom.

## Always a solution

We stock an extremely diverse range of products. From helm seats and gangways to life-saving equipment, from pumps and hoses to ropes and rope accessories, deck equipment, navigation lights, cleaning supplies and much more besides - Hoenderop supplies it all. There's no such word as 'can't' here. Our team always looks for a solution. This positive can-do attitude is characteristic of this Rotterdam family business.

## Family firm in development

The second generation is now at the helm. Traditional values go hand in hand with innovation. The company is undergoing major developments in the areas of digitalisation and sustainability, all of which is geared towards making life easier for our customers and helping them achieve their goals.

## Showroom and advice

Hoenderop has large business premises on the Boelewerf in Ridderkerk. Our showroom, warehouse, workplace and office are all under one roof. The showroom houses a wide range of helm seats and stainless steel products. End users and dealers are always welcome to come and visit. Our team is ready and waiting with fresh coffee and professional advice.



Est. 1975

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### Design

Reclameloods Rotterdam BV /  
Senang Vormgeving | Consultancy  
www.senangvormgeving.nl

### Production

Senang Vormgeving | Consultancy  
info@ www.senangvormgeving.nl  
www.senangvormgeving.nl

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# Group 0

Rope and rope accessories  
Chain and steel wire  
Hoisting equipment and ratchet  
straps  
Shackles  
Block, pulley, winch, hoist, jack





## ROPE LENGTH AND BREAKING LOAD ACCORDING TO ES-TRIN

### ES-TRIN Article 13.02, paragraph 3 Other equipment

3. In addition, the equipment shall include at least:

a) mooring cables:

Vessels shall be equipped with three mooring cables. Their minimum lengths shall be at least the following:

first cable : shiplength + 20 metres, but not more than 100 metres,

second cable : 2/3 of the first cable,

third cable : 1/3 of the first cable.

The shortest cable is not required on board vessels whose shiplength is less than 20 m.

The cables shall have a breaking load (Rs) that is calculated using the following formulae;

For LxBxD up to 1000 m<sup>3</sup>:

$$R_s = 60 + \frac{L \times B \times D}{10} = \text{Kilo Newton}$$

For LxBxD greater than 1000 m<sup>3</sup>:

$$R_s = 150 + \frac{L \times B \times D}{100} = \text{Kilo Newton}$$

1 kilo Newton x 102 = kilogrammes

1 kilogramme / 102 = kilo Newtons

For the required cables a certificate in accordance with European Standard EN 10204 : 2004, under No 3.1, shall be on board.

**These cables may be replaced by ropes having the same length and breaking load.**

The minimum breaking load of these ropes shall be indicated in a certificate.

b) towing cables;

Tugs shall be equipped with a number of cables that are suitable for their operation.

However, the main cable shall be at least 100 m long and have a breaking load, in kN, not less than one third of the total power, in kW, of the main engine(s).

Motor vessels and pushers that are also able to tow shall be equipped with a towing cable that is at least 100 m long and whose breaking load, in kN, is not less than one quarter of the total power, in kW, of the main engine(s).

## ORKA HMPE, 250/1000 METRE COILS



12 strand braided rope made from HMPE yarns.  
 The best alternative for heavy steel wires.  
 The strength of steel wire and the handling characteristics of rope.  
 The breaking load is higher and the weight is seven times lower than of steel wire.  
 These improved features are especially appreciated during towing and mooring of vessels.  
 HMPE rope floats.

colour : silver/grey  
 construction : 12-strand braided  
 weave : supple  
 strand structure : twined fibres  
 material : 100% high-grade HMPE  
 coating : special coating for better resistance to the weather and friction

ARTIKELNO	DIAMETER	WEIGHT PER 100/250M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.01.806	6 mm	2.0 / 4.9 kg	reel 250 m	47.07 kN	4.8 t
01.01.808	8 mm	3.4 / 8.5 kg	reel 250 m	71.59 kN	7.3 t
01.01.810	10 mm	6.0 / 15.0 kg	reel 250 m	105.91 kN	10.8 t
01.01.8101	10 mm	6.0 / 15.0 kg	reel 1,000 m	105.91 kN	10.8 t
01.01.812	12 mm	7.5 / 18.8 kg	reel 250 m	166.71 kN	17.0 t
01.01.8121	12 mm	7.5 / 18.8 kg	reel 1,000 m	166.71 kN	17.0 t
01.01.814	14 mm	10.4 / 26.0 kg	reel 250 m	195.15 kN	19.9 t
01.01.816	16 mm	12.9 / 32.3 kg	reel 250 m	230.46 kN	23.5 t

## ORKA HMPE, PER METER



12 strand braided rope made from HMPE yarns.  
 The best alternative for heavy steel wires.  
 The strength of steel wire and the handling characteristics of rope.  
 The breaking load is higher and the weight is seven times lower than of steel wire.  
 These improved features are especially appreciated during towing and mooring of vessels.  
 HMPE rope floats.

colour : yellow  
 construction : 12-strand braided  
 weave : supple  
 strand structure : twined fibres  
 material : 100% high-grade HMPE of European origin  
 coating : special coating for better resistance to the weather and friction

ARTIKELNO	DIAMETER	WEIGHT PER 100/200M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.02.118	18 mm	15,3 / 30,6 kg	per meter	270.0 kN	27.53 t
01.02.120	20 mm	20,0 / 40,0 kg	per meter	343.0 kN	34.98 t
01.02.122	22 mm	23,4 / 46,8 kg	per meter	400.0 kN	40.79 t
01.02.124	24 mm	28,4 / 56,8 kg	per meter	486.0 kN	49.56 t

## BOLLARD EYE, CERTIFIED

Bollard eye by certified splicer.



ARTIKELNO	DESCRIPTION
01.03.000	Bollard eye, certified



## ORKA-12, 220 METRE COILS

Much improved version of polysteel, and also extra reinforced with polyester yarns to reduce wear. Polysteel is a modern version of polypropylene, and over 60% stronger than polypropylene. Orka-12 rope floats.

colour : yellow and white  
 construction : 12-strand braided  
 weave : supple  
 strand structure : twined fibres  
 material : 100% high-grade polysteel with polyester



ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
<b>01.07.212</b>	12 mm	7.7 / 17.0 kg	coil 220 m	29.7 kN	3.03 t
<b>01.07.214</b>	14 mm	9.1 / 20.0 kg	coil 220 m	36.3 kN	3.70 t
<b>01.07.216</b>	16 mm	11.8 / 26.0 kg	coil 220 m	47.3 kN	4.82 t
<b>01.07.218</b>	18 mm	14.6 / 32.0 kg	coil 220 m	66.0 kN	6.73 t
<b>01.07.220</b>	20 mm	18.6 / 41.0 kg	coil 220 m	76.0 kN	8.52 t
<b>01.07.224</b>	24 mm	29.1 / 64.0 kg	coil 220 m	115.5 kN	11.78 t
<b>01.07.228</b>	28 mm	35.9 / 79.0 kg	coil 220 m	148.5 kN	15.14 t
<b>01.07.232</b>	32 mm	46.4 / 10.0 kg	coil 220 m	204.6 kN	20.86 t
<b>01.07.236</b>	36 mm	60.9 / 134.0 kg	coil 220 m	257.4 kN	26.25 t
<b>01.07.240</b>	40 mm	70.5 / 155.0 kg	coil 220 m	313.5 kN	31.97 t
<b>01.07.244</b>	44 mm	91.4 / 201.0 kg	coil 220 m	383.9 kN	39.15 t
<b>01.07.248</b>	48 mm	97.3 / 214.0 kg	coil 220 m	451.0 kN	45.99 t

## ORKA-12, SHORT LENGTHS

Much improved version of polysteel, and also extra reinforced with polyester yarns to reduce wear. Polysteel is a modern version of polypropylene, and over 60% stronger than polypropylene. Orka-12 rope floats.

colour : yellow and white  
 construction : 12-strand braided  
 weave : supple  
 strand structure : twined fibres  
 material : 100% high-grade polysteel with polyester

Complete mooring ropes with two spliced eyes.  
 Each length is neatly packed and finished.  
 All packaging is marked on the outside with diameter and length.  
 (Remaining length = cut length minus two 150 cm eyes, minus two 50 cm splices).



ARTIKELNO	DIAMETER	LENGTH REMAINING - CUT LENGTH
01.07.253	24 mm	26 m - 30 m
01.07.254	24 mm	36 m - 40 m
01.07.255	24 mm	51 m - 55 m
01.07.256	24 mm	56 m - 60 m
01.07.283	28 mm	26 m - 30 m
01.07.284	28 mm	36 m - 40 m
01.07.285	28 mm	51 m - 55 m
01.07.323	32 mm	26 m - 30 m
01.07.324	32 mm	36 m - 40 m
01.07.325	32 mm	51 m - 55 m
01.07.327	32 mm	71 m - 75 m
01.07.328	32 mm	81 m - 85 m
01.07.329	32 mm	106 m - 110 m
01.07.363	36 mm	26 m - 30 m
01.07.364	36 mm	36 m - 40 m
01.07.365	36 mm	51 m - 55 m
01.07.367	36 mm	71 m - 75 m
01.07.369	36 mm	106 m - 110 m
01.07.403	40 mm	26 m - 30 m
01.07.404	40 mm	36 m - 40 m
01.07.405	40 mm	51 m - 55 m
01.07.407	40 mm	71 m - 75 m
01.07.409	40 mm	106 m - 110 m
01.07.445	44 mm	51 m - 55 m
01.07.447	44 mm	71 m - 75 m
01.07.449	44 mm	106 m - 110 m
01.07.485	48 mm	51 m - 55 m
01.07.489	48 mm	106 m - 110 m



## ORKAVA PE4, 220 METRE COILS

Ideal for inland navigation.  
Behaves somewhat like steel wire, does not jam and is reasonable to use with greased bollards to tie up vessels.  
Do not use in a hawser basket and uncoil regularly!  
ORKAVA PE4 rope floats.

ORKAVA PE4 has a high shock absorption capacity and is very wear resistant.

Thanks to the somewhat hydrophobic raw materials and also its weave, ORKAVA PE4 absorbs barely any water.  
You are therefore guaranteed not to have mooring ropes that get frozen stiff in the winter.

colour : blue green with **blue marker**  
construction : 4-strand twisted with core  
weave : tight  
strand structure : double twined monofilament  
material : 100% high-grade polyethylene  
marker tape : **ORKAVA guarantee tape** in strand twisted with marker tape



ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
<b>01.14.008</b>	8 mm	3.1 / 6.8 kg	reel 220 m	5.8 kN	0.59 t
<b>01.14.010</b>	10 mm	4.8 / 10.6 kg	reel 220 m	9.1 kN	0.93 t
<b>01.14.012</b>	12 mm	6.9 / 15.2 kg	reel 220 m	12.9 kN	1.31 t
<b>01.14.214</b>	14 mm	9.3 / 20.5 kg	coil 220 m	17.5 kN	1.78 t
<b>01.14.216</b>	16 mm	12.2 / 26.9 kg	coil 220 m	23.3 kN	2.38 t
<b>01.14.218</b>	18 mm	15.4 / 33.9 kg	coil 220 m	28.8 kN	2.94 t
<b>01.14.220</b>	20 mm	19.1 / 42.0 kg	coil 220 m	35.6 kN	3.63 t
ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
<b>01.14.224</b>	24 mm	27.3 / 60.0 kg	coil 220 m	50.9 kN	5.19 t
<b>01.14.228</b>	28 mm	38.7 / 85.0 kg	coil 220 m	66.9 kN	6.83 t
<b>01.14.232</b>	32 mm	50.0 / 110.0 kg	coil 220 m	86.9 kN	8.84 t
<b>01.14.236</b>	36 mm	63.6 / 140.0 kg	coil 220 m	108.3 kN	11.05 t
<b>01.14.240</b>	40 mm	75.9 / 167.0 kg	coil 220 m	130.1 kN	13.26 t
<b>01.14.244</b>	44 mm	94.5 / 208.0 kg	coil 220 m	156.7 kN	15.98 t
<b>01.14.248</b>	48 mm	108.2 / 238.0 kg	coil 220 m	186.7 kN	19.04 t



## ORKAVA PE4, SHORT LENGTHS

Ideal for inland navigation.

Behaves somewhat like steel wire, does not jam and is reasonable to use with greased bollards to tie up vessels.

Do not use in a hawser basket and uncoil regularly!

ORKAVA PE4 rope floats.

ORKAVA PE4 has a high shock absorption capacity and is very wear resistant.

Thanks to the somewhat hydrophobic raw materials and also its weave, ORKAVA PE4 absorbs barely any water.

You are therefore guaranteed not to have mooring ropes that get frozen stiff in the winter.

colour : blue green with **blue marker**  
 construction : 4-strand twisted with core  
 weave : tight  
 strand structure : double twined monofilament  
 material : 100% high-grade polyethylene  
 marker tape : **ORKAVA guarantee tape** in strand twisted with marker tape

Complete mooring ropes with two spliced eyes.

Each length is neatly packed and finished as is normal in the ORKAVA factories.

All packaging is marked on the outside with diameter and length.

(Remaining length = cut length minus two 150 cm eyes, minus two 50 cm splices).



ARTIKELNO	DIAMETER	LENGTH REMAINING - CUT LENGTH	APPROX. WT. PER LENGTH
01.14.322	32 mm	31 m - 35 m	18.0 kg
01.14.325	32 mm	51 m - 55 m	29.0 kg
01.14.365	36 mm	51 m - 55 m	36.0 kg
01.14.367	36 mm	71 m - 75 m	49.0 kg
01.14.405	40 mm	51 m - 55 m	44.0 kg
01.14.408	40 mm	71 m - 75 m	60.0 kg
01.14.409	40 mm	81 m - 85 m	66.0 kg
01.14.411	40 mm	106 m - 110 m	85.0 kg
01.14.445	44 mm	51 m - 55 m	59.0 kg
01.14.447	44 mm	71 m - 75 m	72.0 kg
01.14.449	44 mm	106 m - 110 m	107.0 kg
01.14.489	48 mm	106 m - 110 m	122.0 kg



## ORKAVA SPLICING FID

ARTIKELNO	MATERIAL	LENGTH (INCH)	LENGTH (CM)	THICKNESS
01.14.914	ash	14"	35 cm	45 mm tapering to a point





## ORKAVA PE12, 220 METRE COILS

Ideal for inland navigation.

Behaves somewhat like steel wire, does not jam and is reasonable to use with greased bollards to tie up vessels.

ORKAVA PE12 rope floats.

ORKAVA PE12 has a high shock absorption capacity and is very wear resistant.

Thanks to the somewhat hydrophobic raw materials, ORKAVA PE12 absorbs barely any water.

You are therefore guaranteed not to have mooring ropes that get frozen stiff in the winter.



colour : blue green with **blue marker**  
 construction : 12-strand braided  
 strand structure : double twined monofilament  
 material : 100% high-grade polyethylene  
 marker tape : **ORKAVA guarantee tape** in strand twisted with marker tape

ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
<b>01.19.132</b>	32 mm	49.1 / 108.0 kg	coil 220 m	102.0 kN	10.40 t
<b>01.19.136</b>	36 mm	55.5 / 122.0 kg	coil 220 m	127.5 kN	13.00 t
<b>01.19.140</b>	40 mm	74.6 / 164.0 kg	coil 220 m	153.0 kN	15.60 t
<b>01.19.144</b>	44 mm	92.3 / 203.0 kg	coil 220 m	184.4 kN	18.80 t
<b>01.19.148</b>	48 mm	105.9 / 233.0 kg	coil 220 m	219.7 kN	22.40 t

## ORKAVA PE12, SHORT LENGTHS

Ideal for inland navigation.

Behaves somewhat like steel wire, does not jam and is reasonable to use with greased bollards to tie up vessels..

ORKAVA PE12 rope floats.

ORKAVA PE12 has a high shock absorption capacity and is very wear resistant.

Thanks to the somewhat hydrophobic raw material, ORKAVA PE12 absorbs little water.

You are therefore guaranteed not to have mooring ropes that get frozen stiff in the winter.

colour : blue green with **blue marker**  
 construction : 12-strand braided  
 strand structure : double twined monofilament  
 material : 100% high-grade polyethylene  
 marker tape : **ORKAVA guarantee tape** in strand twisted with marker tape

Complete mooring ropes with two spliced eyes.

Each length is neatly packed and finished as is normal in the ORKAVA factories.

All packaging is marked on the outside with diameter and length.

(Remaining length = cut length minus two 150 cm eyes, minus two 50 cm splices).



ARTIKELNO	DIAMETER	LENGTH REMAINING - CUT LENGTH
<b>01.19.323</b>	32 mm	36 m - 40 m
<b>01.19.324</b>	32 mm	41 m - 45 m
<b>01.19.325</b>	32 mm	51 m - 55 m
<b>01.19.364</b>	36 mm	41 m - 45 m
<b>01.19.365</b>	36 mm	51 m - 55 m
<b>01.19.367</b>	36 mm	71 m - 75 m
<b>01.19.369</b>	36 mm	106 m - 110 m
<b>01.19.404</b>	40 mm	41 m - 45 m
<b>01.19.405</b>	40 mm	51 m - 55 m
<b>01.19.407</b>	40 mm	71 m - 75 m
<b>01.19.409</b>	40 mm	106 m - 110 m
<b>01.19.445</b>	44 mm	51 m - 55 m
<b>01.19.447</b>	44 mm	71 m - 75 m
<b>01.19.449</b>	44 mm	106 m - 110 m
<b>01.19.485</b>	48 mm	51 m - 55 m
<b>01.19.487</b>	48 mm	71 m - 75 m
<b>01.19.489</b>	48 mm	106 m - 110 m





## ORKAVA PPFF3, ORANGE COLOUR, 220 METRE COILS

Is used for all purposes, shipping, fisheries, agriculture, stock breeding, building, industry, road transport, boating etc. ORKAVA PPFF3 rope floats.

colour : ORANGE colour  
 construction : 3 strand twisted  
 weave : supple  
 strand structure : twined mechanically fibrillated film  
 material : 100% high-grade polypropylene



ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
<b>01.33.004</b>	4 mm	0.7 / 1.6 kg	reel 220 m		
<b>01.33.006</b>	6 mm	1.7 / 3.8 kg	reel 220 m	5.4 kN	0.55 t
<b>01.33.008</b>	8 mm	3.0 / 6.6 kg	reel 220 m	9.4 kN	0.96 t
<b>01.33.010</b>	10 mm	4.5 / 9.9 kg	reel 220 m	14.0 kN	1.43 t
<b>01.33.012</b>	12 mm	6.5 / 14.3 kg	reel 220 m	19.9 kN	2.03 t
<b>01.33.214</b>	14 mm	9.1 / 20.0 kg	coil 220 m	27.4 kN	2.79 t
<b>01.33.216</b>	16 mm	11.5 / 25.3 kg	coil 220 m	34.3 kN	3.50 t
<b>01.33.218</b>	18 mm	14.8 / 32.5 kg	coil 220 m	43.6 kN	4.45 t
<b>01.33.220</b>	20 mm	18.0 / 39.6 kg	coil 220 m	52.2 kN	5.32 t



## ORKAVA PPFF3, MANILLA COLOUR, 220 METRE COILS

Is used for all purposes, shipping, fisheries, agriculture, stock breeding, building, industry, road transport, boating, and when there is a request for rope with the same outward appearance as real manilla rope, but with the strength and advantages of synthetic rope. ORKAVA PPFF3 rope floats.

colour : MANILLA colour  
 construction : 3 strand twisted  
 weave : supple  
 strand structure : twined mechanically fibrillated film  
 material : 100% high-grade polypropylene



ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
<b>01.33.404</b>	4 mm	0.7 / 1.6 kg	reel 220 m		
<b>01.33.406</b>	6 mm	1.7 / 3.8 kg	reel 220 m	5.4 kN	0.55 t
<b>01.33.408</b>	8 mm	3.0 / 6.6 kg	reel 220 m	9.4 kN	0.96 t
<b>01.33.410</b>	10 mm	4.5 / 9.9 kg	reel 220 m	14.0 kN	1.43 t
<b>01.33.412</b>	12 mm	6.5 / 14.3 kg	reel 220 m	19.9 kN	2.03 t
<b>01.33.614</b>	14 mm	9.1 / 20.0 kg	coil 220 m	27.4 kN	2.79 t
<b>01.33.616</b>	16 mm	11.5 / 25.3 kg	coil 220 m	34.3 kN	3.50 t
<b>01.33.618</b>	18 mm	14.8 / 32.5 kg	coil 220 m	43.6 kN	4.45 t
<b>01.33.620</b>	20 mm	18.0 / 39.6 kg	coil 220 m	52.2 kN	5.32 t

## ORKAVA PPF3, FENDER ROPE, 50 METRE COILS



ORKAVA PPF3 rope floats.

colour : black with orange strand  
 construction : 3 strand twisted  
 weave : supple  
 strand structure : twined mechanically fibrillated film  
 material : 100% high-grade polypropylene

**SCALE (only when you order a closed pallet with the same size):**

10 coils BK 500 metres  
 20 coils BH 1.000 metres  
 30 coils BG 1.500 metres  
 42 coils BF 2.100 metres

ARTIKELNO	DIAMETER	WEIGHT PER 50/100M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.33.816	16 mm	5.8 / 11.5 kg	coil 50 m	34.3 kN	3.50 t
01.33.818	18 mm	7.4 / 14.8 kg	coil 50 m	43.6 kN	4.45 t
01.33.820	20 mm	9.0 / 18.0 kg	coil 50 m	52.2 kN	5.32 t
01.33.824	24 mm	26.1 / 13.1 kg	coil 50 m	68.7 kN	7.00 t



## TIGER ROPE, 220 METRE COILS

Traditional rope that has been used for many decades, for example: moving ships with a winch.

Or simply as a mooring rope, because it's so durable.

Tiger rope floats.

colour : black and white  
 construction : 3 strand twisted  
 weave : supple  
 material : 100% high-grade polypropylene with polyester

ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.34.216	16 mm	15.5 / 34.0 kg	coil 220 m	36.3 kN	3.70 t
01.34.218	18 mm	19.5 / 43.0 kg	coil 220 m	47.1 kN	4.80 t
01.34.220	20 mm	24.1 / 53.0 kg	coil 220 m	56.9 kN	5.80 t
01.34.222	22 mm	28.6 / 63.0 kg	coil 220 m	68.7 kN	7.00 t
01.34.224	24 mm	33.6 / 74.0 kg	coil 220 m	80.4 kN	8.20 t



## MANILLA ROPE, 220 METRE COILS

For situations where a synthetic rope is not suitable.

A diameter of 10 mm is often used as a throwing line.

A diameter of 20 mm is ideal as a lifeline for the ampDN because it cannot cause sparks. However, before use it is important to check that it has not perished. Dry after use, is PERISHABLE.

Manilla rope floats.

colour : brown  
 construction : 3 strand twisted  
 weave : supple to tight  
 strand structure : twined fibres  
 material : 100% manilla  
 weight : according to NEN grade II, BSS-2052

ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.40.010	10 mm	6.6 / 14.5 kg	coil 220 m	6.2 kN	0.64 t
01.40.012	12 mm	9.5 / 21.0 kg	coil 220 m	9.4 kN	0.96 t
01.40.014	14 mm	12.7 / 28.0 kg	coil 220 m	12.6 kN	1.29 t
01.40.016	16 mm	16.4 / 36.0 kg	coil 220 m	17.7 kN	1.81 t
01.40.018	18 mm	20.9 / 46.0 kg	coil 220 m	20.9 kN	2.14 t
01.40.020	20 mm	27.3 / 60.0 kg	coil 220 m	27.9 kN	2.85 t
01.40.022	22 mm	32.7 / 72.0 kg	coil 220 m	33.3 kN	3.40 t
01.40.024	24 mm	40.0 / 88.0 kg	coil 220 m	39.8 kN	4.06 t





## HERKULES, 500 METRE COILS

The modern version of the earlier HERKULES.  
Is used for all purposes, shipping and fisheries.  
The steel wire is concealed and combined with the advantages of synthetic rope.

colour : green  
construction : 6x7 or 6x8 steel wires sheathed in PP film + 1 steel core  
weave : supple  
strand structure : steel wire and polypropylene film



ARTIKELNO	DIAMETER	CONSTRUCTION	WEIGHT PER 100/500M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.62.020	20 mm	6x7	57.0 / 285.0 kg	reel 500 m	105.9 kN	10.8 t
01.62.022	22 mm	6x8	67.0 / 335.0 kg	reel 500 m	139.2 kN	14.2 t
01.62.024	24 mm*	6x8	86.0 / 430.0 kg	reel 500 m	204.0 kN*	20.8 t*

\* Made of high-quality steel.



## HERKULES, SHORT LENGTHS

Complete with two spliced eyes.  
Each length is neatly packed and finished.  
All packaging is marked on the outside with diameter and length.  
(Remaining length = cut length minus two 150 cm eyes, minus two 50 cm splices).

ARTIKELNO	DIAMETER	LENGTH REMAINING - CUT LENGTH
01.62.183	18 mm	31 m - 35 m
01.62.189	18 mm	96 m - 100 m
01.62.203	20 mm	31 m - 35 m
01.62.205	20 mm	51 m - 55 m
01.62.207	20 mm	71 m - 75 m
01.62.209	20 mm	96 m - 100 m
01.62.225	22 mm	51 m - 55 m
01.62.227	22 mm	71 m - 75 m
01.62.229	22 mm	96 m - 100 m
01.62.245	24 mm	51 m - 55 m
01.62.247	24 mm	71 m - 75 m
01.62.248	24 mm	81 m - 85 m
01.62.249	24 mm	96 m - 100 m
01.62.285	28 mm	51 m - 55 m
01.62.287	28 mm	71 m - 75 m
01.62.289	28 mm	96 m - 100 m



## PP MULTI, BLACK, 220 METRE COILS

PP Multi is a rope that is comfortable to use because it has the handling characteristics of genuine nylon, however you pay considerably less.

For mooring ropes and fenders for yachts and also for fenders in inland shipping.

colour : black  
 construction : 3 strand twisted  
 weave : supple  
 strand structure : multifilament  
 material : 100% high-grade polypropylene

ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.72.006	6 mm	1.7 / 3.8 kg	reel 220 m	5.4 kN	0.55 t
01.72.008	8 mm	3.0 / 6.6 kg	reel 220 m	9.4 kN	0.96 t
01.72.010	10 mm	4.5 / 9.9 kg	reel 220 m	14.0 kN	1.43 t
01.72.012	12 mm	6.5 / 14.3 kg	reel 220 m	19.9 kN	2.03 t
01.72.014	14 mm	9.1 / 20.0 kg	coil 220 m	27.4 kN	2.79 t
01.72.016	16 mm	11.5 / 25.3 kg	coil 220 m	34.3 kN	3.50 t
01.72.018	18 mm	14.8 / 32.5 kg	coil 220 m	43.6 kN	4.45 t
01.72.020	20 mm	18.0 / 39.6 kg	coil 220 m	52.2 kN	5.32 t



## NYLON ROPE, 220 METRE COILS

Used mostly for water sports. Nylon has a high breaking load, but is not resistant to chemicals and it freezes because it absorbs water.

colour : natural (white)  
 construction : 3 strand twisted  
 weave : supple to tight  
 strand structure : multifilament  
 material : nylon

ARTIKELNO	DIAMETER	WEIGHT PER 100/220M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.73.006	6 mm	2.4 / 5.2 kg	reel 220 m	5.6 kN	0.58 t
01.73.008	8 mm	4.2 / 9.2 kg	reel 220 m	9.3 kN	0.95 t
01.73.010	10 mm	6.5 / 14.3 kg	reel 220 m	12.8 kN	1.30 t
01.73.012	12 mm	9.4 / 20.7 kg	reel 220 m	17.7 kN	1.80 t
01.73.014	14 mm	12.5 / 27.5 kg	coil 220 m	23.5 kN	2.40 t
01.73.016	16 mm	16.6 / 36.5 kg	coil 220 m	29.4 kN	3.00 t





## NYLON CORD, 200 METRE COILS

Usually used as flag lines.

Braided nylon cord made from high-grade polyamide.

Nylon has a high breaking load, but is not resistant to chemicals and it freezes because it absorbs water.

colour : natural (white)  
 construction : 16 strand braided sheath around a core  
 weave : tight  
 strand structure : multifilament  
 material : nylon



ARTIKELNO	DIAMETER	WEIGHT PER 100/200M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.76.001	1 mm	0.07 / 0.14 kg	reel 200 m	0.3 kN	0.03 t
01.76.002	2 mm	0.2 / 0.4 kg	reel 200 m	0.9 kN	0.10 t
01.76.003	3 mm	0.45 / 0.9 kg	reel 200 m	1.6 kN	0.16 t
01.76.004	4 mm	1.0 / 2.0 kg	reel 200 m	2.8 kN	0.28 t
01.76.005	5 mm	1.4 / 2.8 kg	reel 200 m	4.4 kN	0.45 t
01.76.006	6 mm	2.0 / 4.0 kg	reel 200 m	6.1 kN	0.62 t
01.76.008	8 mm	3.2 / 6.4 kg	reel 200 m	10.9 kN	1.11 t
01.76.010	10 mm	5.0 / 10.0 kg	reel 200 m	16.7 kN	1.70 t
01.76.012	12 mm	8.0 / 16.0 kg	reel 200 m	24.3 kN	2.48 t



## LIFERAFT LINE, 200 METRE COILS

Special mooring line / painter line for life rafts.

Is used , among other things, to connect several rafts together, to prevent them from drifting apart.

When a life raft is reinspected, the line is always replaced in accordance with the manufacturer's instructions. Every 3 years or every 5 years or after visual inspection status.

Commonly used length : 36 or 40 meters.  
 colour : white with light blue marker  
 construction : 16 strand braided  
 material : 100% HT polyester



ARTIKELNO	DIAMETER	WEIGHT PER 100/200M	COMES AS/LENGTH	LINEAR BREAKING LOAD (KN)	LINEAR BREAKING LOAD (TONNE)
01.77.310	10 mm	5.0 / 10.0 kg	reel 200 m	11.8 Kn	1.20 t



## WHIPPING – SAIL TWINE

British hemp sail twine, untarred.

ARTIKELNO	DIAMETER	LENGTH PER BALL	TYPE	WEIGHT	PRIJS PER BOL
01.81.122	1.8 mm	166 m	3/3500	200 gr	



## SISAL BINDER TWINE OR SPUN YARN

Made from prime quality sisal.

ARTIKELNO	DIAMETER	LENGTH PER BALL	TYPE	WEIGHT	PRIJS PER BOL
01.82.532	3 mm	500 m	3/600	2.5 kg	
01.82.540	5 mm	375 m	3/450	2.5 kg	
01.82.555	6 mm	180 m	3/220	2.5 kg	



## MONKEY'S FIST, THROWING WEIGHT, FLAG WEIGHT

Can be used as a throwing weight at the end of a throwing line or as a weight at the bottom of a freely hanging flag.



### SCALE (only 350 gr):

30 items BG  
60 items BB



ARTIKELNO	COLOUR	MATERIAL	CAPACITY	WEIGHT	DIAMETER
01.95.212	classic	poliprop. film	knotted	450 gr	80 mm
01.95.215	orange	PVC	water filled	350 gr	90 mm
01.95.217	yellow	PVC	water filled	350 gr	90 mm
01.95.220	white	PVC	water filled	350 gr	90 mm
01.95.225	blue	PVC	water filled	350 gr	90 mm
01.95.230	black	PVC	water filled	350 gr	90 mm
01.95.235	silver	PVC	water filled	350 gr	90 mm
01.95.315	orange	PVC	water filled	800 gr	150 mm

## THROWING WEIGHT ACCORDING TO MCA

To avoid the risk of injury, a throwing weight must not contain added weighting material like metal or the like. Maximum weight is 500 grams.

### Meets the guidelines of: The United Kingdom Marine and Coastguard Agency (MCA).

The MCA Code of Safe Working Practices for Merchant Seafarers: 2015 Edition, Chapter 26 section 26.3.5 states:

To prevent personal injury to those receiving heaving lines, the "monkey's fist" should be made with rope only and must not contain added weighting material. Safe alternatives include a small highvisibility soft pouch, filled with fastdraining pea shingle or similar, with a weight of not more than 0,5 kg. Under no circumstances is a line to be weighted by items such as shackles, blots of nuts, or twist locks.

Visibility : retro reflective tape

Equipped with : large loop (12 cm) for attaching the throwing line



ARTIKELNO	COLOUR	MATERIAL	CAPACITY	WEIGHT	DIMENSIONS (LXWXH)
01.95.444	orange	PVC/nylon	dry sand	440 gr	17.5 x 13 x 3.5 cm

## THROWING LINE

ARTIKELNO	DIAMETER	MATERIAL	COMES AS/LENGTH	WEIGHT
01.96.330	10 mm	100 % Manilla	reel 30 m	1.9 kg





## CHAIN, BRASS

Hoisting chain for tank thermometer.

ARTIKELNO	LINKS (LXW)	COMES AS/LENGTH	TYPE
<b>02.00.012</b>	12 x 5 mm	spool 25 m	Patent chain



## CHAIN, LONG LINK, HOT GALVANIZED

Complies with DIN 763.  
Not permitted for hoisting.

ARTIKELNO	THICKNESS	INTERNAL SIZE	WEIGHT PER METER	MATERIAL	SAFE WORKING LOAD	BREAKING LOAD	LENGTH
<b>02.00.104</b>	4 mm	32 x 8 mm	270 gr	galvanized	100 kg	690 kg	30 m
<b>02.00.105</b>	5 mm	36 x 10 mm	430 gr	galvanized	160 kg	1,020 kg	30 m
<b>02.00.106</b>	6 mm	42 x 12 mm	630 gr	galvanized	200 kg	1,220 kg	30 m
<b>02.00.107</b>	7 mm	48 x 14 mm	860 gr	galvanized	300 kg	1,935 kg	30 m
<b>02.00.108</b>	8 mm	54 x 16 mm	1,100 gr	galvanized	400 kg	2,550 kg	30 m
<b>02.00.110</b>	10 mm	66 x 20 mm	1,750 gr	galvanized	630 kg	4,080 kg	30 m
<b>02.00.113</b>	13 mm	82 x 24 mm	2,950 gr	galvanized	1000 kg	6,520 kg	30 m



## CHAIN, LONG LINK, STAINLESS STEEL 316

Complies with DIN 763.  
Not permitted for hoisting.

ARTIKELNO	THICKNESS	INTERNAL SIZE	WEIGHT PER METER	MATERIAL	SAFE WORKING LOAD	BREAKING LOAD	LENGTH
<b>02.00.203</b>	3 mm	26 x 6 mm	150 gr	stainless steel 316	55 kg	460 kg	30 m
<b>02.00.204</b>	4 mm	32 x 8 mm	270 gr	stainless steel 316	100 kg	815 kg	30 m
<b>02.00.205</b>	5 mm	36 x 10 mm	430 gr	stainless steel 316	160 kg	1,275 kg	30 m
<b>02.00.206</b>	6 mm	42 x 12 mm	630 gr	stainless steel 316	200 kg	1,835 kg	30 m
<b>02.00.208</b>	8 mm	54 x 16 mm	1,100 gr	stainless steel 316	400 kg	3,270 kg	30 m
<b>02.00.210</b>	10 mm	66 x 20 mm	1,750 gr	stainless steel 316	630 kg	5,115 kg	30 m

**CHAIN, SHORT LINK, HOT GALVANIZED**

Complies with DIN 766.  
Not permitted for hoisting.

ARTIKELNO	THICKNESS	INTERNAL SIZE	WEIGHT PER METER	MATERIAL	SAFE WORKING LOAD	BREAKING LOAD	LENGTH
<b>02.00.304</b>	4 mm	16 x 6 mm	320 gr	galvanized	200 kg	815 kg	30 m
<b>02.00.305</b>	5 mm	18.5 x 7 mm	500 gr	galvanized	320 kg	1,275 kg	30 m
<b>02.00.306</b>	6 mm	18.5 x 8 mm	750 gr	galvanized	400 kg	1,630 kg	30 m
<b>02.00.307</b>	7 mm	22 x 9 mm	1,000 gr	galvanized	630 kg	2,550 kg	30 m
<b>02.00.308</b>	8 mm	24 x 10 mm	1,350 gr	galvanized	800 kg	3,260 kg	30 m
<b>02.00.310</b>	10 mm	28 x 14 mm	2,200 gr	galvanized	1,250 kg	5,100 kg	30 m
<b>02.00.313</b>	13 mm	36 x 18 mm	3,800 gr	galvanized	2,000 kg	8,150 kg	30 m

**CHAIN, SHORT LINK, STAINLESS STEEL 316**

Complies with DIN 766.  
Not permitted for hoisting.

ARTIKELNO	THICKNESS	INTERNAL SIZE	WEIGHT PER METER	MATERIAL	SAFE WORKING LOAD	BREAKING LOAD	LENGTH
<b>02.00.403</b>	3 mm	12 x 4 mm	160 gr	stainless steel 316	55 kg	460 kg	30 m
<b>02.00.404</b>	4 mm	16 x 6 mm	320 gr	stainless steel 316	200 kg	815 kg	30 m
<b>02.00.405</b>	5 mm	18.5 x 7 mm	500 gr	stainless steel 316	320 kg	1,275 kg	30 m
<b>02.00.406</b>	6 mm	18.5 x 8 mm	750 gr	stainless steel 316	400 kg	1,835 kg	30 m
<b>02.00.408</b>	8 mm	24 x 10 mm	1,350 gr	stainless steel 316	800 kg	3,270 kg	30 m
<b>02.00.410</b>	10 mm	28 x 14 mm	2,200 gr	stainless steel 316	1,250 kg	5,115 kg	30 m

**WASHING LINE CORD**

Plasticized steel wire.

ARTIKELNO	DIAMETER OVERALL	DIAMETER STEEL WIRE	COMES AS/LENGTH
<b>02.05.005</b>	5 mm	3 mm	reel 100 m



# CAR LIFTING SLINGS



## CAR LIFTING SLING

Very special car lifting sling.  
Set of 4, length adjustable from approx. **110 to 235 cm**.  
Has an adjustable top link.  
**NB** this sling is adjusted from the top and therefore **CANNOT** damage the car.

material : 50 mm polyester sling fabric  
colour : green or yellow  
safety factor : 7 (breaking load is 7 x working load)  
load : safe working load 500 kg per sling, 2,000 kg per set



ARTIKELNO	LOAD	HOOK	FEET	COLOUR
<b>03.09.502</b>	500 / 2,000 kg	double hook	with 2 feet	green
<b>03.09.506</b>	500 / 2,000 kg	single hook	with 1 foot	green
<b>03.09.510</b>	500 / 2.000kg	safety hook	-	yellow



## WHEEL RIM SLING / CAR LIFTING SLING / LIFTING SLING

Round sling (continuous sling).  
For attachment to slings or directly to the car beam.

width : approx. 25 mm  
material : polyester  
safety factor : 7 (breaking load is 7 x working load)  
safe working load : 1,000 kg each (1,000 kg vertical, 800 kg open, 2,000 kg double)  
: 2,000 kg each (2,000 kg vertical, 1,600 kg open, 4,000 kg double)

ARTIKELNO	LENGTH	CIRCUMFERENCE	VEILIGE WERKBELASTING	KLEUR
<b>03.09.525</b>	40 cm	80 cm	1,000 kg	purple
<b>03.09.530</b>	50 cm	100 cm	1,000 kg	purple
<b>03.09.535</b>	60 cm	120 cm	1,000 kg	purple
<b>03.09.537</b>	100 cm	200 cm	1,000 kg	purple
<b>03.09.538</b>	150 cm	300 cm	1,000 kg	purple
<b>03.09.540</b>	200 cm	400 cm	1,000 kg	purple
<b>03.09.545</b>	225 cm	450 cm	1,000 kg	purple
<b>03.09.550</b>	250 cm	500 cm	1,000 kg	purple
<b>03.09.555</b>	275 cm	550 cm	1,000 kg	purple
<b>03.09.560</b>	300 cm	600 cm	1,000 kg	purple
<b>03.09.570</b>	350 cm	700 cm	1,000 kg	purple
<b>03.09.580</b>	400 cm	800 cm	1,000 kg	purple
<b>03.09.610</b>	50 cm	100 cm	2,000 kg	green
<b>03.09.612</b>	60 cm	120 cm	2,000 kg	green
<b>03.09.620</b>	100 cm	200 cm	2,000 kg	green
<b>03.09.630</b>	150 cm	300 cm	2,000 kg	green
<b>03.09.640</b>	200 cm	400 cm	2,000 kg	green
<b>03.09.645</b>	225 cm	450 cm	2,000 kg	green
<b>03.09.650</b>	250 cm	500 cm	2,000 kg	green
<b>03.09.660</b>	300 cm	600 cm	2,000 kg	green
<b>03.09.670</b>	350 cm	700 cm	2,000 kg	green
<b>03.09.680</b>	400 cm	800 cm	2,000 kg	green



**STRAP, COMPLETE**

Has ratchet clasp and 2 hooks.

standard : NEN 12195-2  
 material : polyester strap fabric  
 colour : orange



ARTIKELNO	LENGTH	WIDTH	SAFE WORKING LOAD	BREAKING LOAD
<b>03.10.209</b>	9 m	25 mm	750 kg	1,500 kg
<b>03.10.213</b>	13 m	25 mm	750 kg	1,500 kg
<b>03.10.310</b>	10 m	35 mm	1,250 kg	2,500 kg
<b>03.10.315</b>	15 m	35 mm	1,250 kg	2,500 kg
<b>03.10.511</b>	11 m	50 mm	2,000 kg	4,000 kg
<b>03.10.515</b>	15 m	50 mm	2,000 kg	4,000 kg
<b>03.10.520</b>	20 m	50 mm	2,000 kg	4,000 kg

**STRAP, RATCHET CLASP**

Ratchet clasp + hook + strap.

standard : NEN 12195-2  
 material : polyester strap fabric  
 colour : orange



ARTIKELNO	LENGTH	WIDTH	SAFE WORKING LOAD	BREAKING LOAD
<b>03.10.225</b>	50 cm	25 mm	750 kg	1,500 kg
<b>03.10.325</b>	28 cm	35 mm	1,250 kg	2,500 kg
<b>03.10.605</b>	35 cm	50 mm	2,000 kg	4,000 kg



## CLEAT

Nickled aluminium.

ARTIKELNO	LENGTH
<b>04.00.206</b>	60 mm
<b>04.00.211</b>	110 mm
<b>04.00.215</b>	150 mm



## THIMBLE

Made in accordance with DIN 6899, galvanized.  
Thimble for steel wire.

ARTIKELNO	FOR DIAMETER WIRE	GROOVE WIDTH	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
<b>04.03.203</b>	2.5 mm	3 mm	19 mm	12 mm	5 gr
<b>04.03.204</b>	3.5 mm	4 mm	21 mm	13 mm	8 gr
<b>04.03.205</b>	4 mm	5 mm	23 mm	14 mm	10 gr
<b>04.03.206</b>	5 mm	6 mm	25 mm	16 mm	20 gr
<b>04.03.207</b>	6 mm	7 mm	28 mm	18 mm	30 gr
<b>04.03.208</b>	7 mm	8 mm	32 mm	20 mm	30 gr
<b>04.03.210</b>	9 mm	10 mm	38 mm	24 mm	40 gr
<b>04.03.212</b>	11 mm	12 mm	45 mm	28 mm	70 gr
<b>04.03.214</b>	13 mm	14 mm	51 mm	32 mm	100 gr
<b>04.03.216</b>	15 mm	16 mm	58 mm	36 mm	150 gr
<b>04.03.218</b>	16 mm	18 mm	72 mm	45 mm	160 gr
<b>04.03.220</b>	18 mm	20 mm	80 mm	50 mm	330 gr
<b>04.03.222</b>	20 mm	22 mm	80 mm	50 mm	440 gr
<b>04.03.224</b>	22 mm	24 mm	90 mm	56 mm	670 gr
<b>04.03.226</b>	24 mm	26 mm	99 mm	62 mm	700 gr
<b>04.03.228</b>	26 mm	28 mm	112 mm	70 mm	900 gr
<b>04.03.230</b>	28 mm	30 mm	120 mm	75 mm	1,100 gr
<b>04.03.232</b>	30 mm	32 mm	128 mm	80 mm	1,200 gr



## THIMBLE, STAINLESS STEEL 316

Stainless steel 316.  
Thimble for steel wire.

ARTIKELNO	FOR DIAMETER WIRE	GROOVE WIDTH	INTERNAL LENGTH	INTERNAL WIDTH	CA. GEWICHT
<b>04.03.302</b>	2 mm	3 mm	17 mm	9 mm	2 gr
<b>04.03.303</b>	3 mm	4 mm	18 mm	10 mm	3 gr
<b>04.03.304</b>	4 mm	5 mm	20 mm	11 mm	3 gr
<b>04.03.305</b>	5 mm	6 mm	21 mm	13 mm	7 gr
<b>04.03.306</b>	6 mm	7 mm	27 mm	15 mm	8 gr
<b>04.03.308</b>	8 mm	9 mm	38 mm	22 mm	18 gr
<b>04.03.310</b>	10 mm	11 mm	48 mm	27 mm	25 gr
<b>04.03.312</b>	12 mm	14 mm	53 mm	29 mm	37 gr
<b>04.03.314</b>	14 mm	16 mm	57 mm	32 mm	60 gr
<b>04.03.316</b>	16 mm	18 mm	67 mm	40 mm	72 gr
<b>04.03.318</b>	18 mm	20 mm	75 mm	45 mm	100 gr
<b>04.03.320</b>	20 mm	22 mm	84 mm	52 mm	124 gr

## STEEL WIRE CLAMP, FLAT DOUBLE

Has 2 screws.  
Galvanized.



ARTIKELNO	FOR DIAMETER WIRE
04.12.302	2 mm
04.12.303	3 mm
04.12.304	4 mm
04.12.305	5 mm
04.12.306	6 mm

## STEEL WIRE CLAMP

Made in accordance with DIN 741, completely galvanized.



ARTIKELNO	WIRE WIDTH (INCH)	WIRE WIDTH (MM)	CLAMP/WIRE DIAMETER	APPROX. WEIGHT
04.24.503	1/8"	3 mm	M4	7 gr
04.24.505	3/16"	5 mm	M5	15 gr
04.24.506	1/4"	6 mm	M5	20 gr
04.24.508	5/16"	8 mm	M6	35 gr
04.24.510	3/8"	10 mm	M8	65 gr
04.24.512	1/2"	13 mm	M10	130 gr
04.24.514	9/16"	14 mm	M10	135 gr
04.24.516	5/8"	16 mm	M12	210 gr
04.24.519	3/4"	20 mm	M12	280 gr
04.24.522	7/8"	22 mm	M14	400 gr
04.24.525	1"	26 mm	M14	440 gr
04.24.528	1.1/8"	30 mm	M16	660 gr
04.24.532	1.1/4"	34 mm	M16	720 gr
04.24.538	1.1/2"	40 mm	M16	1040 gr
04.24.541	2"	50 mm	M20	2000 gr

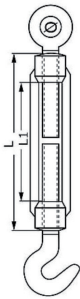
## STEEL WIRE CLAMP, STAINLESS STEEL 316

Stainless steel 316.



ARTIKELNO	WIRE WIDTH (INCH)	WIRE WIDTH (MM)	CLAMP/WIRE DIAMETER	APPROX. WEIGHT
04.24.603	1/8"	3 mm	M4	10 gr
04.24.604	5/32"	4 mm	M4	11 gr
04.24.605	3/16"	5 mm	M5	14 gr
04.24.606	1/4"	6 mm	M5	18 gr
04.24.608	5/16"	8 mm	M6	33 gr
04.24.610	3/8"	10 mm	M8	65 gr
04.24.613	1/2"	13 mm	M10	128 gr
04.24.616	5/8"	16 mm	M12	203 gr
04.24.619	3/4"	19 mm	M12	280 gr

# TURNBUCKLES



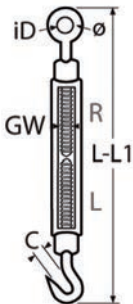
## TURNBUCKLE EYE-HOOK

Made in accordance with DIN 1480.

Open body turnbuckle with an eye on one side and a hook on the other side.  
Eye -hook (eye = right-hand thread / hook = left-hand thread).

Material : steel, electro-galvanized  
Thread type : metric

ARTIKELNO	THREAD	EYE DIAMETER (Ø)	LENGTH (L)	LENGTH 1 (L1)	SAFE WORKING LOAD	APPROX. WEIGHT
04.35.405	M5	8 mm	70 mm	50 mm	60 kg	50 gr
04.35.406	M6	11 mm	110 mm	80 mm	70 kg	90 gr
04.35.408	M8	14 mm	110 mm	75 mm	140 kg	150 gr
04.35.410	M10	18 mm	125 mm	85 mm	220 kg	270 gr
04.35.412	M12	18 mm	125 mm	80 mm	310 kg	410 gr
04.35.416	M16	22 mm	170 mm	110 mm	600 kg	1,000 gr

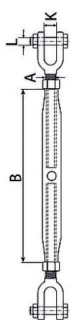


## TURNBUCKLE EYE-HOOK, STAINLESS STEEL 316

Open body turnbuckle with an eye on one side and a hook on the other side.  
Eye -hook (eye = right-hand thread / hook = left-hand thread).

Material : stainless steel 316  
Thread type : metric

ARTIKELNO	THREAD (GW)	INSIDE DIAMETER (iD)	LENGTH (L)	LENGTH 1 (L1)	MATERIAL-DIAMETER (Ø)	WIDTH OF OPENING (C)	SAFE WORKING LOAD	APPROX. WEIGHT
04.35.505	M5	8 mm	165 mm	110 mm	4.3 mm	7.5 mm	40 kg	33 gr
04.35.506	M6	10 mm	210 mm	145 mm	5.3 mm	9.0 mm	70 kg	64 gr
04.35.508	M8	14 mm	280 mm	190 mm	7.0 mm	12.0 mm	125 kg	128 gr
04.35.510	M10	16 mm	345 mm	240 mm	8.9 mm	13.0 mm	195 kg	246 gr
04.35.512	M12	18 mm	455 mm	300 mm	10.9 mm	14.0 mm	280 kg	558 gr
04.35.516	M16	26 mm	580 mm	390 mm	14.5 mm	18.0 mm	515 kg	984 gr



## TURNBUCKLE FORK-FORK WITH SLIP HOOK

Closed body turnbuckle with locknut on both sides and clip with nut and bolt.  
Complete with slip hook.

Material : steel, electro-galvanized  
Thread type : metric

ARTIKELNO	THREAD (A)	INSIDE WIDTH (K)	BODY LENGTH (B)	MATERIAL DIAMETER (L)	SAFE WORKING LOAD	APPROX. WEIGHT
04.45.512	M12	13 mm	160 mm	10 mm	600 kg	730 gr
04.45.516	M16	18 mm	250 mm	12 mm	800 kg	1,400 gr

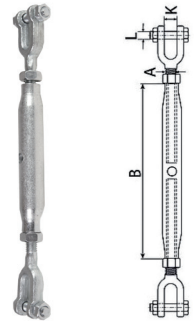


## TURNBUCKLE FORK-FORK

Made in accordance with DIN 1478.

Closed body turnbuckle with locknut on both sides and clip with nut and bolt.  
Safety factor 4 (minimum breaking load is 4 x working load).

Material : steel, electro-galvanized  
Thread type : metric

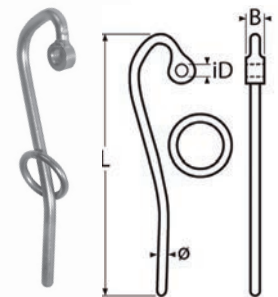


ARTIKELNO	THREAD (A)	INSIDE WIDTH (K)	BODY LENGTH (B)	MATERIAL DIAMETER (L)	SAFE WORKING LOAD	APPROX. WEIGHT
04.55.506	M6	7 mm	102 mm	4 mm	200 kg	165 gr
04.55.508	M8	9 mm	110 mm	6 mm	250 kg	260 gr
04.55.510	M10	11 mm	125 mm	8 mm	300 kg	450 gr
04.55.512	M12	13 mm	125 mm	10 mm	600 kg	660 gr
04.55.516	M16	18 mm	170 mm	12 mm	800 kg	1,500 gr
04.55.519	M20	21 mm	230 mm	16 mm	1.500 kg	2.200 gr
04.55.525	M24	30 mm	360 mm	22 mm	3.200 kg	4.100 gr
04.55.532	M33	38 mm	385 mm	24 mm	5.000 kg	6.400 gr

## SLIP HOOK FOR TURNBUCKLE, STAINLESS STEEL 316

Slip hook for turnbuckle.

Material : stainless steel 316

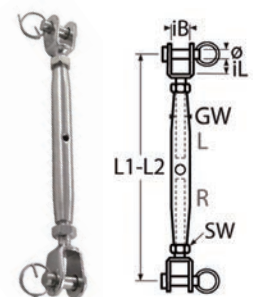


ARTIKELNO	SUITABLE FOR TURNBUCKLE	WIDTH (B)	INSIDE DIAMETER (ID)	LENGTH (L)	MATERIAL-DIAMETER (Ø)	APPROX. WEIGHT
04.55.705	M5	7.1 mm	5.1 mm	132 mm	5.0 mm	50 gr
04.55.706	M6	9.6 mm	6.2 mm	142 mm	6.0 mm	60 gr
04.55.708	M8	11.3 mm	8.5 mm	192 mm	8.0 mm	125 gr
04.55.710	M10	10.0 mm	10.5 mm	230 mm	10.0 mm	250 gr
04.55.712	M12	14.4 mm	13.0 mm	235 mm	12.0 mm	325 gr
04.55.716	M13	12.5 mm	14.0 mm	300 mm	12.5 mm	500 gr

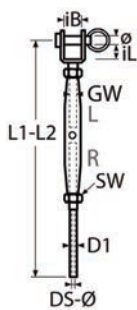
## TURNBUCKLE FORK-FORK, STAINLESS STEEL 316

Closed body turnbuckle with locknut on both sides and clip with nut and bolt.  
Safety factor 4 (minimum breaking load is 4 x working load).

Material : stainless steel 316  
Thread type : metric



ARTIKELNO	THREAD (GW)	INSIDE WIDTH (IB)	INSIDE LENGTH (IL)	LENGTH 1 (L1)	LENGTH 2 (L2)	MATERIAL-DIAMETER (Ø)	DRIVE (SW)	SAFE WORKING LOAD	APPROX. WEIGHT
04.55.805	M5	6.5 mm	10 mm	190 mm	130 mm	5 mm	SW7	200 kg	55 gr
04.55.806	M6	7.5 mm	10 mm	220 mm	150 mm	6 mm	SW8	275 kg	81 gr
04.55.808	M8	11 mm	11 mm	240 mm	165 mm	8 mm	SW10	450 kg	142 gr
04.55.810	M10	12 mm	14 mm	280 mm	190 mm	9 mm	SW13	775 kg	260 gr
04.55.812	M12	14 mm	20 mm	360 mm	245 mm	12 mm	SW17	1,150 kg	520 gr
04.55.816	M16	17 mm	26 mm	450 mm	310 mm	16 mm	SW22	2,000 kg	1,141 gr
04.55.820	M20	20 mm	30 mm	510 mm	360 mm	19 mm	SW27	3,200 kg	1,817 gr

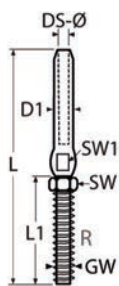


## TURNBUCKLE FORK-TERMINAL, STAINLESS STEEL 316

Open body turnbuckle with on one side a locknut and clip with nut and bolt and on the other side a terminal with thread.

Material : stainless steel 316  
Thread type : metric

ARTIKELNO	WIRE ROPE DIAMETER (DS-Ø)	DIAMETER 1 (D1)	THREAD (GW)	INSIDE WIDTH (IB)	INSIDE LENGTH (IL)	LENGTH 1 (L1)	LENGTH 2 (L2)	MATERIAL-DIAMETER (Ø)	DRIVE (SW)	APPROX. WEIGHT
<b>04.56.308</b>	5 mm	9 mm	M8	11 mm	11 mm	280 mm	205 mm	8 mm	SW10	160 gr
<b>04.56.310</b>	5 mm	12.6 mm	M10	12 mm	14 mm	335 mm	245 mm	9 mm	SW13	300 gr



## TERMINAL WITH THREAD, STAINLESS STEEL 316

Terminal with thread for turnbuckle.

Material : stainless steel 316  
Thread type : metric

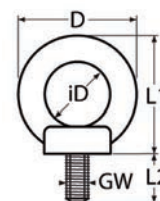
ARTIKELNO	WIRE ROPE DIAMETER (DS-Ø)	DIAMETER 1 (D1)	THREAD (GW)	LENGTH (L)	LENGTH 1 (L1)	DRIVE (SW)	APPROX. WEIGHT
<b>04.56.408</b>	5 mm	9 mm	M8	124 mm	57 mm	SW13	46 gr
<b>04.56.410</b>	6 mm	12.6 mm	M10	145 mm	63 mm	SW17	100 gr

## LIFTING EYE BOLT, STAINLESS STEEL 316

Made in accordance with DIN 580.

Material : stainless steel 316  
Thread type : metric

ARTIKELNO	DIAMETER (D)	THREAD (GW)	INSIDE DIAMETER (iD)	LENGTH 1 (L1)	LENGTH 2 (L2)	APPROX. WEIGHT
04.95.206	36 mm	M6	20 mm	33 mm	14 mm	50 gr
04.95.208	36 mm	M8	20 mm	33 mm	13 mm	50 gr
04.95.210	45 mm	M10	25 mm	42 mm	17 mm	80 gr
04.95.212	54 mm	M12	30 mm	51 mm	21 mm	160 gr
04.95.216	63 mm	M16	35 mm	62 mm	27 mm	
04.95.220	72 mm	M20	40 mm	71 mm	30 mm	
04.95.224	90 mm	M24	50 mm	90 mm	36 mm	

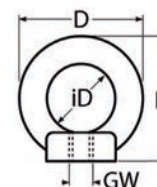


## LIFTING EYE NUT, STAINLESS STEEL 316

Made in accordance with DIN 582.

Material : stainless steel 316  
Thread type : metric

ARTIKELNO	DIAMETER (D)	THREAD (GW)	INSIDE DIAMETER (iD)	LENGTH (L)	APPROX. WEIGHT
04.95.306	36 mm	M6	20 mm	33 mm	35 gr
04.95.308	36 mm	M8	20 mm	33 mm	35 gr
04.95.310	45 mm	M10	25 mm	42 mm	76 gr
04.95.312	54 mm	M12	30 mm	51 mm	114 gr
04.95.316	63 mm	M16	35 mm	62 mm	
04.95.320	72 mm	M20	40 mm	71 mm	





## CARABINER

With rotating eye and sprung snap.  
Galvanized cast metal.

ARTIKELNO	TOTAL LENGTH	DIAMETER UPPER EYE (INCH)	DIAMETER UPPER EYE (MM)	APPROX. WEIGHT
05.00.012	72 mm	1/2"	12 mm	35 gr
05.00.025	86 mm	3/4"	19 mm	40 gr
05.00.028	106 mm	1 1/4"	32 mm	90 gr



## CARABINER, STAINLESS STEEL 316

With rotating eye and sprung snap.  
Stainless steel 316.

ARTIKELNO	TOTAL LENGTH	DIAMETER UPPER EYE (INCH)	DIAMETER UPPER EYE (MM)	APPROX. WEIGHT
05.00.112	72 mm	1/2"	12 mm	35 gr
05.00.120	86 mm	3/4"	19 mm	40 gr
05.00.132	106 mm	1 1/4"	32 mm	90 gr



## THROAT CARABINER

Galvanized steel. DIN 5299.

ARTIKELNO	TOTAL LENGTH	SCREW WIDTH	APPROX. WEIGHT
05.01.205	50 mm	5 mm	17 gr
05.01.206	60 mm	6 mm	28 gr
05.01.207	70 mm	7 mm	45 gr
05.01.208	80 mm	8 mm	67 gr
05.01.209	90 mm	9 mm	95 gr
05.01.210	100 mm	10 mm	129 gr
05.01.212	120 mm	11 mm	188 gr
05.01.214	140 mm	12 mm	260 gr
05.01.216	160 mm	13 mm	350 gr



## THROAT CARABINER, STAINLESS STEEL 316

Stainless steel 316. DIN 5399.

ARTIKELNO	TOTAL LENGTH	SCREW WIDTH	APPROX. WEIGHT
05.01.605	50 mm	5 mm	19 gr
05.01.606	60 mm	6 mm	27 gr
05.01.607	70 mm	7 mm	44 gr
05.01.608	80 mm	8 mm	65 gr
05.01.610	100 mm	10 mm	127 gr
05.01.612	120 mm	11 mm	180 gr
05.01.614	140 mm	12 mm	260 gr
05.01.616	160 mm	13 mm	350 gr

## BOAT HOOK, LARGE JAW

Made from high-grade alloy steel grade 8.

Safety factor 4 (minimum breaking load is 4 x working load).

- Very large eye diameter.
- Large jaw width.
- Lightweight and high working load.



ARTIKELNO	TYPE	SAFE WORKING LOAD	JAW WIDTH	INTERNAL EYE DIAM.	TOTAL LENGTH	APPROX. WEIGHT
05.23.701	7/8	2,500 kg	63 mm	28 mm	162 mm	0.8 kg
05.23.703	10	4,000 kg	76 mm	34 mm	196 mm	1.4 kg
05.23.705	13	6,700 kg	90 mm	44 mm	242 mm	2.8 kg
05.23.708	16	10,000 kg	102 mm	56 mm	287 mm	4.9 kg
05.23.711	18/20	12,500 kg	114 mm	60 mm	334 mm	7.2 kg

## HOISTING HOOK, LARGE EYE

Made from high-grade alloy steel grade 8.

Hoisting hooks must have a safety clip.

The hooks we supply have one as standard.

Safety factor 4 (minimum breaking load is 4 x working load).



ARTIKELNO	SAFE WORKING LOAD	JAW WIDTH	INTERNAL EYE DIAM.	TOTAL LENGTH	APPROX. WEIGHT
05.48.415	1,250 kg	20 mm	19 mm	109 mm	0.30 kg
05.48.420	1,600 kg	22 mm	22 mm	125 mm	0.44 kg
05.48.425	2,500 kg	27 mm	28 mm	145 mm	0.63 kg
05.48.430	3,200 kg	30 mm	32 mm	170 mm	1.27 kg
05.48.435	5,400 kg	37 mm	39 mm	201 mm	1.76 kg
05.48.440	8,200 kg	48 mm	50 mm	261 mm	3.60 kg

## HOISTING HOOK, SWIVEL EYE

Made from high-grade alloy steel grade 8.

Hoisting hooks must have a safety clip.

The hooks we supply have one as standard.

Safety factor 4 (minimum breaking load is 4 x working load).



ARTIKELNO	SAFE WORKING LOAD	JAW WIDTH	INTERNAL EYE DIAM.	TOTAL LENGTH	APPROX. WEIGHT
05.55.510	1,250 kg	20 mm	28 mm	148 mm	0.49 kg
05.55.515	1,600 kg	22 mm	35 mm	182 mm	0.95 kg
05.55.520	2,500 kg	27 mm	43 mm	211 mm	1.48 kg
05.55.525	3,200 kg	30 mm	47 mm	228 mm	1.79 kg
05.55.530	5,400 kg	37 mm	54 mm	275 mm	3.80 kg



## H-SHACKLE, BRASS

For attaching a bell lanyard to a ship's bell.

ARTIKELNO	SHACKLE/BOLT (MM)	FOR SHIP'S BELL
<b>06.03.504</b>	4 mm	10 t/m 12 cm
<b>06.03.505</b>	5 mm	15 up to 19 cm
<b>06.03.506</b>	6 mm	21 up to 25 cm
<b>06.03.508</b>	8 mm	27 up to 40 cm



## D-SHACKLE, STAINLESS STEEL 316

Trade quality.

Stainless steel 316.

Shackle and shoulder bolt are the same thickness.

These shackles do not meet the requirements of the HEALTH & SAFETY INSPECTORATE and must therefore never ever be used for hoisting.

ARTIKELNO	SHACKLE/BOLT (INCH)	SHACKLE/BOLT (MM)	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
<b>06.13.304</b>	1/8"	4 mm	14 mm	8 mm	27gr
<b>06.13.305</b>	3/16"	5 mm	17 mm	10 mm	33 gr
<b>06.13.306</b>	1/4"	6 mm	21 mm	12 mm	40 gr
<b>06.13.308</b>	5/16"	8 mm	28 mm	16 mm	90 gr
<b>06.13.310</b>	3/8"	10 mm	35 mm	20 mm	140 gr
<b>06.13.312</b>	1/2"	12 mm	42 mm	24 mm	220 gr
<b>06.13.316</b>	5/8"	16 mm	56 mm	32 mm	500 gr
<b>06.13.319</b>	3/4"	19 mm	66 mm	38 mm	740 gr



## H-SHACKLE, STAINLESS STEEL 316

Trade quality.

Stainless steel 316.

Shackle and shoulder bolt are the same thickness.

These shackles do not meet the requirements of the HEALTH & SAFETY INSPECTORATE and must therefore never ever be used for hoisting.

ARTIKELNO	SHACKLE/BOLT (INCH)	SHACKLE/BOLT (MM)	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
<b>06.13.504</b>	1/8"	4 mm	14 mm	8 mm	27 gr
<b>06.13.505</b>	3/16"	5 mm	17 mm	10 mm	34 gr
<b>06.13.506</b>	1/4"	6 mm	21 mm	12 mm	43 gr
<b>06.13.508</b>	5/16"	8 mm	28 mm	16 mm	100 gr
<b>06.13.510</b>	3/8"	10 mm	35 mm	20 mm	150 gr
<b>06.13.512</b>	1/2"	12 mm	42 mm	24 mm	220 gr
<b>06.13.516</b>	5/8"	16 mm	56 mm	32 mm	540 gr
<b>06.13.519</b>	3/4"	19 mm	66 mm	38 mm	750 gr

**D-SHACKLE**

Trade quality.

Galvanized, shackle and shoulder bolt are the same thickness.

These shackles do not meet the requirements of the HEALTH & SAFETY INSPECTORATE and must therefore never ever be used for hoisting.



ARTIKELNO	SHACKLE/BOLT (INCH)	SHACKLE/BOLT (MM)	MAX. WORKING LOAD	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
06.33.205	3/16"	5 mm	80 kg	20 mm	10 mm	16 gr
06.33.206	1/4"	6 mm	100 kg	24 mm	12 mm	32 gr
06.33.208	5/16"	8 mm	200 kg	32 mm	16 mm	70 gr
06.33.210	3/8"	10 mm	300 kg	40 mm	20 mm	134 gr
06.33.211	7/16"	11 mm	400 kg	44 mm	22 mm	176 gr
06.33.212	1/2"	12 mm	500 kg	50 mm	25 mm	250 gr
06.33.214	9/16"	14 mm	600 kg	56 mm	28 mm	360 gr
06.33.216	5/8"	16 mm	800 kg	64 mm	32 mm	0.5 kg
06.33.219	3/4"	19 mm	1,100 kg	76 mm	38 mm	0.9 kg
06.33.222	7/8"	22 mm	1,500 kg	88 mm	44 mm	1.4 kg
06.33.225	1"	25 mm	2,000 kg	100 mm	50 mm	2.1 kg
06.33.228	1.1/8"	28 mm	2,600 kg	114 mm	57 mm	3.4 kg
06.33.232	1 1/4"	32 mm	3,200 kg	128 mm	64 mm	4.6 kg
06.33.238	1 1/2"	38 mm	4,500 kg	152 mm	76 mm	7.6 kg

**H-SHACKLE**

Trade quality.

Galvanized, shackle and shoulder bolt are the same thickness.

These shackles do not meet the requirements of the HEALTH & SAFETY INSPECTORATE and must therefore never ever be used for hoisting.



ARTIKELNO	SHACKLE/BOLT (INCH)	SHACKLE/BOLT (MM)	MAX. WORKING LOAD	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
06.33.405	3/16"	5 mm	80 kg	20 mm	10 mm	16 gr
06.33.406	1/4"	6 mm	100 kg	24 mm	12 mm	34 gr
06.33.408	5/16"	8 mm	200 kg	32 mm	16 mm	72 gr
06.33.410	3/8"	10 mm	300 kg	40 mm	20 mm	140 gr
06.33.412	1/2"	12 mm	500 kg	50 mm	25 mm	265 gr
06.33.416	5/8"	16 mm	800 kg	64 mm	32 mm	560 gr
06.33.419	3/4"	19 mm	1,100 kg	76 mm	38 mm	1.0 kg
06.33.422	7/8"	22 mm	1,500 kg	88 mm	44 mm	1.5 kg
06.33.425	1"	25 mm	2,000 kg	100 mm	50 mm	2.3 kg
06.33.428	1.1/8"	28 mm	2,600 kg	114 mm	57 mm	3.5 kg
06.33.432	1 1/4"	32 mm	3,200 kg	128 mm	64 mm	4.8 kg
06.33.438	1 1/2"	38 mm	4,500 kg	152 mm	76 mm	8.3 kg



## D-SHACKLE (EN)

Complies with EN 13889 standard.  
 Completely galvanized with lacquered shoulder bolt.  
 Bolt thicker than shackle.  
 Safety factor 6 (minimum breaking load is 6 x working load).

ARTIKELNO	SAFE WORKING LOAD	SHACKLE DIAM.	BOLT DIAM.	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
06.40.302	330 kg	5 mm	6 mm	19 mm	10 mm	20 gr
06.40.304	500 kg	6 mm	8 mm	22 mm	13 mm	50 gr
06.40.306	750 kg	8 mm	10 mm	26 mm	14 mm	77 gr
06.40.308	1,000 kg	10 mm	11 mm	32 mm	17 mm	109 gr
06.40.310	1,500 kg	11 mm	13 mm	36 mm	18 mm	181 gr
06.40.312	2,000 kg	13 mm	16 mm	41 mm	21 mm	268 gr
06.40.314	3,250 kg	16 mm	19 mm	51 mm	27 mm	549 gr
06.40.316	4,750 kg	19 mm	22 mm	60 mm	32 mm	1.0 kg
06.40.318	6,500 kg	22 mm	25 mm	71 mm	37 mm	1.4 kg
06.40.320	8,500 kg	25 mm	28 mm	81 mm	43 mm	2.1 kg
06.40.322	9,500 kg	28 mm	32 mm	90 mm	46 mm	3.0 kg
06.40.324	12,000 kg	32 mm	35 mm	100 mm	51 mm	4.1 kg
06.40.326	13,500 kg	35 mm	38 mm	111 mm	57 mm	5.2 kg
06.40.328	17,000 kg	38 mm	41 mm	122 mm	60 mm	7.2 kg
06.40.330	25,000 kg	45 mm	50 mm	146 mm	73 mm	12.1 kg
06.40.332	35,000 kg	50 mm	57 mm	172 mm	83 mm	19.1 kg



## H-SHACKLE (EN)

Complies with EN 13889 standard.  
 Completely galvanized with lacquered shoulder bolt.  
 Bolt thicker than shackle.  
 Safety factor 6 (minimum breaking load is 6 x working load).

ARTIKELNO	SAFE WORKING LOAD	SHACKLE DIAM.	BOLT DIAM.	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
06.40.502	330 kg	5 mm	6 mm	22 mm	10 mm	23 gr
06.40.504	500 kg	6 mm	8 mm	28 mm	13 mm	54 gr
06.40.506	750 kg	8 mm	10 mm	31 mm	14 mm	86 gr
06.40.508	1,000 kg	10 mm	11 mm	37 mm	17 mm	141 gr
06.40.510	1,500 kg	11 mm	13 mm	43 mm	18 mm	172 gr
06.40.512	2,000 kg	13 mm	16 mm	48 mm	21 mm	286 gr
06.40.514	3,250 kg	16 mm	19 mm	60 mm	27 mm	626 gr
06.40.516	4,750 kg	19 mm	22 mm	71 mm	32 mm	1.0 kg
06.40.518	6,500 kg	22 mm	25 mm	84 mm	37 mm	1.5 kg
06.40.520	8,500 kg	25 mm	28 mm	95 mm	43 mm	2.4 kg
06.40.522	9,500 kg	28 mm	32 mm	108 mm	46 mm	3.0 kg
06.40.524	12,000 kg	32 mm	35 mm	119 mm	51 mm	4.3 kg
06.40.526	13,500 kg	35 mm	38 mm	132 mm	57 mm	6.0 kg
06.40.528	17,000 kg	38 mm	41 mm	146 mm	60 mm	8.0 kg
06.40.530	25,000 kg	45 mm	50 mm	178 mm	73 mm	13.7 kg
06.40.532	35,000 kg	50 mm	57 mm	197 mm	83 mm	20.4 kg



**D-SHACKLE (EN) WITH NUT**

Complies with EN 13889 standard.

Completely galvanized with lacquered nut.

Bolt thicker than shackle.

Safety factor 6 (minimum breaking load is 6 x working load).

ARTIKELNO	SAFE WORKING LOAD	SHACKLE DIAM.	BOLT DIAM.	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
<b>06.65.320</b>	2,000 kg	13 mm	16 mm	41 mm	21 mm	340 gr
<b>06.65.325</b>	3,250 kg	16 mm	19 mm	51 mm	27 mm	667 gr
<b>06.65.330</b>	4,750 kg	19 mm	22 mm	60 mm	32 mm	1.1 kg
<b>06.65.335</b>	6,500 kg	22 mm	25 mm	71 mm	37 mm	1.7 kg
<b>06.65.340</b>	8,500 kg	25 mm	28 mm	81 mm	43 mm	2.5 kg
<b>06.65.345</b>	9,500 kg	28 mm	32 mm	90 mm	46 mm	3.4 kg
<b>06.65.350</b>	12,000 kg	32 mm	35 mm	100 mm	51 mm	4.9 kg
<b>06.65.355</b>	13,500 kg	35 mm	38 mm	111 mm	57 mm	6.2 kg
<b>06.65.360</b>	17,000 kg	38 mm	41 mm	122 mm	60 mm	8.3 kg
<b>06.65.365</b>	25,000 kg	45 mm	50 mm	146 mm	73 mm	14.2 kg
<b>06.65.370</b>	35,000 kg	50 mm	57 mm	172 mm	83 mm	21.2 kg

**H-SHACKLE (EN) WITH NUT**

Complies with EN 13889 standard.

Completely galvanized with lacquered nut.

Bolt thicker than shackle.

Safety factor 6 (minimum breaking load is 6 x working load).

ARTIKELNO	SAFE WORKING LOAD	SHACKLE DIAM.	BOLT DIAM.	INTERNAL LENGTH	INTERNAL WIDTH	APPROX. WEIGHT
<b>06.65.504</b>	500 kg	6 mm	8 mm	28 mm	13 mm	64 gr
<b>06.65.506</b>	750 kg	8 mm	10 mm	31 mm	14 mm	103 gr
<b>06.65.508</b>	1,000 kg	10 mm	11 mm	37 mm	17 mm	169 gr
<b>06.65.510</b>	1,500 kg	11 mm	13 mm	43 mm	18 mm	206 gr
<b>06.65.520</b>	2,000 kg	13 mm	16 mm	48 mm	21 mm	358 gr
<b>06.65.525</b>	3,250 kg	16 mm	19 mm	60 mm	27 mm	762 gr
<b>06.65.530</b>	4,750 kg	19 mm	22 mm	71 mm	32 mm	1.2 kg
<b>06.65.535</b>	6,500 kg	22 mm	25 mm	84 mm	37 mm	1.7 kg
<b>06.65.540</b>	8,500 kg	25 mm	28 mm	95 mm	43 mm	2.7 kg
<b>06.65.545</b>	9,500 kg	28 mm	32 mm	108 mm	46 mm	3.7 kg
<b>06.65.550</b>	12,000 kg	32 mm	35 mm	119 mm	51 mm	5.3 kg
<b>06.65.555</b>	13,500 kg	35 mm	38 mm	132 mm	57 mm	6.9 kg
<b>06.65.560</b>	17,000 kg	38 mm	41 mm	146 mm	60 mm	9.4 kg
<b>06.65.565</b>	25,000 kg	45 mm	50 mm	178 mm	73 mm	15.3 kg
<b>06.65.570</b>	35,000 kg	50 mm	57 mm	197 mm	83 mm	23.7 kg





## PULLEY, TOUGHENED RESIN

For guiding wires from the throttle in engine rooms and hoisting wires for hatch covers.

material : toughened resin  
bearing bush : **no**

ARTIKELNO	PULLEY DIAMETER	GROOVE	BORE DIAMETER	THICKNESS
<b>07.00.103</b>	30 mm	4 mm	6 mm	9 mm
<b>07.00.104</b>	40 mm	4 mm	6 mm	9 mm
<b>07.00.105</b>	50 mm	5 mm	8 mm	11 mm
<b>07.00.106</b>	60 mm	5 mm	8 mm	11 mm
<b>07.00.107</b>	70 mm	6.5 mm	10 mm	13 mm
<b>07.00.108</b>	80 mm	6.5 mm	10 mm	13 mm
<b>07.00.109</b>	90 mm	8 mm	10 mm	15 mm
<b>07.00.110</b>	100 mm	8 mm	10 mm	15 mm



## PULLEY, CAST IRON

For guiding wires from the throttle in engine rooms and hoisting wires for hatch covers.

material : cast iron  
bearing bush : **no**

ARTIKELNO	PULLEY DIAMETER	GROOVE	BORE DIAMETER	THICKNESS
<b>07.00.203</b>	30 mm	6 mm	8.25 mm	10 mm
<b>07.00.204</b>	40 mm	6 mm	8.25 mm	10 mm
<b>07.00.205</b>	50 mm	8 mm	10.25 mm	12 mm
<b>07.00.206</b>	60 mm	10 mm	10.25 mm	12 mm
<b>07.00.207</b>	75 mm	12 mm	12.25 mm	16 mm
<b>07.00.209</b>	90 mm	16 mm	14.25 mm	20 mm
<b>07.00.210</b>	100 mm	16 mm	14.25 mm	20 mm



## PULLEY, CAST IRON GG60/BRONZE

For guiding wires from the throttle in engine rooms and hoisting wires for hatch covers.

material : cast iron GG60/bronze  
bearing bush : **yes**

ARTIKELNO	PULLEY DIAMETER	GROOVE	BORE DIAMETER	THICKNESS
<b>07.00.510</b>	100 mm	8 mm	15 mm	20 mm
<b>07.00.512</b>	125 mm	10 mm	22 mm	27 mm
<b>07.00.515</b>	150 mm	12 mm	30 mm	40 mm
<b>07.00.520</b>	200 mm	14 mm	30 mm	40 mm
<b>07.00.525</b>	250 mm	18 mm	35 mm	45 mm
<b>07.00.531</b>	300 mm	20 mm	40 mm	50 mm

**BLOCK WITH 1 NYLON PULLEY**

Made of galvanized cast iron.  
Often used in lighting masts, for hoisting flags and nautical lights.

ARTIKELNO	PULLEY DIAMETER	WIDTH DIAMETER	EYE DIAMETER	BIGGEST LENGTH	SAFE WORKING LOAD	WEIGHT
<b>07.02.215</b>	15 mm	5 mm	10 mm	50 mm	150 kg	25 gr
<b>07.02.220</b>	20 mm	6 mm	11 mm	60 mm	200 kg	40 gr
<b>07.02.225</b>	25 mm	7 mm	12 mm	70 mm	230 kg	60 gr
<b>07.02.230</b>	30 mm	8 mm	13 mm	80 mm	250 kg	75 gr
<b>07.02.240</b>	40 mm	9 mm	14 mm	93 mm	300 kg	125 gr
<b>07.02.250</b>	50 mm	12 mm	15 mm	113 mm	390 kg	190 gr

**BLOCK WITH 2 NYLON PULLEYS**

Made of galvanized cast iron.

ARTIKELNO	PULLEY DIAMETER	WIDTH DIAMETER	EYE DIAMETER	BIGGEST LENGTH	SAFE WORKING LOAD	WEIGHT
<b>07.02.415</b>	15 mm	5 mm	10 mm	50 mm	150 kg	40 gr
<b>07.02.420</b>	20 mm	6 mm	11 mm	60 mm	200 kg	60 gr
<b>07.02.425</b>	25 mm	7 mm	12 mm	70 mm	230 kg	90 gr
<b>07.02.430</b>	30 mm	8 mm	13 mm	80 mm	250 kg	140 gr
<b>07.02.440</b>	40 mm	9 mm	16 mm	105 mm	300 kg	260 gr
<b>07.02.450</b>	50 mm	12 mm	16 mm	117 mm	390 kg	420 gr

**FLAG LINE BLOCK**

Made from toughened resin.

ARTIKELNO	PULLEY DIAMETER	WIDTH DIAMETER	EYE DIAMETER	TOTAL LENGTH	WEIGHT
<b>07.09.418</b>	20 mm	5 mm	9 mm	44 mm	46 gr
<b>07.09.430</b>	30 mm	10 mm	10 mm	72 mm	46 gr





## SNATCH BLOCK (FAIRLEAD BLOCK)

For steel cable.  
Has swivel eye and swivel hook.

ARTIKELNO	PULLEY DIAMETER (INCH)	PULLEY DIAMETER (MM)	WIDTH DIAMETER	EYE OR HOOK	NUMBER OF PULLEYS	SAFE WORKING LOAD	WEIGHT
<b>07.77.075</b>	3"	75 mm	7 - 10 mm	eye	1	2,000 kg	4 kg
<b>07.77.115</b>	4"	115 mm	10 - 16 mm	eye	1	4,000 kg	6 kg
<b>07.77.150</b>	6"	150 mm	17 - 22 mm	eye	1	8,000 kg	15 kg
<b>07.87.075</b>	3"	75 mm	7 - 10 mm	hook	1	2,000 kg	4 kg
<b>07.87.115</b>	4"	115 mm	10 - 16 mm	hook	1	4,000 kg	6 kg



## CAR HOISTING BLOCK

Extra strong!  
For steel cable.  
Industrial quality, produced by established manufacturer.  
Has a swivel hook .  
Safety factor 5 (minimum breaking load is 5 x working load).

Bearing : bronze bush  
Pulley : cast steel GG20  
Frame + eye : steel

### GUIDELINE

The diameter of the pulley must be at least 20 x the diameter of the cable.

ARTIKELNO	PULLEY DIAMETER (INCH)	PULLEY DIAMETER (MM)	WIDTH DIAMETER	EYE OR HOOK	NUMBER OF PULLEYS	SAFE WORKING LOAD	WEIGHT
<b>07.89.149</b>	6"	150 / 120 mm	10 - 12 mm	hook	1	2,000 kg	6.5 kg

## TRAILER WINCH, STAINLESS STEEL 316, STEEL WIRE

Raising ship's masts, as winch for rolling hatch covers etc.  
Stainless steel 316 model, manual power about 22 kg.

ARTIKELNO	TYPE	PULLING POWER	HOISTING CAPACITY	HANDLE LENGTH	BLOCKING	DRUM DIMENSIONS (DXWXH)	WIRE CAPACITY	BEDPLATE (LXW)
09.05.024	4AFID	500 kg	180 kg	150 mm	self-braking	40 x 49 x 96 mm	12 m of 4 mm steel wire	125 x 91 mm
09.05.026	6AFID	750 kg	240 kg	180 mm	self-braking	50 x 60 x 130 mm	12 m of 5 mm steel wire	155 x 96 mm
09.05.028	8AFID	850 kg	270 kg	240 mm	self-braking	60 x 70 x 167 mm	19 m of 6 mm steel wire	178 x 101 mm
09.05.032	12AFID	1,500 kg	490 kg	245 mm	self-braking	76 x 85 x 170 mm	12 m of 7 mm steel wire	201 x 120 mm



## WINCH STRAP, WITH HOOK AND CLACK

ARTIKELNO	WIDTH	LENGTH	SAFE WORKING LOAD	BREAKING LOAD
09.05.054	50 mm	4.6 m	610 kg	1,818 kg
09.05.056	50 mm	6.1 m	610 kg	1,818 kg
09.05.059	50 mm	9.0 m	610 kg	1,818 kg



## STEEL CABLE WITH HOOK AND CLACK

ARTIKELNO	DIAMETER	LENGTH	SAFE WORKING LOAD	CONSTRUCTION
09.05.060	6 mm	8.5 m	410 kg	6x19+1TK
09.05.061	6 mm	12.0 m	410 kg	6x19+1TK
09.05.080	8 mm	8.5 m	700 kg	6x19+1TK
09.05.081	8 mm	12.0 m	700 kg	6x19+1TK



## TRAILER WINCH

Raising ships' masts, as winch for rolling hatch covers etc.  
Made from high-grade carbon steel, galvanized or powder coating.  
A robust and well finished winch, manual power approx. 22 kg.

ARTIKELNO	TYPE	PULLING POWER	HANDLE LENGTH	BLOCKING	DRUM DIMENSIONS (DXWXH)	WIRE CAPACITY	BEDPLATE (LXW)
09.05.130	T900	410 kg	200 mm	by means of pawl for neutral and 2 directions	16 x 49 x 110 mm	42/11 m of 3/6 mm rope	115 x 84 mm
09.05.141	T1300	550 kg	230 mm	by means of pawl for neutral and 2 directions	19 x 51 x 130 mm	41 m of 4 mm rope	140 x 84 mm
09.05.170	T1801	815 kg	280 mm	by means of pawl for neutral and 2 directions	22 x 54 x 170 mm	40/6 m of 4/10 mm rope	135 x 95 mm





## TRAILER WINCH, STEEL WIRE

Raising ships' masts, as winch for rolling hatch covers etc.  
Made from high-grade carbon steel, galvanized or powder coating.  
A robust and well finished winch, manual power approx. 22 kg.

ARTIKELNO	TYPE	PULLING POWER	HANDLE LENGTH	BLOCKING	DRUM DIMENSIONS (DXWXH)	THREAD	BEDPLATE (LXW)	BRAKE
<b>09.05.430</b>	T2025	450 kg single, 910 kg double	260 mm	by means of pawl for neutral and 2 directions	45 x 76 x 129 mm	30 metres of 5 mm steel wire	188 x 132 mm	option
<b>09.05.460</b>	T2625	590 kg single, 1,180 kg double	260 mm	by means of pawl for neutral and 2 directions	45 x 76 x 159 mm	44 metres of 5 mm steel wire	188 x 132 mm	option
<b>09.05.470</b>	T3205	725 kg single, 1,450 kg double	260 mm	by means of pawl for neutral and 2 directions	45 x 71 x 159 mm	42 metres of 5 mm steel wire	188 x 132 mm	option
<b>09.05.490</b>	T3700	830 kg single, 1,700 kg double	260 mm	by means of pawl for neutral and 2 directions	45 x 95 x 159 mm	56 metres of 5 mm steel wire	220 x 180 mm	yes



## TRAILER WINCH, ACCESSORIES

ARTIKELNO	DESCRIPTION	SUITABLE FOR TRAILER WINCH TYPE
<b>09.05.499</b>	trailer winch brake	T2025, T2625, T3205, T3700
<b>09.05.500</b>	trailer winch cable fixing set	various



## TRAILER WINCH + LOAD BRAKE

Ideal as winch for rolling hatch covers.

ARTIKELNO	TYPE	PULLING POWER	HANDLE LENGTH	BLOCKING	DRUM DIMENSIONS (DXWXH)	WIRE CAPACITY	BEDPLATE (LXW)
<b>09.05.930</b>	K650	270 kg	300 mm	automatic	32 x 48 x 138 mm	29/18 m of 3/4 mm rope	140 x 100 mm



## TRAILER WINCH + LOAD BRAKE, STEEL WIRE

Ideal as winch for rolling hatch covers.

ARTIKELNO	TYPE	PULLING POWER	HANDLE LENGTH	BLOCKING	TROMMEL AFMETING (DXBXH)	WIRE CAPACITY	BEDPLATE (LXW)
<b>09.05.940</b>	K1051	455 kg	255 mm	automatic	57 x 51 x 134 mm	20 m of 5 mm steel wire	133 x 103 mm
<b>09.05.970</b>	KX1550	680 kg	304 mm	automatic	64 x 57 x 165 mm	24/15 m of 6/8 mm steel wire	158 x 130 mm
<b>09.05.990</b>	K2550	1,135 kg	304 mm	automatic	79 x 98 x 165 mm	35/23 m of 6/8 mm steel wire	210 x 180 mm

## HAND WINCH WITH WORM GEAR

Can also be used as a stacking winch.  
Worm gear, worm gear axle and drum are toughened.  
All bearings are nodle bearing.  
The handle is adjustable.  
The winches are coated in hammered effect baked enamel.

ARTIKELNO	HOISTING CAPACITY	REQUIRED FORCE	BLOCKING	DRUM DIMENSIONS (DXWXH)	WIRE CAPACITY	DIMENSIONS (LXWXH)	WEIGHT
09.07.202	250 kg	67.8 m for 5 mm	self-braking	48 x 107 x 112 mm	67.8 m bij 5 mm	293 x 170 x 410 mm	13 kg
09.07.205	500 kg	67.7 m for 6 mm	self-braking	70 x 129 x 120 mm	67.7 m bij 6 mm	313 x 190 x 440 mm	16 kg
09.07.210	1,000 kg	58.4 m for 9 mm	self-braking	101 x 160 x 139 mm	58.1 m bij 9 mm	348 x 260 x 490 mm	26 kg
09.07.215	1,500 kg	50.4 m for 10 mm	self-braking	101 x 185 x 139 mm	50.4 m bij 10 mm	378 x 263 x 490 mm	28 kg



## HAND WINCH WITH WORM GEAR, OIL BATH, ADLER

Ideal as mast winch.

ARTIKELNO	TYPE	HOISTING CAPACITY	BLOCKING	DRUM DIMENSIONS (DXWXH)	WIRE CAPACITY	DIMENSIONS (LXWXH)	WEIGHT
09.07.502	WH2S	250 kg	self-braking	96 x 94 x 39 mm	11.3 m by 5 mm	237 x 219 x 404 mm	12.5 kg
09.07.505	WH5S	500 kg	self-braking	128 x 138 x 54 mm	29.1 m by 6 mm	290 x 282 x 538 mm	21 kg
09.07.507	WH7S	750 kg	self-braking	150 x 182 x 90 mm	49.0 m by 8 mm	390 x 350 x 638 mm	42 kg



## TACKLE SET, 3RD 'HAND'

Simple tackle set, comprising:

- 2 swivel blocks with double 4" pulley
- 12 metres of manilla rope, diameter 12 mm

Hoisting height : max. approx. 3 metres

ARTIKELNO	DESCRIPTION
09.50.504	Tackle set. 3rd 'hand'



## STEEL WIRE TACKLE

Professional hoisting, pulling and hauling equipment for universal use.  
Ideal for shipyards and heavy industry.  
Hoisting capacity from 800 to 3200 kg.  
Lightweight cast aluminium housing.  
Comes with 20 metres of steel wire as standard.  
Hook has a safety clip.  
Suitable for use outside.  
Can be supplied for any hoisting height.  
Meets the requirements of the Health and Safety Inspectorate.

ARTIKELNO	HOISTING CAPACITY	WEIGHT WITHOUT WIRE	MANUAL POWER	DIAMETER STEEL WIRE
09.61.708	800 kg	6 kg	28.5 kg	8.5 mm
09.61.716	1,600 kg	11 kg	41.0 kg	11.5 mm
09.61.732	3,200 kg	22 kg	44.0 kg	16.5 mm





## RATCHET TACKLE OR HAULING TACKLE

Professional hoisting, pulling and hauling equipment for universal use.  
 Ideal for shipyards and heavy industry.  
 Capacity from 250 to 6000 kg.  
 Compact construction, lightweight, simple operation.  
 Steel housing and lever, suitable for use outside.  
 Requires little power because of good leverage.  
 Sealed housing prevents penetration of dust and dirt.  
 Upper and lower hooks run in bearings and have safety clips.  
 Standard hoisting height of 1.5 metres, galvanized load chain.  
 High safety factor of 4:1.  
 Meets the requirements of the Health and Safety Inspectorate.  
 Standard hoisting height of 1.5 metres.  
 Load chain complies with DIN 5684 - grade 80

ARTIKELNO	HOISTING CAPACITY	BUILDING HEIGHT	WEIGHT	JAW WIDTH	MANUAL POWER	NUMBER OF PARTS
09.62.602	250 kg	240 mm	2.2 kg	21 mm	25 kg	1
09.62.605	500 kg	283 mm	2.8 kg	25 mm	35 kg	1
09.62.607	750 kg	180 mm	6.2 kg	39 mm	29 kg	1
09.62.615	1,500 kg	350 mm	9.6 kg	49 mm	29 kg	1
09.62.630	3,000 kg	420 mm	16.5 kg	67 mm	35 kg	1
09.62.660	6,000 kg	570 mm	28.0 kg	78 mm	36 kg	2



## CHAIN TACKLE

Also often called quick tackle or manual tackle.  
 Professional hoisting equipment for universal use.  
 Ideal for shipyards and heavy industry.  
 Lightweight, sheet steel housing, modest height.  
 Modern styling, simple operation.  
 Tested at 50% static overloading.  
 Upper and lower swivel hooks have safety clips  
 High-grade governed load chain that complies with DIN 5684.  
 Chrome galvanized chain available at additional cost.  
 Can be supplied for any hoisting height, suitable for use outdoors.  
 High safety factor of 4:1.  
 Meets the requirements of the Health and Safety Inspectorate.

type : STM  
 standard hoisting height : 3 metres  
 operating height : 2.5 metres  
 load chain complies with : DIN 5684 - grade 80

ARTIKELNO	HOISTING CAPACITY	BUILDING HEIGHT	WEIGHT	JAW WIDTH	MANUAL POWER	NUMBER OF PARTS
09.68.005	500 kg	285 mm	9.0 kg	37 mm	25 kg	1
09.68.010	1,000 kg	315 mm	12.2 kg	45 mm	33 kg	1
09.68.015	1,500 kg	442 mm	17.8 kg	33 mm	27 kg	1
09.68.020	2,000 kg	380 mm	21.0 kg	52 mm	34 kg	1
09.68.030	3,000 kg	475 mm	22.0 kg	67 mm	35 kg	2
09.68.050	5,000 kg	600 mm	41.0 kg	78 mm	39 kg	2



## BOTTLE JACK, HYDRAULIC

Handy and strong tool, a lot of power for little money.  
 For jacking up parts, engines and heavy objects during assembly, disassembly etc.

ARTIKELNO	LIFTING CAPACITY	LOWEST POSITION	HIGHEST POSITION	HYDRAULIC STROKE	SCREW SPINDLE	WEIGHT
09.90.502	2,000 kg	158 mm	308 mm	90 mm	60 mm	2.3 kg
09.90.505	5,000 kg	195 mm	380 mm	125 mm	60 mm	3.5 kg
09.90.512	12,000 kg	215 mm	400 mm	125 mm	60 mm	7.2 kg



# Group 1

Rescue items and fire extinguishers  
Signals, flags and instruction stickers  
Ship's bell, signal and foghorn  
Navigation, deck and searchlights  
Plug, battery, cable reels



## SOLAS (IMO)

**SOLAS** stands for Safety Of Life At Sea and describes the requirements to be satisfied by seagoing vessels. The International Convention for the Safety of Life at Sea (SOLAS) is an international convention first passed in 1914. It was passed in response to the disaster with the Titanic in 1912.

In 1948 the participating member states of the United Nations decided to set up an organisation which specialised in safety at sea, the International Maritime Organization (IMO). SOLAS has come under the International Maritime Organization (IMO) since 1954.

IMO is responsible for compliance with SOLAS, although this task is subcontracted increasingly to classification societies.

## MED 96/98/EC (IMO)

**Marine Equipment Directive 96/98/EC (MED 96/98/EC)** comprises the requirements established by the International Maritime Organization (IMO) for commercial shipping. These requirements apply to all new ships and to all existing ships which have not yet been fitted with approved equipment.

The MED 96/98/EC applies to the following parts of the shipping equipment:

- lifesaving equipment;
- prevention of sea pollution;
- fire protection;
- navigation equipment;
- radio communication equipment.

The MED 96/98/EC relates to the EU requirements for transport and international maritime conventions (IMO, SOLAS) and international standards (IEC, ISO). Equipment which has been approved is given the mark of conformity, a ship's wheel.



## ES-TRIN

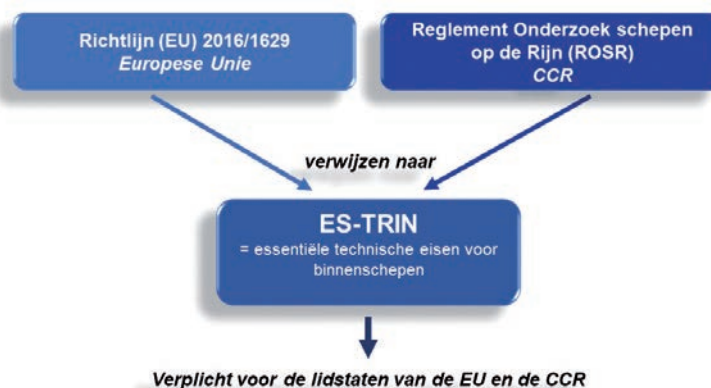
Since 2015, the CESNI Committee has regularly updated and published the European Standard laying down Technical Requirements for Inland Navigation vessels (**ES-TRIN**).

This standard lays down the uniform technical requirements necessary to ensure the safety of inland navigation vessels. It is available in four languages (German, English, French, Dutch) and brings together in a standardised way the requirements previously contained in directive 2006/87/EC and in the Rhine vessel inspection regulations. It contains provisions on inland navigation vessel construction and equipment, special provisions for certain categories of vessels such as passenger and container vessels, provisions on the model of inland navigation vessel certificate as well as instructions on how to apply the technical standard.

References to ES-TRIN are now included in the legal frameworks of the EU and the CCNR (respectively directive (EU) 2016/1629 and Rhine vessel inspection regulations).

The Danube Commission also decided in 2017 to recommend the standard in its international instruments and the International Sava River Basin Commission intends to create a reference to the standard in its legal framework. In other words, ES-TRIN

has been established, with great effort, as the centrepiece and baseline for the technical requirements for inland navigation vessels in Europe and has contributed to the reinforcement of governance at the European level.



## LIFE BUOY REGULATIONS

### ES-TRIN Article 13.08, paragraph 1 Lifebuoys and lifejackets

1. On board craft there shall be at least three lifebuoys:
  - in accordance with European Standard EN 14144 : 2003; or
  - in accordance with the 1974 International Convention for the Safety of Life at Sea (SOLAS 1974), Chapter III, Regulation 7.1, and the International LifeSaving Appliance (LSA) Code, subsection
- 2.1. They shall be ready for use and attached to the deck at appropriate points without being attached to their mounting. At least one lifebuoy shall be in the immediate vicinity of the wheelhouse and shall be equipped with a selfigniting, batterypowered light that will not be extinguished in water.

## LIFE BUOY, WATER SPORT



Polyethylene outer skin, filled with polyurethane foam.  
Durable, low maintenance, colourfast, resistant to oil, petrol and weather.  
Round model with grab lines.

colour : orange  
dimensions : 24" x 14" (570 x 330 mm)  
thickness : 100 mm

### SCALE:

5 items CK  
10 items CH  
15 items CG  
20 items CF



ARTIKELNR	TARGET GROUP	WEIGHT	BUOYANCY
10.04.060	recreational boating	1.4 kg	100N

## LIFE BUOY, PROFESSIONAL



Polyethylene outer skin, filled with polyurethane foam.  
Durable, low maintenance, colourfast, resistant to oil, petrol and weather.  
Round model with grab lines.

**SOLAS - MED 96/98/EC approved.**

**Applies to demands of ES-TRIN (art.13.08, paragraph 1).**

colour : orange  
dimensions : 30" x 18" (750 x 450 mm)  
thickness : 100 mm  
bearing : with retroreflective strips

### SCALE:

5 items CK  
10 items CH  
15 items CG  
20 items CF



ARTIKELNR	TARGET GROUP	WEIGHT	BUOYANCY
10.13.076	inland navigation	2.5 kg	160N
10.13.375	seagoing shipping	4.5 kg	160N



## RETROREFLECTIVE STRIPS



Obligatory for life buoys used in commercial shipping.  
Need per buoy: 1.6 metres (4 x 40 cm).

**SCALE:**  
per roll                      BF

ARTIKELNR	ROLL LENGTH	WIDTH
10.20.002	45.7 m	50 mm



## LIFE BUOY LIGHT LED

Complete with line.

**SOLAS - MED 96/98/EC approved.**  
**Applies to demands of ES-TRIN (art.13.08, paragraph 1).**

colour                               : orange  
materials                           : plastic  
holder dimensions               : Ø 19-25 mm  
buoy light dimensions         : Ø 105 mm x 180 mm  
light intensity                   : 2 candela  
running time                     : at least 2 hours  
batteries                          : 4 alkaline batteries AA penlite 1,5 V (not included)  
holder                               : separately available (no screws included)

ARTIKELNR	DESCRIPTION
10.20.005	Life buoy light LED without holder
10.20.006	Holder for life buoy light LED (no screws included)



## LIFE BUOY LIGHT

Complete with line.

**SOLAS - MED 96/98/EC approved.**  
**Applies to demands of ES-TRIN (art.13.08, paragraph 1).**

colour                               : orange  
materials                           : plastic  
holder dimensions               : Ø 99 mm x 125 mm  
buoy light dimensions         : Ø 90 mm x 340 mm  
weight                              : 0.205 kg (excluding batteries)  
light intensity                   : 2 candela  
running time                     : at least 2 hours  
batteries                          : 4 alkaline batteries, wide bar, 1.5 V (not included)  
holder                               : separately available

ARTIKELNR	DESCRIPTION
10.20.007	Life buoy light without holder
10.20.008	Holder for life buoy light

### LIFE BUOY LIGHT DANIAMANT L90

Daniamant make, very robust quality.  
**Complete with holder, batteries and line.**

**SOLAS - MED 96/98/EC approved.**  
**Applies to demands of ES-TRIN (art.13.08, paragraph 1).**

colour : orange  
 type : L90  
 materials : plastic  
 holder dimensions : Ø 110 mm x 143 mm  
 buoy light dimensions : Ø 100 mm x 391 mm  
 weight : 1.25 kg (including batteries)  
 light intensity : 2 candela  
 running time : at least 2 hours  
 operating temperature : -1°C to +30°C  
 batteries : 5 alkaline batteries, wide bar, 1.5 V (included)  
 lifetime : of batteries approx. 2 years (-30°C to +65°C)

ARTIKELNR	DESCRIPTION
10.20.010	Life buoy light Daniamant L90



### LIFE BUOY LIGHT DANIAMANT L170 LED

Daniamant make, very robust quality.  
**Complete with holder, battery and line (1 metre).**

**SOLAS - MED 96/98/EC approved.**  
**Applies to demands of ES-TRIN (art.13.08, paragraph 1).**

colour : yellow  
 type : L170 LED  
 material : plastic  
 holder dimensions : Ø 77 mm x 73.5 mm (84 mm including buoy light)  
 buoy light dimensions : Ø 75 mm x 78 mm  
 weight : 0.128 kg (including battery)  
 light intensity : 2 candela  
 burning hours : at least 2 hours  
 operating temperature : -1°C to +30°C  
 batteries : 1 alkaline battery (non-replaceable)  
 lifetime : battery approx. 5 years (-30°C to +65°C)

ARTIKELNR	DESCRIPTION
10.20.020	Life buoy light Daniamant L170 LED



### BUOY LINE HOLDER

Ideal for storing the throwing line of a life buoy such that it is always ready for use.  
 Tidy, clean and ready for action.  
 Meets SOLAS requirements: doesn't kink, minimally 8 mm thick, minimally 5kn/510 kg

**SOLAS approved.**  
**Applies to demands of ES-TRIN (art.13.08, paragraph 1).**

colour : white  
 material : soft but strong plastic  
 rope : 8 mm, orange, braided polyethylene

ARTIKELNR	DESCRIPTION	FOR BUOY	DIMENSIONS (LXWXH)	LINE	WEIGHT
10.20.499	buoy line holder (DOESN'T fit in buoy)	water sport (60 cm - 24")	385 x 120 x 70 mm	24 m	380 gr
10.20.500	buoy line holder (fits in buoy)	professional (75 cm - 30")	480 x 120 x 70 mm	30 m	550 gr





## THROWING RING FOR LIFELINE (FLOATS)

colour : orange  
 material : soft but strong plastic  
 diameter : 185 x 130 mm  
 weight : 290 gram

ARTIKELNR	DESCRIPTION
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10.20.501	Throwing ring for lifeline (floats)
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## LIFELINE OR THROWING LINE

For attachment to a life buoy, throwing ring, monkey's fist and throwing weight.  
 Equipped with fastening clip.  
 Meets SOLAS requirements: minimally 8 mm thick, minimally 5 kn/510 kg.  
 The lifeline keeps floating.



**SOLAS approved.**  
 Applies to demands of ES-TRIN (art.13.08, paragraph 1).

colour : orange  
 construction : twisted  
 material : polyethylene  
 diameter : 8 mm  
 length : 30 metres

ARTIKELNR	DESCRIPTION
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10.20.502	Lifeline or throwing line
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## LIFE BUOY MOUNTING BRACKET

Made from stainless steel 316.  
 For life buoy 24" (570 x 330 mm) and 30" (750 x 450 mm).

width : 70 mm  
 material thickness : 3 mm  
 weight : 480 gram  
 length : 300 mm overall

ARTIKELNR	DESCRIPTION
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10.20.980	Life buoy mounting bracket
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## LIFE BUOY CABINET , UNIVERSAL



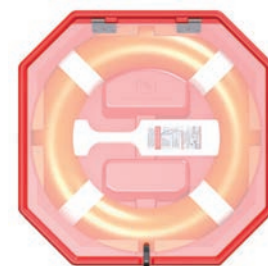
Made from durable impact resistant polyethylene.  
UV resistant and colourfast.  
Hinges are corrosion and vandalism resistant.

Is supplied as standard **without** throwing line, life buoy and fixings!

colour : red  
throwing line space : for 30 metres  
for buoys : approx. 30" x 18" or 76 x 46 cm  
cabinet size : hxxxd = 840 x 840 x 270 mm

### SCALE:

5 items GK  
10 items GH  
15 items GG



ARTIKELNR	DESCRIPTION	WEIGHT
10.21.000	Open model	7.0 kg
10.21.005	With clear plastic lid	9.5 kg

## LIFE BUOY CABINET, SMALL CLOSED



Made from durable impact resistant polyethylene.  
UV resistant and colourfast.  
Hinges are corrosion and vandalism resistant.

Is supplied as standard **without** throwing line, life buoy and fixings!

colour : red  
lock : clamp latch  
throwing line space : for 30 metres  
for buoys : approx. 24" x 14" or 60 x 34 cm  
cabinet size : hxxxd = 780 x 690 x 207 mm  
weight : 6.6 kg

### SCALE:

5 items GK  
10 items GH  
15 items GG



ARTIKELNR	DESCRIPTION
10.21.024	Life buoy cabinet, small closed

## LIFE BUOY CABINET, LARGE CLOSED



Made from durable impact resistant polyethylene.  
UV resistant and colourfast.  
Hinges are corrosion and vandalism resistant.

Is supplied as standard **without** throwing line, life buoy and fixings!

colour : red  
lock : clamp latch  
throwing line space : for 30 metres  
for buoys : approx. 30" x 18" or 76 x 46 cm  
cabinet size : h x w x d = 940 x 875 x 202 mm  
weight : 11.6 kg

### SCALE:

5 items GK  
10 items GH  
15 items GG



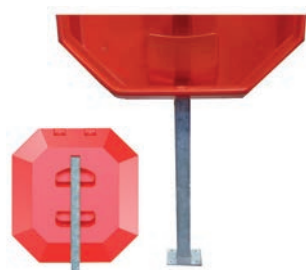
ARTIKELNR	DESCRIPTION
10.21.030	Life buoy cabinet, large closed + 3M reflective stickers
10.21.031	Reddingsboeikast, gesloten groot + 3M reflecterende stickers



## HOLDER

Useful for holding the life buoy together with the throwing line without the line becoming tangled.  
Can also be used to mount the buoy indoors on the wall, in a swimming pool for instance.

ARTIKELNR	FOR BUOY
10.21.080	water sport (60 cm - 24")
10.21.081	professional (75 cm - 30")



## POLE LIFE BUOY CABINET

Including mounting (2 bolts, 2 nuts, 2 rings).

ARTIKELNR	DESCRIPTION	DIMENSIONS	MATERIAL
10.21.089	with base plate, 4 holes M10	1,500 x 60 x 40 x 3 mm	galvanized steel (U-profile)
10.21.090	without base plate	2,000 x 60 x 40 x 3 mm	galvanized steel (U-profile)



## RAIL, WALL FIXING LIFE BUOY CABINET

Railing fastening is suitable for railing with a diameter of 31.8 mm up to and including 58 mm.

ARTIKELNR	DESCRIPTION	MATERIAL
10.21.093	rail fixing	galvanized steel
10.21.094	wall fixing	galvanized steel



## LIFE BUOY CABINET, BASIC

Made from durable impact resistant polyethylene.  
UV resistant and colourfast.  
**Lid is sold separately.**

Is supplied as standard **without** throwing line, life buoy and fixings!

colour : orange  
throwing line space : for 30 metres  
for buoys : approx. 24" x 14" or 60 x 34 cm  
: approx. 30" x 18" or 76 x 46 cm  
cabinet size : h x w x d = 850 x 850 x 230 mm  
lid size : h x w x d = 640 x 800 x 70 mm  
weight cabinet : 6.5 kg  
weight lid : 3.0 kg

ARTIKELNR	DESCRIPTION
10.21.200	Life buoy cabinet, basic
10.21.205	Seperate cover life buoy cabinet, basic



## POLE LIFE BUOY CABINET, BASIC

Including mounting (3 bolts, 3 nuts, 6 rings).

ARTIKELNR	DESCRIPTION	DIMENSIONS	MATERIAL
10.21.208	with base plate	1,500 mm	galvanized steel
10.21.209	without base plate	2,000 mm	galvanized steel



## LIFE RAFT REGULATIONS

### ES-TRIN Art 19.09, paragraph 6 (special provisions applicable to passenger vessels) Lifesaving equipment

6. Additional collective lifesaving appliances are items of lifesaving equipment which ensure the buoyancy of several persons in the water. These shall:

- a) bear a notice indicating their purpose and the number of persons for whom they are approved;
- b) provide a buoyancy of at least 100 N per person in fresh water;
- c) be made of suitable materials and be resistant to oil, oil products and to temperatures of up to 50 °C;
- d) assume and maintain a stable trim and, in this respect, be fitted with appropriate devices enabling them to be grabbed by the indicated number of persons;
- e) be fluorescent orange in colour or have fluorescent surfaces, visible from all sides, of at least 100 cm<sup>2</sup>;
- f) be such that they can be released from their stowed position and put overboard quickly and safely by one person, or can float free from their stowed position.



## LIFE RAFT



For use on board vessels on inland waterways.

Modern light weight life raft made from polystyrene foam with PVC cover.

Complete with grab lines.

**NSI approved.**

**Applies to demands of ES-TRIN (art.19.09, paragraph 6).**

### SCALE:

5 items	CK
10 items	CH
15 items	CG

ARTIKELNR	NUMBER PEOPLE	BUOYANCY	DIMENSIONS (LXWXH)	WEIGHT	COLOUR
<b>10.23.404</b>	4	400N	74 x 57 x 12 cm	1.6 kg	orange
<b>10.23.408</b>	8	800N	114 x 74 x 12 cm	3.2 kg	orange

## LIFE JACKET REGULATIONS

### ES-TRIN Article 13.08, paragraph 23 Lifebuoys and lifejackets

2. A personalised, automatically inflatable life jacket shall be within reach of every person who is regularly on board a craft. Such life jackets shall conform to:

- European Standards EN ISO 12402-2 : 2006, EN ISO 12402-3 : 2006, EN ISO 12402-4 : 2006; or
- The 1974 International Convention for the Safety of Life at Sea (SOLAS 1974), Chapter III, Regulation 7.2, and the International Life-Saving Appliance (LSA) Code, sub-section 2.2.

Non-inflatable lifejackets in accordance with these Standards shall also be admissible for children.

3. Lifejackets shall be inspected in accordance with the manufacturer's instructions.

### Inland Waterway Vessels Decree equipment Article 7.05, paragraph 34 Lifebuoys and lifejackets

3. On a ship there must be a life jacket within easy reach for every person who is regularly on board.

4. Life jackets must comply with the rules for life buoys as far as buoyancy, material and colour are concerned. They must be of a type approved by the inspector general. It must be possible for inflatable life jackets to inflate automatically and in addition, be inflated manually and orally.

### BPR Article 1.08 - Usage of lifejackets

1. Crew members and other persons on board must wear life jackets in accordance with ES-TRIN article 13.08, paragraph 2.

- a) when going on or off board, if there is a danger of falling in the water;
- b) when in the dinghy;
- c) during work on the outside of the vessel, or;
- d) when staying or working on deck and in the gangway, if there are no bulwarks of at least 90 cm in height or if continuous railings, as indicated in paragraph 5, have not been fitted.

2 Work outside the vessel is only permitted when ships are stationary and only when no danger can be expected from other shipping.

## 50N FLOTATION AID (ISO 12402-5)

Not a life jacket.

For experienced swimmers at a short distance from the shore and in the vicinity of possible helpers.

Not safe in case of unconsciousness.



## 100N LIFE JACKET (ISO 12402-4)

For users in inland waters and in sheltered waters

Limited safety in case of unconsciousness (clothing dependent).



## 150N LIFE JACKET (ISO 12402-3)

For users in Inlandwaters, open waters and coastal water.

Limited safe use if wearing (heavy and/or) waterproof clothing.



## 275N LIFE JACKET (ISO 12402-2)

For users on the open sea under extreme weather conditions.

In virtually all cases safe in case of unconsciousness, even if wearing heavy and/or waterproof clothing.



## LIFE JACKET SEAGOING SHIPS (SOLAS – MED 96/98/EC)

Complies at least with the standards of the SOLAS.

Block life jacket buoyancy 175N.

Automatically inflatable life jacket buoyancy 150N 275N

equipped with completely double system, 1 flotation section with 2 chambers, 2 CO2 cartridges and 2 mechanisms.

These life jackets are suitable for users on the open sea under extreme weather conditions.

Use in case of unconsciousness, even if wearing heavy clothing, is safe in virtually all cases.





## BESTO DOG LIFE VEST

This flotation device was designed specifically for the safety of your faithful dog.

During the time on, in or next to the water, your dog is immediately visible thanks to the High Visibility fabric from which this special dog vest is made.

The vest is filled with light-weight PE filling and has two chest straps and one collar with clasps which can be opened and closed easily and quickly.

The vest does not affect your dog's freedom of movement in any way.

You can attach the dog lead easily to the strong D-ring on the top of the vest.

The strong grabline on the top of the vest allows you to grab the dog quickly (out of the water).

Extra benefit: the vest will also protect your dog against the cold on or around the water.

The filling is layered PE foam.

With reflective strips.

Colour : orange

ARTIKELNR	SIZE	WEIGHT
10.28.204	XS	0 - 4 kg
10.28.205	S	4 - 8 kg
10.28.206	M	8 - 15 kg
10.28.207	L	15 - 40 kg
10.28.208	XL	40+ kg



## BESTO WORKMATE 50N, WIPE CLEAN

Working jacket with special strong, smooth synthetic dirt-repellent cover that is easy to clean.

Special supersoft Airex foam filling with closed cells for extra comfort.

Easy to adjust to the body with 2 strong waistbands with Nexus click buckles.

The jacket is provided with a tab and reflecting strips on the front and back for extra safety.

Optional safety light.

**50N** ISO 12402-5 / CE EN393 approved

Dimensions : 59 x 55 x 5 cm

Colour : signal orange

ARTIKELNR	SIZE	WEIGHT	BUOYANCY
10.29.657	Large	60 - 70 kg	80N
10.29.658	XLarge	70+ kg	80N
10.29.659	2XLarge	70++ kg	80N

## LIFE JACKET WHISTLE + CORD

ARTIKELNR	DESCRIPTION
<b>10.30.001</b>	Life jacket whistle + cord (25 cm)



## LIFE JACKET LIGHT DANIAMANT W3

Obligatory for seagoing shipping since 1-7-1991.  
Lithium battery is activated by water.  
Including fastening clip.

**SOLAS - MED 96/98/EC approved.**

running time	: at least 8 hours
light Intensity	: at least 0,75 candela
life time	: 5 years

ARTIKELNR	DESCRIPTION	WEIGHT
<b>10.30.011</b>	Life jacket light Daniamant W3	31.3 gr



## SMARTFIND S20 SRS PERSONAL AIS BEACON

The Smartfind S20 AIS MOB is designed to be fitted to a lifejacket using the clips supplied, ready to be activated in the event of a man over-board situation. After the lifejacket is inflated, pull the orange locking tab downwards which allows the red cap to be released. Pulling off the red cap deploys the antenna and activates the S20 SRS.

The S20 AIS MOB features a high precision GPS and it will transmit position information and a serialised identity number back to your vessel's onboard plotter, enabling you to be quickly located and recovered. It will transmit continuously for a minimum of 24 hours and has a 7 year battery storage life. The flashing LED indicator light also makes you easier to spot at night.

An automatic deployment option is offered when professionally fitted to compatible lifejackets, allowing the S20 to automatically activate when the lifejacket is inflated

- Manually activated personal safety device
- Easy to operate
- Automatic deployment option\*
- Designed to be mounted on a lifejacket using the clips supplied
- Transmits GPS tracking information over AIS
- Compact and lightweight
- Waterproof, buoyant and submersible to 60 metres
- Unique ID
- Flashing LED light
- Minimum 24hr continuous operation
- 7 year battery storage life
- Self test facility with battery use indicator (with compatible lifejackets)

\* Only for adapted life jackets

ARTIKELNR	DESCRIPTION
<b>10.30.051</b>	Smartfind S20 SRS Personal AIS Beacon
<b>98.10.30.051</b>	Mounting the Smartfind S20 SRS Personal AIS Beacon





## AIS EASYONE A109 AUTO

The EasyONE AIS MOB operates by using the AIS system. A vessel needs to have an AIS receiver in order to be able to receive the distress message. This is compulsory in commercial shipping and also increasingly more pleasure craft are equipped with AIS.

The EasyONE AIS MOB is fully automatic! This is huge advantage if the drowning person is unconscious and consequently unable to activate the device.

The beacon is pushed into the jacket upside down and connected to the jacket by a line and is activated when it is submerged in water, after which it will determine its position. As soon as this is known, the EasyOne will transmit a distress message. The distress message will be received by all vessels within a 5 - 8 mile radius that are equipped with AIS.

The EasyONE can transmit for at least 24 hours at -20 °C and for at least 36 hours under normal circumstances.

The EasyONE is also equipped with a high intensity LED light that ensures maximum beacon visibility in the dark.

The correct operation of the EasyONE is read by means of 2 LEDs. One LED indicates whether the unit is transmitting and the other indicates whether there is a GPS fix.

- Easy lifejacket integration
- Can be applied to any lifejacket without adjusting the lifejacket
- Fast and accurate positioning
- 36+ hours transmitting power
- 7 year battery life
- High intensity LED flashlight
- Floats without aids
- Automatically activated by means of water activation
- At least 1.5 Watt transmitting power (radiated)
- No registration applies
- Transmitting power: at least 1.5 watt (radiated)
- Frequency: 161.975 and 162.025 MHz
- GPS receiver with integrated antenna in compliance with IEC 61108-1
- Extendable VHF antenna (35 cm)
- Two buttons ('TEST' and 'ON')
- Format: 168 x 48 x 27 mm, 150 gram
- Batteries: 6V, 2 lithium
- Battery: 36 hours at 15 °C
- Battery life: 7 years
- Operating temperature: -20 °C to +55 °C

ARTIKELNR	DESCRIPTION
10.30.061	AIS Easyone A109 auto

## BESTO SOLAS 2010



Seagoing lifebelt for use on seagoing vessels as well as passenger ships.  
Nylon cover with PE foam filling.  
Has retroreflective strips.  
Comes with signalling whistle and floating buddy line.

**SOLAS - MED 96/98/EC approved.**

Option : Life jacket light (not included in price!)  
Colour : orange

**SCALE:**

20 to 60 items CK  
61 to 100 items CH  
101 to 250 items CG  
251 to 500 items CF  
501 to 1.000 items CC  
1.001 Items or more CB

ARTIKELNR	SIZE	TYPE	WEIGHT	BUOYANCY	DIMENSIONS (LXWXH)
<b>10.30.191</b>	Infant	-	0 - 15 kg	120N	52 x 10 x 30 cm
<b>10.30.193</b>	Child	-	15 - 43 kg	170N	30 x 22 x 30 cm
<b>10.30.197</b>	Adult	-	43+ kg	200N	32 x 25 x 32 cm
<b>10.30.198</b>	Adult	Crew	43+ kg	200N	32 x 25 x 32 cm



## BESTO GULF 100N



Inland navigation life jacket, also for passenger ships.  
Layered PE foam filling.  
Has retroreflective strips.

**100N ISO 12402-4 approved.**

Colour : orange  
Dimensions : (LxWxH) 41 x 36 x 10 cm

**SCALE:**

20 to 60 items CK  
61 to 100 items CH  
101 to 250 items CG  
251 to 500 items CF  
501 to 1.000 items CC  
1.001 Items or more CB

ARTIKELNR	SIZE	WEIGHT	BUOYANCY
<b>10.46.104</b>	Junior	30 - 50 kg	100N
<b>10.46.106</b>	Small	50 - 70 kg	100N
<b>10.46.107</b>	Adult	70+ kg	100N





## BESTO ECON 100N

Life jacket.

**Always test baby and child jackets in practice because the weight is not the only consideration.**

NEVER use the baby and child jackets in combination with disposable nappies.

The Baby through Junior sizes have a leg strap.

The filling is made from layered PE foam.

Has retroreflective strips.

**100N**                      **ISO 12402-4 approved.**

Colour                      : orange

ARTIKELNR	SIZE	TYPE	WEIGHT	BUOYANCY
10.48.201	Baby 1	leg strap	0 - 15 kg	30N
10.48.202	Toddler 2	leg strap	15 - 20 kg	30N
10.48.203	Child 3	leg strap	20 - 30kg	40N
10.48.204	Junior 4	leg strap	30 - 40 kg	50N
10.48.205	S	-	40 - 60 kg	70N
10.48.206	M	-	60 - 70 kg	80N
10.48.207	L	-	70+ kg	100N
10.48.208	XL	-	70++ kg	100N



## BESTO SPECIAL 100N

Extremely comfortable children's life jacket, designed for intensive use.

**Always test baby and children's life jackets in practice to make sure that it is the right fit rather than selecting based on the weight category.**

NEVER use the baby and children's life jackets in combination with disposable nappies.

The filling is made from exceptionally soft Airex foam.

The Baby size features nappy pants, retroreflective strips, grab loop on the collar and leash loop on the back.

**100N**                      **ISO 12402-4 approved.**

Colour                      : orange with star design

ARTIKELNR	SIZE	TYPE	WEIGHT	BUOYANCY
10.48.301	Baby 1	leg strap	0 - 15 kg	30N



## BESTO, SEPARATE LEG STRAP

Easy to buckle on and with adjustable length.

Only suitable for Besto life jackets.

ARTIKELNR	DESCRIPTION
10.50.001	Seperate leg strap for Besto life jackets



## LIFE JACKET, FLEECE COLLAR

ARTIKELNR	DESCRIPTION
10.50.002	Fleece collar for automatic



## LUME-ON LIFEJACKET ILLUMINATION LIGHTS

Is used in addition to the life jacket light.

2 Flashing LED Lights (pair) illuminate the inflated life jacket lung and improve visibility and rescue capabilities.

Is activated by contact with water (waterproof IP68).

Uses the reflection in the inflated lung of the life jacket and increases visibility.

Only to be attached to life jackets with a separate lung and covered construction.

Is attached directly to the bottom of the inflated lung.

Compact design and packed per pair, including attachment stickers.

All newly supplied Marinepool life jackets are suitable for the use of Lume-On and can be delivered equipped with Lume-On.

To use Lume-On on other life jacket brands, it is the responsibility of the user to check with the manufacturer of the other brand whether Lume-On can be used.



ARTIKELNR	DESCRIPTION
10.52.872	Lume-On lifejacket illumination lights

## MARINEPOOL AUTOMATIC, INLAND SHIPPING 165N



Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord.

Also inflatable by mouth and complete with whistle.

The cover is made of nylon and is provided with a velcro closure.

Must be worn over outer clothing.

### Standard equipped with:

- adjustable leg strap
- hoisting eye
- plastic quick release

Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-3
	: harness	: ISO 12401
Activation system	: Halkey Roberts	: 32 grams
Colour	: protective cover	: dark blue
	: floating body	: luminescent yellow (suitable for Lume-On)
Buoyancy	: 165N	
Minimum bodyweight	: 43 kg	
Chest size	: maximum 175 cm	

### SCALE:

5 units	FK
10 units	FH
15 units	FG
20 units	FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM	LUME-ON LIFEJACKET ILLUMINATION LIGHTS
10.49.112	Standard: normal nylon cover	Halkey Roberts	excluded
10.49.122	Including harness and stainless steel eye for life line	Halkey Roberts	excluded

## MARINEPOOL AUTOMATIC, SEAPRO ECO 300N



The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions.  
 Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord.  
 Also inflatable by mouth and complete with whistle.  
 The cover is made of nylon and is provided with a velcro closure.  
 Available with or without Lume-On life jacket light.  
 Must be worn over outer clothing.

### Standard equipped with:

- integrated safety harness
- adjustable leg strap
- hoisting eye
- stainless steel buckle
- stainless steel eye for lifeline

### Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-2
	: harness	: ISO 12401
Activation system	: United Moulders MK5	: 60 grams
Colour	: protective cover	: black
	: floating body	: luminescent yellow (suitable for Lume-On)
Buoyancy	: 300N	
Minimum bodyweight	: 43 kg	
Chest size	: maximum 175 cm	

### SCALE:

5 units	FK
10 units	FH
15 units	FG
20 units	FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM	LUME-ON LIFEJACKET ILLUMINATION LIGHTS
10.49.510	Standard: normal nylon cover	United Moulders MK5	excluded
10.49.511	Standard: normal nylon cover	United Moulders MK5	included

**MARINEPOOL AUTOMATIC, SEAPRO PREMIUM 300N**

The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions.

Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord.

Also inflatable by mouth and complete with whistle.

The cover is made of nylon and is provided with a velcro closure.

Available with or without Lume-On life jacket light.

Must be worn over outer clothing.

**Standard equipped with:**

- integrated safety harness
- adjustable leg strap
- hoisting eye
- stainless steel buckle
- stainless steel eye for lifeline
- mesh back
- removable fleece collar for added comfort and hygiene

**Meets the ES-TRIN requirements (art. 13.08, paragraph 2).**

Classifications	: life jacket	: ISO 12402-2
	: harness	: ISO 12401
Activation system	: United Moulders MK5	: 60 grams
Colour	: protective cover	: black
	: floating body	: luminescent yellow (suitable for Lume-On)
Buoyancy	: 300N	
Minimum bodyweight	: 43 kg	
Chest size	: maximum 175 cm	

**SCALE:**

5 units	FK
10 units	FH
15 units	FG
20 units	FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM	LUME-ON LIFEJACKET ILLUMINATION LIGHTS
10.49.530	Standard: normal nylon cover	United Moulders MK5	excluded



## MARINEPOOL AUTOMATIC, SEAPRO SOLAS 300N



The Seapro SOLAS life jacket is designed for a variety of purposes. The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions. Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord. **Complete double system, 1 floating body with 2 chambers, 2 CO2 cartridges and 2 mechanisms.** Also inflatable by mouth and complete with whistle. The cover is made of Wipe Clean PVC and is provided with a zipper. Must be worn over outer clothing.

### Standard equipped with:

- integrated safety harness
- double leg strap with lateral adjustment
- hoisting eye
- stainless steel buckle
- reflecting tape on the cover
- stainless steel eye for lifeline
- removable fleece collar for added comfort and hygiene
- W3 life jacket light
- Lume-On life jacket light

### SOLAS - MED 96/98/EC approved

Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: <b>ISO 12402-2</b>
	: harness	: <b>ISO 12401</b>
Activation system	: United Moulders MK5	: 2 x 60 grams
Colour	: protective cover	: red, black, signal yellow or silver
	: floating body	: luminescent yellow (suitable for Lume-On)
Buoyancy	: 300N	
Minimum bodyweight	: 43 kg	
Chest size	: maximum 175 cm	

### SCALE:

5 units	FK
10 units	FH
15 units	FG
20 units	FF

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM	LUME-ON LIFEJACKET ILLUMINATION LIGHTS
10.49.867	Wipe Clean: easy to clean cover, intended for dirty work	United Moulders MK5	included

## BESTO AUTOMATIC, CHILDREN'S LIFE JACKET 100N



Baby's and children's life jackets must always be tested in practice, because weight is not the only determining factor. Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord. Also inflatable by mouth and complete with whistle. The cover is made of nylon and is provided with a velcro closure. Must be worn over outer clothing.

### Standard equipped with:

- integrated safety harness
- adjustable leg strap
- hoisting eye
- stainless steel buckle
- stainless steel eye for lifeline
- removable protective cover for washing

Classifications : life jacket : **ISO 12402-3**  
 Activation system : United Moulders MK5 : 24 grams  
 Colour : protective cover : red  
 : floating body : signal yellow  
 Buoyancy : 100N  
 Size : 15 to 40 kg of bodyweight

### SCALE:

5 units FK  
 10 units FH  
 15 units FG  
 20 units FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.50.112	Standard: normal nylon cover	United Moulders MK5

## BESTO AUTOMATIC, INLAND SHIPPING 165N



Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord. Also inflatable by mouth and complete with whistle. The cover is made of nylon and is provided with a velcro closure. Must be worn over outer clothing.

### Standard equipped with:

- adjustable leg strap
- hoisting eye
- plastic quick release

Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications : life jacket : **ISO 12402-3**  
 Activation system : United Moulders MK5 : 32 grams  
 Colour : protective cover : red or blue  
 : floating body : signal yellow  
 Buoyancy : 165N  
 Size : 50 kg minimum bodyweight

### SCALE:

5 units FK  
 10 units FH  
 15 units FG  
 20 units FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.50.119	Standard: normal nylon cover (red)	United Moulders MK5
10.50.120	Standard: normal nylon cover (blue)	United Moulders MK5



## BESTO AUTOMATIC, PRO 165N



Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord. Also inflatable by mouth and complete with whistle. The cover is made of nylon and is provided with a velcro closure. Must be worn over outer clothing.

### Standard equipped with:

- integrated safety harness
- adjustable leg strap
- hoisting eye
- stainless steel buckle
- stainless steel eye for lifeline

### Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications : life jacket : ISO 12402-3  
 Activation system : United Moulders MK5 : 32 grams  
 Colour : protective cover : black  
 : floating body : signal yellow  
 Buoyancy : 165N  
 Size : 50 kg minimum bodyweight

### SCALE:

5 units FK  
 10 units FH  
 15 units FG  
 20 units FF

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.50.126	Standard: normal nylon cover	United Moulders MK5



## BESTO AUTOMATIC, PRO 190N



Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord. Also inflatable by mouth and complete with whistle. The cover is made of wipe clean PVC or fire retardent material and is provided with a Velcro closure. Must be worn over outer clothing.

### Standard equipped with:

- integrated safety harness
- adjustable leg strap
- hoisting eye
- stainless steel buckle
- stainless steel eye for lifeline

### Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications : life jacket : ISO 12402-3  
 Activation system : United Moulders MK5 : 38 grams  
 Colour : protective cover : black and silver  
 : floating body : signal yellow  
 Buoyancy : 190N  
 Size : 50 kg minimum bodyweight

### SCALE:

5 units FK  
 10 units FH  
 15 units FG  
 20 units FF

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.50.129	Fire Retardant: fire retardant cover, for metal workers and welders + ATEX	United Moulders MK5

**BESTO AUTOMATIC, OFFSHORE 300N**

%

The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions. Automatically inflatable by means of a CO2 cartridge that is activated by a watersoluble tablet, or by using the pull cord.

Also inflatable by mouth and complete with whistle.

The cover is made of nylon or Wipe Clean PVC and is provided with a velcro closure.

Must be worn over outer clothing.

**Standard equipped with:**

- integrated safety harness
- adjustable leg strap
- hoisting eye
- stainless steel buckle
- stainless steel eye for lifeline

**Meets the ES-TRIN requirements (art. 13.08, paragraph 2).**

Classifications	: life jacket	: ISO 12402-2
Activation system	: United Moulders MK5	: 60 grams
	: United Moulders Pro Sensor MK2 / CI	: 60 grams
Colour	: protective cover	: red, black, signal yellow or silver
	: floating body	: signal yellow
Buoyancy	: 300N	
Size	: 50 kg minimum bodyweight	

**SCALE:**

5 units	FK
10 units	FH
15 units	FG
20 units	FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
<b>10.50.139</b>	Standard: normal nylon cover (red)	United Moulders MK5
<b>10.50.140</b>	Standard: normal nylon cover (black)	United Moulders MK5
<b>10.50.141</b>	Standard XL: normal nylon cover (black)	United Moulders MK5
<b>10.50.142</b>	Wipe Clean: easy to clean cover, intended for dirty work (black)	United Moulders Pro Sensor MK2 / CI
<b>10.50.143</b>	Wipe Clean: easy to clean cover, intended for dirty work (yellow)	United Moulders Pro Sensor MK2 / CI
<b>10.50.144</b>	Fire Retardant: fire retardant cover, for metal workers and welders + ATEX	United Moulders MK5

**WELDER COVER FOR FIRE RETARDANT 150N + 275N**

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
<b>10.50.149</b>	Welder cover for Fire Retardant 150N + 275N	



## BESTO AUTOMATIC, HARBOUR (ANTISTATIC / FIRE RETARDENT) 300N



The Besto Harbour life jacket has anti-static and flame retardant properties, which makes it ideally suited for use in refineries, chemical factories or on board tankers.

The anti-static properties prevent ignition by electrostatic discharge.

Thanks to the Hi-Visible cover and reflective stripes, the user's visibility is greatly increased.

The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions.

Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord.

Also inflatable by mouth and complete with whistle.

The status window shows at a glance whether the status of the activation system is in order.

The cover is made of anti-static nylon and is provided with a velcro closure.

Must be worn over outer clothing.

### Standard equipped with:

- adjustable and removable leg strap
- hoisting eye
- plastic quick release
- eye for lifeline
- slim fit, waisted
- anti-static straps and cover
- comfort fleece collar
- adjustable collar strap
- 2 reflective stripes on the cover
- fitting for walkie-talkie speaker on the cover
- additional info pocket for personal information, etc.
- prepared for Smartfind S20 SRS personal AIS beacon

### Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-2
	: anti-static	: EN1149-3
	: flame-retardant	: ISO14116-1
	: cover	: EN471
Activation system	: United Moulders Pro Sensor MK2 / CI	: 60 grams
Colour	: protective cover	: signal yellow
	: floating body	: signal yellow
Buoyancy	: 300N	
Size	: 50 kg minimum bodyweight	

### SCALE:

5 units	FK
10 units	FH
15 units	FG
20 units	FF

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.50.152	Standard: antistatic nylon cover	United Moulders Pro Sensor MK2 / CI



**BESTO AUTOMATIC, TWIN CHAMBER SOLAS 300N****%**

The Besto Twin Chamber life jacket is designed for extreme weather conditions and is suitable for a variety of purposes. The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions.

Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord.

**Complete double system, 1 floating body with 2 chambers, 2 CO2 cartridges and 2 mechanisms.**

Also inflatable by mouth and complete with whistle.

The cover is made of hard-wearing Cordura fabric and is provided with a zipper.

Must be worn over outer clothing.

**Standard equipped with:**

- integrated safety harness
- double leg strap with lateral adjustment
- hoisting eye
- stainless steel buckle
- stainless steel eye for lifeline
- life jacket light
- fleece collar for added comfort

**SOLAS - MED 96/98/EC approved**

Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-2
	: harness	: ISO 12401
Activation system	: United Moulders MK5	: 2 x 60 grams
Colour	: protective cover	: red
	: floating body	: signal yellow
Buoyancy	: 300N	
Size	: 50 kg minimum bodyweight	

**SCALE:**

5 units	FK
10 units	FH
15 units	FG
20 units	FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.50.170	Standard: normal Cordura cover	United Moulders MK5



## BESTO AUTOMATIC, FALL ARREST SOLAS 300N

The Besto Fall Arrest SOLAS life jacket is specially designed for use with a fall protection. Due to the design of the life jacket, the safety hooks can easily be attached to the harness. Special loops have been attached to the back of the jacket to connect the harness strap to the jacket, allowing you to put it on quickly. The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions. Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord.

**Complete double system, 1 floating body with 2 chambers, 2 CO2 cartridges and 2 mechanisms.**

Also inflatable by mouth and complete with whistle.

The status window shows at a glance whether the status of the activation system is in order.

The cover is made of high-visible wipe clean PVC and is provided with a zipper.

Must be worn over outer clothing.

### Standard equipped with:

- double leg strap with lateral adjustment
- hoisting eye
- plastic buckle
- slim fit, waisted
- life jacket light
- fleece collar for added comfort

### SOLAS - MED 96/98/EC approved

Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-2
Activation system	: United Moulders Pro Sensor MK2 / CI	: 2 x 60 grams
Colour	: protective cover	: orange
	: floating body	: signal yellow
Buoyancy	: 300N	
Size	: 50 kg minimum bodyweight	

### SCALE:

5 units	FK
10 units	FH
15 units	FG
20 units	FF



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.50.175	Wipe Clean: easy to clean cover, intended for dirty work	United Moulders Pro Sensor MK2 / CI

## BESTO AUTOMATIC, FISHERMAN SOLAS 300N

The Besto Fisherman SOLAS life jacket is specially developed for the fishing industry and can optionally be provided with an AIS MOB EasyONE.

The jacket also disposes of Wave Barrier Technology, which prevents wash back and tunnel formation towards the mouth.

The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions. Automatically inflatable by means of a CO2 cartridge WITHOUT a water-soluble tablet, but that is activated by the PRESSURE of approximately 20 cm of water, or by using the pull cord.

**Complete double system, 1 floating body with 2 chambers, 2 CO2 cartridges and 2 mechanisms.**

Also inflatable by mouth and complete with whistle.

The cover is made of high-visible wipe clean PVC and is provided with a zipper.

Must be worn over outer clothing.

### Standard equipped with:

- adjustable and removable leg strap
- lateral adjustment
- ergonomic fit
- plastic buckle
- neoprene collar
- ergonomic fabric back panel
- life jacket light
- Wave Barrier Technology

### Optional:

- AIS MOB EasyONE

**SOLAS - MED 96/98/EC approved.**

**Meets the ES-TRIN requirements (art. 13.08, paragraph 2).**

Classifications	: life jacket	: ISO 12402-3
Activation system	: Hammar MA1	: 2 x 60 grams
Colour	: protective cover	: orange
	: floating body	: signal yellow
Buoyancy	: 300N	
Size	: 50 kg minimum bodyweight	



ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM	TYPE
10.50.179	Wipe Clean: easy to clean cover, intended for dirty work	Hammar MA1	exclusive AIS MOB EasyONE
10.50.180	Wipe Clean: easy to clean cover, intended for dirty work	Hammar MA1	including AIS MOB EasyONE



## SECUMAR AUTOMATIC, GOLF 160N

Approved by the Binnenschiffahrts Berufsgenossenschaft (GS-zulassungnr.: 93 13 062).  
Automatically inflatable by means of a CO2 cartridge that is activated by a water-soluble tablet, or by using the pull cord.  
Also inflatable by mouth and complete with whistle.  
The cover is made of nylon and is provided with a velcro closure.  
Must be worn over outer clothing.

### Standard equipped with:

- hoisting eye
- stainless steel buckle
- adjustable back strap

Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-3
Activation system	: Secumar	: 32 grams
Colour	: protective cover	: dark blue
	: floating body	: luminescent orange
Buoyancy	: 160N	
Size	: 50 kg minimum bodyweight	

ARTIKELNR	DESCRIPTION
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10.51.215	Standard: normal nylon cover
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## SECUMAR AUTOMATIC, GOLF TWIN CHAMBER SOLAS 280N

The high buoyancy provides extra protection when wearing tools and heavy clothing and is suitable for use in extreme weather conditions.  
Automatically inflatable by means of a CO2 cartridge that is triggered by a melting tablet that reacts to water, or through the pull cord.  
Complete double system, 1 floating body with 2 chambers, 2 CO2 cartridges and 2 mechanisms.  
Also inflatable by mouth and complete with whistle.  
The cover is made of hard-wearing nylon and is provided with a zipper.  
To be worn over the outerwear.

### Standard equipped with:

- hoisting eye
- plastic buckle
- reinforced and dividable back strap
- life jacket light

SOLAS - MED 96/98/EC approved

Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-2
Activation system	: Secumar	: 2 x 60 grams
Colour	: protective cover	: dark blue
	: floating body	: signal yellow
Buoyancy	: 280N	
Size	: 50 kg minimum bodyweight	
Chest size	: maximum 175 cm	

ARTIKELNR	DESCRIPTION
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10.51.352	Standard: normal nylon cover
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## SECUMAR, SPARE SETS

Connection screw thread : 1/4" UNF  
 Connection width : 12.6 mm

ARTIKELNR	CAPACITY	SUITABLE FOR BUOYANCY	INCLUDED
10.51.522	22 gr	100N	2x soluble tablet and 2x pin
10.51.535	32 gr	150N	2x soluble tablet and 2x pin
10.51.556	56 gr	275N	2x soluble tablet and 2x pin
10.51.560	(bajonet) 60 gr	275N	2x Pill-Box



## SECUMAR, SOLUBLE TABLET

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM	PACKAGED PER
10.51.599	soluble tablet	Secumar	4
10.51.600	Secumar Pill-Box	Secumar	4



## HAMMAR, SPARE SETS

Connection screw thread : 1/4" UNF  
 Connection width : 12.6 mm

ARTIKELNR	CAPACITY	SUITABLE FOR BUOYANCY	INCLUDED
10.51.633	32 gr	150N	activation set. old model: A1/M1
10.51.634	32 gr	150N	activation set. new model: MA1
10.51.660	60 gr	275N	activation set



## PRE WEAR CHECK LIFEJACKET

Before use check if one of the [green] indicators below is not missing, if one of the indicators indicates RED, if the cylinder is corroded or penetrated, or the expiry date is exceeded, then the jacket is not operational anymore!  
Make sure the jacket is checked or serviced periodically by an authorized station.

### UM MK5, STANDARD HALKEY ROBERTS STANDARD

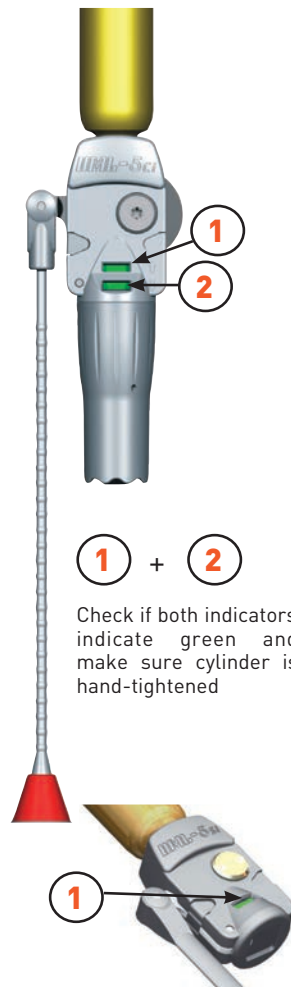


- 1 always check cylinder for penetration and make sure cylinder is hand-tightened
- 2 check if the green manual indication is still on.
- 3 check if the green indication for water activation is still on/visible.

#### MANUAL SYSTEM:

Check if the green manual indication is still on and make sure the cylinder is not penetrated and hand-tightened.

### UM CXI/PRO SENSOR/ELITE INDICATOR



1 + 2

Check if both indicators indicate green and make sure cylinder is hand-tightened

#### MANUAL SYSTEM:

Check the single green indicator and make sure cylinder is hand-tightened.

### HAMMAR MA1 HYDROSTATIC



1 Check if indicator is green.

2 Check if date is not expired.

### UNITED MOULDERS CARTRIDGES

Replacement date: on the cartridge a maximum replacement date is printed. Always replace before this date! From the moment the jacket is in use the recommended replacement interval is:

- Normal/ leisure use: every 2 years
- Professional use: every year



Art. No.	Description	Art. No.	Description	Art. No.	Description
10.51.799	"All Weather" Cartridge	10.51.800	CXI "Pro Sensor" Cartridge	10.51.798	CXI "Elite" Cartridge

### HALKEY ROBERTS SUPER BOBBIN

Production date: on the bobbin a production date is printed. Add 4 years for maximum replacement date. From the moment the jacket is in use, the recommended replacement interval is:

- Normal/ leisure use: every 2 years
- Professional use: every year



Art. No.	Description
10.51.899	HR Bobbin

## UNITED MOULDERS MK5, SPARE SETS

Date on the melting capsule is the expiry date.  
Set excludes activation mechanism.

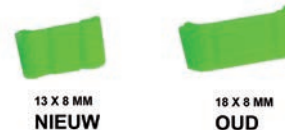
Screw connection : 1/4" UNF  
Connection width : 12.6 mm



ARTIKELNR	CAPACITY	SUITABLE FOR BUOYANCY	INCLUDED
10.51.724	24 gr	100N	soluble capsule and securing clip
10.51.733	32 gr	150N	soluble capsule and securing clip
10.51.738	38 gr	180N	soluble capsule and securing clip
10.51.760	60 gr	275N	soluble capsule and securing clip

## UNITED MOULDERS MK5, SECURING CLIPS

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.51.795	securing clip. green (new)	United Moulders MK5 new (yellow)
10.51.796	securing clip. green (old)	United Moulders MK5 old (black)



## UNITED MOULDERS, SOLUBLE CAPSULE

Date on the melting capsule is the expiry date.

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.51.798	soluble capsule with holder	United Moulders Elite
10.51.799	soluble capsule with holder	United Moulders MK5
10.51.800	soluble capsule with holder	United Moulders Pro Sensor MK2 / CXI



## HALKEY-ROBERTS, SPARE SETS

Date on the melting tablet is the production date (shelf life maximum 3 years after first use).  
Set excludes activation mechanism.

Screw thread connection : 1/4" UNF  
Connection width : 12.6 mm

ARTIKELNR	CAPACITY	SUITABLE FOR BUOYANCY	INCLUDED
10.51.831	32 gr	150N	soluble tablet and securing clip
10.51.838	38 gr	180N	soluble tablet and securing clip
10.51.860	60 gr (bajonet)	275N	soluble tablet and securing clip





## HALKEY-ROBERTS, SECURING CLIPS

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.51.895	securing pin green (old)	Halkey Roberts old
10.51.896	securing clip green, U-model (old)	Halkey Roberts old
10.51.897	securing clip green, U-model (new)	Halkey Roberts new



## HALKEY-ROBERTS, SOLUBLE TABLET

Date on the soluble tablet is the production date (shelf life maximum 3 years after first use).

ARTIKELNR	DESCRIPTION	ACTIVATION SYSTEM
10.51.899	soluble tablet	Halkey Roberts



## LIFE JACKET, CO2 CARTRIDGES, OTHER SYSTEMS

We have learned from experience that many CO2 cartridges can be fitted to various jackets.

Because a life jacket is a matter of life and death, we cannot give you the guarantee if you do not buy the gas cartridges of the relevant make.

Connection screw thread : 1/4" UNF  
Connection width : 12,6 mm

ARTIKELNR	CAPACITY
10.51.923	24 gr
10.51.933	33 gr
10.51.938	38 gr
10.51.945	45 gr
10.51.960	60 gr



## LIFE JACKET, INSPECTION WITH CERTIFICATE

Inspection of automatically inflatable life jacket: **excluding parts**

Life jackets must be inspected in accordance with the instructions of the manufacturer (ES-TRIN article 13.08, paragraph 3). For the requirements and frequency of the inspection, see the user manual of your life jacket.

ARTIKELNR	DESCRIPTION
10.51.997	Inspection with certificate



## THERMOSEA SURVIVAL SUIT, IMMERSION SUIT, SOLAS

This suit reduces the risk of hypothermia and therefore increases the chances of survival.  
 Made from reinforced neoprene, it has a face protector, 3 finger gloves, a waterproof zip at the front and ankle protectors.  
 Neoprene storage pouch and reflective strips.  
 This suit exceeds the most recent SOLAS standard relating to hypothermia.  
 Ideal for use on ferries, offshore, lifeboats and for general use in commercial seagoing shipping.  
 100% waterproof, individually tested.  
 Comes packed in handy storage bag.  
 Has buoyancy for the head and life jacket and light.

**SOLAS - MED 96/98/EC approved.**

Classifications : 24 928-05 Lux en 24 929-05 Lux  
 Colour : orange



ARTIKELNR	SIZE	LENGTH	WEIGHT
<b>10.52.929</b>	Child	100-150 cm	20-50 kg
<b>10.52.930</b>	Adult Universal	160-190 cm	50-120 kg
<b>10.52.932</b>	Adult XL	180-210 cm	>85 kg



## MARINEPOOL RESCUE COAT, (PILOT'S COAT, ALL WEATHER COAT) LONG 170N

Excellent finished rescue jacket in 3/4 model complete with automatically inflating life jacket. Made from waterproof and windproof material, and yet slightly breathable and moisture-permeable. Fleece lining on the inside and in the collar. Front closing with zipper and flap with Velcro, Velcro on outside of cuff, wind scoops in the sleeves, hood in the collar. Closeable inner pocket and two large lined waterproof pockets on the outside. Reflective material attached to shoulders, lower arms, chest, back and hood. There is an extra chest closure on the front with a hoisting eye, which is attached to an adjustable hoisting belt. **Possibility of inserting AIS SMARTFIND S20.**

### Standard equipped with:

- adjustable leg strap
- hoisting eye
- stainless steel buckle

### Meets the ES-TRIN requirements (art. 13.08, paragraph 2).

Classifications	: life jacket	: ISO 12402-3
Activation system	: United Moulders MK5	: 32 grams
Colours	: rescue jacket	: fluorescent yellow (from the midriff to the top of the coat and the sleeves) and black (from midriff to the bottom).
	: floating body	: signal yellow
Buoyancy	: 170N	
Minimum bodyweight	: 43 kg	

ARTIKELNR	SIZE
10.53.885	M
10.53.886	L
10.53.887	XL
10.53.888	XXL



## SMARTFIND S20 SRS PERSONAL AIS BEACON

The Smartfind S20 AIS MOB is designed to be fitted to a lifejacket using the clips supplied, ready to be activated in the event of a man overboard situation. After the lifejacket is inflated, pull the orange locking tab downwards which allows the red cap to be released. Pulling off the red cap deploys the antenna and activates the S20 SRS.

The S20 AIS MOB features a high precision GPS and it will transmit position information and a serialised identity number back to your vessel's onboard plotter, enabling you to be quickly located and recovered. It will transmit continuously for a minimum of 24 hours and has a 7 year battery storage life. The flashing LED indicator light also makes you easier to spot at night.

An automatic deployment option is offered when professionally fitted to compatible lifejackets, allowing the S20 to automatically activate when the lifejacket is inflated

- Manually activated personal safety device
- Easy to operate
- Automatic deployment option\*
- Designed to be mounted on a lifejacket using the clips supplied
- Transmits GPS tracking information over AIS
- Compact and lightweight
- Waterproof, buoyant and submersible to 60 metres
- Unique ID
- Flashing LED light
- Minimum 24hr continuous operation
- 7 year battery storage life
- Self test facility with battery use indicator (with compatible lifejackets)

\* Only for adapted life jackets

ARTIKELNR	DESCRIPTION
10.30.051	Smartfind S20 SRS Personal AIS Beacon
98.10.30.051	Mounting the Smartfind S20 SRS Personal AIS Beacon

## FIRE EXTINGUISHER REGULATIONS

### ES-TRIN Article 13.03 - Portable fire extinguishers

1. There shall be at least one portable fire extinguisher in accordance with the European Standards EN 3-7 : 2007 and EN 3-8 : 2007 at each of the following places:
  - a) in the wheelhouse;
  - b) close to each entrance from the deck to accommodation spaces;
  - c) close to each entrance to service spaces which are not accessible from the accommodation spaces and which contain heating, cooking or refrigeration equipment using solid or liquid fuels or liquefied gas;
  - d) at each entrance to engine rooms and boiler rooms;
  - e) at suitable points below deck in engine rooms and boiler rooms such that no position in the space is more than 10 metres walking distance away from an extinguisher.
2. For the portable fire extinguishers required by (1), only powder type extinguishers with a content of at least 6 kg or other portable extinguishers with the same extinguishing capacity may be used. They shall be suitable for Class A, B and C fires. By way of derogation on vessels with no liquefied gas installations, spray foam fire extinguishers using aqueous filmforming foam (AFFF-AR) frost proof to - 20°C are permissible even if they are unsuitable for Class C fires. These fire extinguishers shall have a minimum capacity of 9 litres. All extinguishers shall be suitable to extinguish fires in electrical systems of up to 1000 V.
3. In addition powder, water or foam fire extinguishers may be used which are suitable at least for the class of fire most likely to occur in the room for which they are intended.
4. Portable fire extinguishers with CO2 as the extinguishing agent may be used only for extinguishing fires in galleys and electrical installations. The content of these fire extinguishers shall be no more than 1 kg per 15 m<sup>3</sup> of the room in which they are made available for use.
5. Portable fire extinguishers shall be checked at least every two years by a competent person. An inspection label shall be affixed to the fire extinguisher, signed by the competent person and showing the date of the inspection.
6. If portable fire extinguishers are installed in such a way that they are out of sight, the panel covering them shall be identified by a symbol for fire extinguishers as shown in Figure 3 of Annex 4, and having a side length of at least 10 cm.

### New regulations for all fire extinguishers as of 1 January 2001: NEN 2559

Every year	: normal inspection (every 2 years for shipping)
After 5 years	: comprehensive inspection, full disassembly
After 10 years	: total overhaul
After 15 years	: comprehensive inspection, full disassembly
After 20 years	: rejected

## FIRE BLANKET

Made from high-grade fibreglass fabric with a weight of 430 gram per m<sup>2</sup> and a double coating of silicone rubber of 2x 35 gram - total 500 gram per m<sup>2</sup>.

Has flame resistant handles and Kevlar stitching.

Comes with slender wall holder made from hard or soft plastic.

ARTIKELNR	DIMENSIONS	DESCRIPTION
10.55.010	100 x 100 cm	canvas wall holder
10.55.012	120 x 180 cm	hard plastic wall holder
10.55.018	180 x 180 cm	hard plastic wall holder





## FIRE EXTINGUISHERS

### Number of fire extinguishers required:

Wheel house	: 1
Every deck entrance to accommodation	: 1
Every engine room entrance	: 1
Below in engine room	: 1
Every bow screw compartment entrance	: 1
Below in bow screw compartment	: 1
Distributed around the deck	: 3

**SOLAS - MED 96/98/EC approved (except 2 kg versions).**

**Applies to demands of ES-TRIN (art.13.03).**

**Approved by Fire Inspectorate.**

**Approved by Fire insurers pricing agency.**

Fire class	: A = solid	: wood, plastic.
	: B = fire of liquids	: diesel, petrol.
	: C = fire of gasses	: butane gas.
	: F = fire of fat	: frying oil

Including manometer.

ARTIKELNR	CAPACITY	TYPE OF EXTINGUISHER	CLASS	DESCRIPTION	ES-TRIN APPROVED
10.55.202	2 kg	powder	13A - 89B - C		no
10.55.206	6 kg	powder	43A - 233B - C		yes
10.55.209	9 kg	powder	55A - 233B - C		yes
10.55.232	2 L	foam	8A - 55B - 25F	store frost free	no
10.55.236	6 L	foam	21A - 183B	store frost free	no
10.55.239	9 L	foam	27A - 233B	store frost free	no
10.55.242	2 L	foam	8A - 55B - 40F	frost-free -30 °C	no
10.55.246	6 L	foam	21A - 144B - 25F	frost-free -30 °C	no
10.55.249	9 L	foam	27A - 183B - 25F	frost-free -30 °C	yes
10.55.252	2 kg	CO2	34B	max. 1 kg per 15 m <sup>3</sup>	no
10.55.255	5 kg	CO2	89B	max. 1 kg per 15 m <sup>3</sup>	no
10.55.266	6 L	fat fire extinguisher (chem. liquid)	13A - 113B - 75F	frost-free -30 °C	no

## FIRE EXTINGUISHER ACCESSORIES

ARTIKELNR	DESCRIPTION	TYPE OF EXTINGUISHER
10.55.292	wall bracket + strap	6 kg powder
10.55.297	adjustable heavy duty wall bracket + strap	6 kg / 6 L - 9 kg / 9 L

## FIRE EXTINGUISHER CABINETS

Equipped with good rubber seal, hinges and bracket(s) with strap.  
Unbreakable panes of impact-resistant clear plastic.



ARTIKELNR	MODEL	DESCRIPTION	EXTERNAL DIMENSIONS	INTERNAL DIMENSIONS
10.55.305	light model	1 extinguisher 6 kg	680 x 320 x 210 mm	620 x 250 x 200 mm
10.55.310	heavy model	1 extinguisher 6 kg	610 x 310 x 247 mm	551 x 247 x 204 mm
10.55.313	heavy model	1 extinguisher 6 to 9 kg	671 x 310 x 247 mm	629 x 247 x 204 mm

## FIRE EXTINGUISHER CABINETS JONESCO

Equipped with good rubber seal and hinges.  
Unbreakable panes of impact-resistant clear plastic.



ARTIKELNR	MODEL	DESCRIPTION	EXTERNAL DIMENSIONS	INTERNAL DIMENSIONS
10.55.376	Jonesco JBWE 70	1 extinguisher 6 to 12 kg	700 x 300 x 255 mm	625 x 260 x 195 mm
10.55.380	Jonesco JBDE 72	2 extinguishers 6 to 12 kg, or 1 extinguisher + fire hose + nozzle	720 x 585 x 270 mm	650 x 530 x 210 mm
10.55.385	Jonesco JBDE 85	2 extinguishers 6 to 12 kg, or 1 extinguisher + fire hose + nozzle	850 x 585 x 375 mm	760 x 530 x 300 mm

## REGULATIONS

### ES-TRIN Article 13.02 - Other equipment

1. At least the following equipment in accordance with the applicable navigational authority regulations in force in one of the Member States shall be onboard:
- radiotelephone equipment;
  - appliances and devices necessary for emitting visual and acoustic signals and for marking the vessel;
  - standalone backup lights for the prescribed mooring lights.

2. The following receptacles must also be present:

- a marked receptacle for domestic waste;
- separate, marked receptacles, with sealing covers, made of steel or another sturdy, nonflammable material, of adequate size but holding at least 10 litres, for the collection of
  - oily cleaning cloths;
  - hazardous or pollutant solid wastes;
  - hazardous or pollutant liquid wastes;
 and, inasmuch as they may arise, for the collection of
- slops;
- other oily or greasy waste.

3. In addition, the equipment shall include at least:

a) mooring cables:

Vessels shall be equipped with three mooring cables. Their minimum lengths shall be at least the following:

- first cable : shiplength + 20 metres, but not more than 100 metres,  
 second cable : 2/3 of the first cable,  
 third cable : 1/3 of the first cable.

The shortest cable is not required on board vessels whose shiplength is less than 20 m.

The cables shall have a breaking load (Rs) that is calculated using the following formulae:

**Length x beam x depth = LxBxD**

**For LxBxD up to 1000 m<sup>3</sup>:**

$$Rs = 60 + \frac{LxBxD}{10} = \text{Kilo Newton}$$

**For LxBxD greater than 1000 m<sup>3</sup>:**

$$Rs = 150 + \frac{LxBxD}{100} = \text{Kilo Newton}$$

1 kilo Newton x 102 = kilogrammes

1 kilogramme / 102 = kilo Newtons

For the required cables a certificate in accordance with European Standard EN 10204 : 2004, under No 3.1, shall be on board.

**These cables may be replaced by ropes having the same length and breaking load.**

The minimum breaking load of these ropes shall be indicated in a certificate.

b) towing cables;

Tugs shall be equipped with a number of cables that are suitable for their operation. However, the main cable shall be at least 100 m long and have a breaking load, in kN, not less than one third of the total power, in kW, of the main engine(s).

Motor vessels and pushers that are also able to tow shall be equipped with a towing cable that is at least 100 m long and whose breaking load, in kN, is not less than one quarter of the total power, in kW, of the main engine(s).

c) a heaving line;

d) a boarding gangway at least 0,40 m wide and 4 m long whose side edges are defined by a brightly-coloured strip; that gangway shall be equipped with a handrail. The inspection body may permit shorter gangways for small vessels;

e) a gaff hook;

f) an appropriate first-aid kit with a content in accordance with a relevant standard of a Member State. The first-aid kit shall be kept in an accommodation room or in the wheelhouse and be stored in such a way that it is easily and safely accessible if necessary. If first-aid kits are stored under cover, the cover shall be marked by a symbol for first-aid kit according to Figure 8 of Annex 4, having a side length of at least 10 cm;

g) a pair of binoculars, 7 x 50 or with larger lens diameter;

h) a notice concerning the rescue and revival of persons overboard;

i) a searchlight that can be operated from the wheelhouse.

4. There shall be an embarkation stairway or ladder on vessels whose side height above the unladen waterline exceeds 1,50 m.

### ASHTRAY SMALL

Adhesive and/or screw-fastening. Not suitable for ADN ships.

ARTIKELNR	DESCRIPTION	DIMENSIONS (HXWXD)
10.55.400	Ashtray small	50 x 90 x 40 mm



### WALL ASHTRAY

Anodized aluminium train model with lid.  
Obligatory at every outside door of vessels complying with ADN rules.

ARTIKELNR	DESCRIPTION	DIMENSIONS (HXWXD)
10.55.401	Wall ashtray	95 x 72 x 57 mm



### LIFE HAMMER

Complete with wall-fitting.

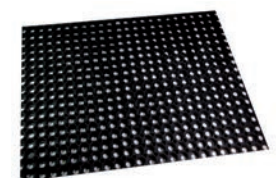
ARTIKELNR	COLOUR
10.55.415	orange
10.55.417	yellow, luminous in the dark



### RING MAT, RUBBER MAT

Rubber ring mat, open model.  
Small feet underneath for good water removal.

ARTIKELNR	DIMENSIONS (LXWXH)	WEIGHT
10.55.424	75 x 100 x 0.23 cm	6.1 kg
10.55.426	100 x 150 x 0.23 cm	12.5 kg



ARTIKELNR	DIMENSIONS (LXWXH)
10.55.429	ring mat connector

### HIGH VOLTAGE CARPET, INSULATING MAT

High-grade insulating carpet for high voltage up to 30,000 volts, tested in accordance with VDE 0303 at a breakdown voltage of 60,000 volts.  
**Sold by the metre.**

ARTIKELNR	THICKNESS	WIDTH	COLOUR	PROFILE	ROLL LENGTH
10.55.436	3 mm	120 cm	grey	fine ribs	10 m





## CLEANING CLOTH BUCKET: FIRE RESISTANT COLLECTION RESERVOIR WITH LID (HW, HAZARDOUS WASTE)

Galvanized bucket with hinged lid, for keeping

1. Oily cleaning clothes.
2. Other solid hazardous waste.
3. Liquid hazardous waste.
4. Slops (oil residues)

Applies to demands of ES-TRIN (art.13.02).

ARTIKELNR	CAPACITY	DIAMETER INT/EXT	HEIGHT INT/EXT	WEIGHT	MODEL
10.55.441	35 L	330/440 mm	420/490 mm	approx. 7.3 kg	Classic
10.55.442	70 L	430/540 mm	520/600 mm	approx. 13.4 kg	Classic
10.55.448	30 L	315/375 mm	345/370 mm	approx. 4.5 kg	Standard
10.55.449	50 L	360/410 mm	480/520 mm	approx. 6.9 kg	Standard



## FIRST AID BOX, SMALL

May only be used as an extra; no longer meets the requirements.  
Complete with wall bracket.

### Contents:

- 1 x Wound dressing
- 4 x Emergency bandage #1 EU 8x6 cm
- 2 x Emergency bandage #2 EU 10x8 cm
- 16 x Hydrophilic gauze 9 x 5 cm
- 10 x Hydrophilic gauze 5 x 5 cm
- 2 x Wound dressing 10 x 10 cm
- 3 x Elastic fixation bandage 6 cm
- 1 x Cambric bandage 6 cm
- 1 x Cambric bandage 8 cm
- 1 x Triangular bandage
- 1 x Cotton wool dressing
- 1 x Synthetic cotton wool
- 1 x Set of bandage fasteners
- 1 x Wound plaster strips
- 1 x Resuscitation mask
- 1 x Splinter tweezers 8 cm
- 1 x Bandage scissors
- 1 x Set of safety pins
- 2 x Pairs of gloves
- 1 x Bottle of disinfectant 30 ml
- 1 x Roll of adhesive plaster 5 m x 2.5 cm

ARTIKELNR	DESCRIPTION
10.55.501	Model B: small



**FIRST AID BOX, FIRST AID SET COMMERCIAL, LARGE**

Complete first-aid kit according to the requirements of the Oranje Kruis. Featuring three individual modules that can be used and replaced separately. Complete with wall bracket.



Meets the ES-TRIN requirements (art. 13.02, paragraph 3f).

**Contents of Module 1:**

- 2x Sterile dressing #3 EU 12 x 10 cm
- 2x Sterile dressing #1 EU 6 x 8 cm
- 4x Hydrophilic gauze 5 x 9 cm (1/16)
- 4x Hydrophilic gauze 10 x 10 cm
- 5x Wound pad 10 x 10 cm
- 1x Sterile cloth 50 x 50 cm
- 1x Set butterfly closures 76 mm

**Contents of Module 2:**

- 1x Thermal blanket (gold/silver)
- 1x set of plasters
- 1x Plaster strips 100 x 6 cm
- 1x Roll of sticking plaster 25 mm
- 1x Bandage scissors 19 cm
- 1x Ventilation mask
- 2x Pair of Nitrile gloves
- 1x Point tweezers
- 5x Finger bandage (finger bob)

**Contents of Module 3:**

- 2x Crepe bandage 500 x 6 cm
- 2x Crepe bandage 500 x 8 cm
- 2x Elastic fixation bandage 6 cm
- 2x Self-adhesive fixation bandage 400 x 8 cm
- 1x Bottle of disinfectant lotion 30 ml
- 1x List of contents & flow chart

**Number:**

On freight vessels, one first-aid kit in an easily reachable and clearly marked location, for example in the wheelhouse, will generally be sufficient.

On passenger ships, you are advised to have several first-aid kits, the number of which will depend on the number of persons on board, as shown below.

Number of passengers and crew	Minimum number first-aid kits
fewer than 51	1
52 to 300	2
301 to 600	3
more than 600	4

ARTIKELNR	DESCRIPTION	DIMENSIONS
10.55.502	BHV model: large (formerly A)	33 x 13 x 24 cm



## RESQ-PLAST PROFESSIONAL

ResQ-plast Professional is a high-quality, medically tested, self-adhesive plaster / bandage for everyday use and can be easily applied to wet, dirty or oily skin.

ResQ-plast, made from pure cotton, adheres only to itself (like Velcro) and is permanently breathable and elastic, making it comfortable and safe to use.

In case of (severe) bleeding, you can apply ResQ-plast directly, so that the bleeding is stopped as soon as possible.

### Advantages of ResQ-plast Professional:

- does not stick to skin, wound or hair
- leaves no adhesive residue on the skin
- prevents bandage allergy
- is permanently elastic, so that movements of your joints are not hindered
- is permanently breathable and can be worn for a long time
- is water resistant and therefore also remains in place during wet work

ARTIKELNR	COLOUR	WIDTH	LENGTH	NUMBER PER BOX
10.55.510	blue	25 mm	4.5 m	24
10.55.511	beige	25 mm	4.5 m	24
10.55.512	black	25 mm	4.5 m	24
10.55.513	camouflage	25 mm	4.5 m	24
10.55.514	green	25 mm	4.5 m	24
10.55.515	red	25 mm	4.5 m	24
10.55.516	turquoise	25 mm	4.5 m	24
10.55.517	white	25 mm	4.5 m	24
10.55.520	blue	50 mm	4.5 m	12
10.55.521	beige	50 mm	4.5 m	12
10.55.522	black	50 mm	4.5 m	12
10.55.523	camouflage	50 mm	4.5 m	12
10.55.524	green	50 mm	4.5 m	12
10.55.525	red	50 mm	4.5 m	12
10.55.526	turquoise	50 mm	4.5 m	12
10.55.527	white	50 mm	4.5 m	12

## ZOLL AED PLUS, SEMI-AUTOMATIC

The **Zoll AED Plus** is an AED that not only delivers a shock when it is needed. This AED also features CPR support. A small blue cushion is placed between the provided electrodes for performing the chest compressions. Once CPR is started, the AED indicates whether the compressions are deep enough. It is easy to maintain the correct speed by means of the metronome, a beep for the rhythm. In addition to the clearly, spoken instructions, images on the AED, LED lamps and a text display also show what has to be done. Combined this offers excellent guidance and makes the AED easy to use for many people.

The robust casing means that the Zoll is not easily damaged. This AED is also highly resistant to dust and water. The ZOLL AED PLUS also features very low maintenance costs. If the AED is not used, the batteries and electrodes only need to be replaced once during its entire 10-year service life. This is because the batteries and electrodes each have a shelf life of 5 years. The Duracell batteries in the ZOLL AED PLUS are also used for cameras and are therefore widely available.

ZOLL article number	: 20100000102011160
Warranty period	: 7 years
Dimensions	: 13.3 x 24.1 x 29.2 cm
Labels	: CE, FDA
Options	: Paediatric CPR, language selection, ECG display, trainer available, delivery incl. bag
Ownership costs per annum	: € 156.00
CPR guidance	: audio (standard), metronome, feedback, text on display
Technical features	: adapted paediatric protocol, measures electrodes during self-test, pacemaker detection, update/up-grade possible
Weight	: 3.1 kg
Fully automatic or semi-automatic	: semi-automatic
Including bag	: yes
Dust and water resistant	: IP55
Battery life	: 5 years
Electrode life	: 5 years
Metronome	: yes
Display	: black ; white
Manufacturer	: Zoll

ARTIKELNR	DESCRIPTION
-----------	-------------

<b>10.55.552</b>	Zoll AED Plus, semi-automatic
<b>10.55.561</b>	Zoll AED Plus, wall mounting bracket
<b>10.55.563</b>	Zoll AED Plus, metal wall cabinet



## RESCUE BLANKET (TPA)

Also known as Thermal Protective Aid (TPA).

ARTIKELNR	DIMENSIONS	COLOUR
<b>10.55.591</b>	210 x 160 cm	gold/silver





## GRAPPLING HOOK

Made of galvanized steel and fitted with brass buttons.

ARTIKELNR	WEIGHT	DIAMETER	HEIGHT	STEM THICKNESS	DIMENSIONS CONNECTING SQUARE
<b>10.55.610</b>	1 kg	240 mm	260 mm	22 mm	7 mm
<b>10.55.615</b>	2 kg	300 mm	325 mm	27 mm	8 mm



## RESQUE SHEET FOR SHIPS

To avoid sinking by a small hole in the hull.

1 size for all inland vessels, made in accordance with the requirements of the Shipping Inspectorate.

A line (not included) **MUST** be attached in every corner (failure load of 1200 kg, approx. 12 mm).

The length of the line is at least the width plus twice the vessel's draught.

NB other sizes available on request.

dimensions	: 4.35 x 4.35 x 4.35 metres
type	: equilateral triangle
area	: 8 m <sup>2</sup>
finishing	: thimbles each metre and cord stitched into edge
material	: nylon/PVC sheeting, 650 grams
weight	: approx. 6 kg

ARTIKELNR	DESCRIPTION
<b>10.55.708</b>	Resque sheet for ships

## SIGNS AND STICKERS

Made from the following materials:

Sign, hard plastic	: 2.0 mm thick, printed on one side
Soft PVC sticker	: 0.5 mm thick with selfadhesive layer
Small sign, hard plastic	: 1.0 mm thick, printed on one side
Sign, hard plastic	: 4.0 mm thick, printed on two sides

## SIGN, FIRST AID

Has only Dutch text.

Applies to demands of ES-TRIN (art.13.02, paragraph 3h).

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.050	hard plastic, 1 mm thick	300 x 390 mm



## SIGN, ERSTER HILFE

Has only German text.

Meets requirements of the German Shipping and Health & Safety Inspectorates.

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.055	"Erster Hilfe" sign	410 x 590 mm



## SIGN, REDDEN VAN DRENKELINGEN

Has only Dutch text.

Made in accordance with requirements of the Dutch drowning rescue association [Koninklijke Nederlandse Bond tot het Redden van Drenkelingen] and the Dutch drowning rescue society [Maatschappij tot Reddings van Drenkelingen].

New version , 2010 reprint.

Applies to demands of ES-TRIN (art.13.02, paragraph 3h).

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.095	hard plastic, 2 mm thick	300 x 390 mm



## SIGN, RETTUNG ERTRINKENDER

Has only German text.

Meets requirements of the German Shipping and Health & Safety Inspectorates.

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.100	hard plastic, 1 mm thick	390 x 280 mm



## PLATE WITH 7 SYMBOLS AND 4 LANGUAGES

Useful plate with 7 safety and prohibition symbols all together in 4 languages (Dutch, English, German, French).  
See which rules must be complied with on deck at a single glance.

**Bezoekers eerst melden bij de bemanning.** **Visitors must report to crew first.**



**Besucher zuerst bei der Besatzung melden.** **Les visiteurs doivent se présenter à l'équipage.**

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.156	soft PVC sticker	128 x 23 cm
10.56.157	plate, Foamed PVC with polymer vinyl top layer	128 x 23 cm



## SIGN, NO MOORING

May only be used on own or private land.  
NOT on public land. That is a task for the authorities.  
Printed on two sides.

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.170	hard plastic sign, 4 mm thick	65 x 65 cm

**VERBODEN TOEGANG**  
voor onbevoegden  
Art. 461 Wetb. v. Strafrecht

## STICKER, VERBODEN TOEGANG WETBOEK STRAFRECHT

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.201	soft PVC sticker	25 x 10 cm

**VERBODEN TOEGANG**

## STICKER, VERBODEN TOEGANG

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.205	soft PVC sticker	20 x 3 cm



## SIGN, NO UNAUTHORIZED PERSONS, HAND (ES-TRIN)

ARTIKELNR	MATERIAL	DIAMETER
10.56.210	soft PVC sticker	10 cm
10.56.215	soft PVC sticker	20 cm
10.56.225	soft PVC sticker	58 cm
10.56.230	small hard plastic sign, 2 mm thick	10 cm
10.56.227	magnetic sign + soft PVC	58.5 cm

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.270	hard plastic sign, 4 mm thick	65 x 65 cm, printed on two sides

## SIGN, NO UNAUTHORIZED PERSONS, MAN (NO ES-TRIN)

While stock lasts.

ARTIKELNR	MATERIAL	DIAMETER
10.56.280	soft PVC sticker	10 cm
10.56.285	soft PVC sticker	20 cm
10.56.298	small hard plastic sign, 2 mm thick	10 cm

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.297	magnetic sign + soft PVC	62 x 62 cm



## SIGN, NO NAKED FLAMES OR SMOKING, MATCHSTICK (ES-TRIN)

ARTIKELNR	MATERIAL	DIAMETER
10.56.303	soft PVC sticker	3 cm
10.56.310	soft PVC sticker	10 cm
10.56.315	soft PVC sticker	20 cm
10.56.325	soft PVC sticker	58 cm
10.56.330	small hard plastic sign, 2 mm thick	10 cm
10.56.327	magnetic sign + soft PVC	58.5 cm

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.370	hard plastic sign, 4 mm thick	65 x 65 cm, printed on two sides



## SIGN, NO SMOKING, CIGARET (NO ES-TRIN)

ARTIKELNR	MATERIAL	DIAMETER
10.56.373	soft PVC sticker	3 cm
10.56.380	soft PVC sticker	10 cm
10.56.385	soft PVC sticker	20 cm
10.56.398	small hard plastic sign, 2 mm thick	10 cm



## STICKER, NO SMOKING

No smoking in 4 languages (Dutch, English, German, French).

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.410	soft PVC sticker	15 x 7 cm

Rauchen verboten  
Défense de fumer  
No smoking  
Niet roken

## STICKER, ROKEN, GEBRUIK VAN OPEN VUUR

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.430	soft PVC sticker	16 x 5 cm

Roken, gebruik van vuur  
of open licht tijdens  
laden, lossen of ontgassen  
is VERBODEN



**TJDENS LADEN, LOSSEN EN  
ONTGASSEN NIET OPENEN  
ZONDER TOESTEMMING  
VAN DE GEZAGVOERDER;  
ONMIDDELIJK SLUITEN**

**ROKEN TOEGESTAAN INDIEN ALLE  
RAMEN, DEUREN, SCHIJNLICHTEN  
EN LUIKEN ZIJN GESLOTEN.**



**MAG GEBRUIKT  
WORDEN TIJDENS  
LADEN, LOSSEN EN  
ONTGASSEN**

**VLOEIBAAR GASINSTALLATIE**

## STICKER, NO MOBILE PHONES

ARTIKELNR	MATERIAL	DIAMETER
10.56.441	soft PVC sticker	10 cm
10.56.442	soft PVC sticker	20 cm
10.56.444	soft PVC sticker	56 cm

## STICKER, TIJDENS LADEN EN LOSSEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.450	soft PVC sticker	18 x 10 cm
10.56.452	small hard plastic sign, 2 mm thick	18 x 10 cm

## STICKER, ROKEN TOEGESTAAN INDIEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.460	soft PVC sticker	6.5 x 2.5 cm

## STICKER, DO NOT USE DURING LOADING, UNLOADING AND VENTING

ARTIKELNR	MATERIAL	DIAMETER
10.56.468	soft PVC sticker	2.5 cm
10.56.470	soft PVC sticker	6.5 x 3 cm

## STICKER, WEL TIJDENS LOSSEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.490	soft PVC sticker	6.5 x 3 cm

## STICKER, VLOEIBAAR GASINSTALLATIE

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.510	soft PVC sticker	17 x 4 cm



## STICKER, INSTRUCTIE VLOEIBAAR GAS

DE AFSLUITKRANEN VAN DE FLESSEN, DIE NIET OP HET DISTRIBUTIENET ZIJN AANGESLOTEN, MOETEN ZIJN GESLOTEN, ZELFS WANNEER DE FLESSEN GEACHT WORDEN LEEG TE ZIJN.

DE SLANGEN MOETEN WORDEN VERVANGEN, ZODRA HUN TOESTAND DIT NOODZAKELIJK MAAKT.

ALLE GEBRUIKSAPPARATEN MOETEN ZIJN AANGESLOTEN, TENZIJ DE BIJBEHOORENDE TOEVOERLEIDINGEN ZIJN GESLOTEN.

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.530	soft PVC sticker	20 x 10 cm

## STICKER, NOODSTOP POMP



ARTIKELNR	MATERIAL	DIMENSIONS
10.56.532	soft PVC sticker	15 x 5 cm

## STICKER, NOODSTOP



ARTIKELNR	MATERIAL	DIMENSIONS
10.56.535	soft PVC sticker	15 x 3 cm

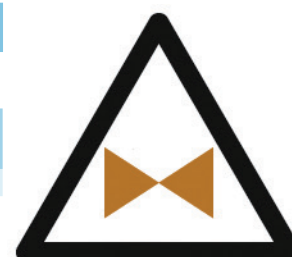
## STICKER, EMERGENCY CUTOFF VALVE WITH TEXT

ARTIKELNR	MATERIAL	DIMENSIONS	COLOUR
10.56.537	soft PVC sticker	10 x 11 cm	brown
10.56.538	soft PVC sticker	10 x 11 cm	red



## STICKER, EMERGENCY CUTOFF VALVE

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.539	soft PVC sticker	9 x 9 x 9 cm



Voor het betreden van de pompkamer deze op de aanwezigheid van gas alarmeren en voldoende zuurstof testen  
Deuren en toegangsoeningen niet zonder toestemming van de gezagvoerder openen  
Bij alarm de ruimte direct verlaten

## STICKER, BETREDEN POMPKAMER

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.540	soft PVC sticker	7 x 25 cm

VOOR HET BETREDEN VAN DE BESLOTEN RUIMTE DEZE OP DE AANWEZIGHEID VAN GAS ALSMEDE OP VOLDOENDE ZUURSTOF TESTEN DEUREN EN TOEGANGSOPENINGEN NIET ZONDER TOESTEMMING VAN DE GEZAGVOERDER OPENEN BIJ ALARM DE RUIMTE DIRECT VERLATEN

## STICKER, VOOR HET BETREDEN VAN DE BESLOTEN RUIMTE

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.542	soft PVC sticker	7 x 25 cm



## SIGN, BILGE ALARM

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.545	small hard plastic sign, 2 mm thick	15 x 10 cm

**BIJ LEKKAGE  
SLUITEN**

## STICKER, BIJ LEKKAGE SLUITEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.550	soft PVC sticker	15 x 10 cm

**BRANDKLEP**

## STICKER, BRANDKLEP

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.555	soft PVC sticker	10 x 2 cm

**IN CASE OF  
EMERGENCY SHUT  
DOWN THE VALVE**

## STICKER, IN CASE OF EMERGENCY SHUT DOWN THE VALVE

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.560	soft PVC sticker	15 x 5 cm

**BIJ BRAND SLUITEN**

## STICKER, BIJ BRAND SLUITEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.565	soft PVC sticker	15 x 3 cm

## STICKER, TIJDENS DE VAART GESLOTEN HOUDEN

**TIJDENS DE VAART  
GESLOTEN HOUDEN**

ARTIKELNR	MATERIAL	DIMENSIONS
10.56.575	soft PVC sticker	15 x 3 cm

## STICKER, NO SHOES



ARTIKELNR	MATERIAL	DIAMETER
10.56.605	soft PVC sticker	10 cm
10.56.610	small hard plastic sign, 2 mm thick	10 cm

## STICKER, A.D.N. VEILIGHEIDSMIDDELEN



ARTIKELNR	MATERIAL	DIMENSIONS
10.56.650	soft PVC sticker	17 x 13 cm

## STICKER, NOT DRINKING WATER



ARTIKELNR	MATERIAL	DIAMETER
10.57.010	soft PVC sticker	10 cm

## STICKER, ONTLUCHTING

**ONTLUCHTING**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.085	soft PVC sticker	10 x 2 cm

## STICKER, LUCHTLEIDING

**LUCHTLEIDING**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.090	soft PVC sticker	10 x 2 cm

## STICKER, 50 KPA

**50 KPA**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.095	soft PVC sticker	10 x 2 cm

## DRINKWATER

### STICKER, DRINKWATER

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.100	soft PVC sticker	10 x 2 cm

## GASOLIE

### STICKER, GASOLIE

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.110	soft PVC sticker	10 x 2 cm

## DIESELOLIE

### STICKER, DIESELOLIE

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.112	soft PVC sticker	10 x 2 cm

## SMEEROLIE

### STICKER, SMEEROLIE

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.120	soft PVC sticker	10 x 2 cm

## HYDRAULISCHE OLIE

### STICKER, HYDRAULISCHE OLIE

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.130	soft PVC sticker	10 x 2 cm

## VUILWATER

### STICKER, VUIL WATER

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.140	soft PVC sticker	10 x 2 cm



### STICKER, BOBS BUNKERTANK +SB +BB

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.160	soft PVC sticker	65 x 18 mm (3x)

## STICKER, SLOBS (OLIERESTEN)

**SLOBS  
(OLIERESTEN)**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.210	soft PVC sticker	17 X 4 cm

## STICKER, POETSLAPPEN SCHOON

**POETSLAPPEN  
SCHOON**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.219	soft PVC sticker	17 X 4 cm

## STICKER, POETSLAPPEN OLIEHOUDEND

**POETSLAPPEN  
OLIEHOUDEND**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.220	soft PVC sticker	17 X 4 cm

## STICKER, VLOEIBAAR KLEIN CHEMISCH AFVAL

**VLOEIBAAR KLEIN  
CHEMISCH AFVAL**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.230	soft PVC sticker	17 X 4 cm

## STICKER, OVERIG VAST KLEIN CHEMISCH AFVAL

**OVERIG VAST KLEIN  
CHEMISCH AFVAL**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.240	soft PVC sticker	17 X 4 cm

## STICKER, OIL SPILL KIT

**OIL  
SPILL KIT**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.250	soft PVC sticker	29 x 17 cm

## STICKER, BRANDBLUS

**BRANDBLUS**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.300	soft PVC sticker	20 x 8 cm

## SPRINKLER

### STICKER, SPRINKLER

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.310	soft PVC sticker	20 x 8 cm

## LAAD/LOS

### STICKER, LAAD/LOS

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.320	soft PVC sticker	20 x 8 cm

## LAAD LEIDING

### STICKER, LAAD

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.321	soft PVC sticker	20 x 8 cm

## LOS LEIDING

### STICKER, LOS

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.322	soft PVC sticker	20 x 8 cm

## DAMP RETOUR

### STICKER, DAMP RETOUR

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.330	soft PVC sticker	20 x 8 cm

## KOELWATER KÜHLWASSER / COOLING WATER

### STICKER, COOLING WATER

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.335	soft PVC sticker	15 x 3 cm

## WERKLUCHT ARBEITSLUFT / COMPRESSED AIR

### STICKER, COMPRESSED AIR

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.338	soft PVC sticker	15 x 3 cm

## STICKER, WERKLUCHT

**WERKLUCHT**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.340	soft PVC sticker	20 x 8 cm

## STICKER, BREATHING AIR



ARTIKELNR	MATERIAL	DIMENSIONS
10.57.348	soft PVC sticker	15 x 3 cm

## STICKER, ADEMLUCHT

**ADEMLUCHT**

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.350	soft PVC sticker	20 x 8 cm

## STICKER, LIQUID



ARTIKELNR	MATERIAL	DIMENSIONS
10.57.358	soft PVC sticker	15 x 3 cm
10.57.360	soft PVC sticker	20 x 8 cm
10.57.362	soft PVC sticker	45 x 6,5 cm



## STICKER, VAPOUR



ARTIKELNR	MATERIAL	DIMENSIONS
10.57.368	soft PVC sticker	15 x 3 cm
10.57.370	soft PVC sticker	20 x 8 cm
10.57.372	soft PVC sticker	45 x 6,5 cm



## STICKER, FIRE FIGHTING



ARTIKELNR	MATERIAL	DIMENSIONS
10.57.378	soft PVC sticker	15 x 3 cm
10.57.380	soft PVC sticker	20 x 8 cm

## STICKER, FIRE LINE



ARTIKELNR	MATERIAL	DIMENSIONS
10.57.390	soft PVC sticker	15 x 3 cm
10.57.392	soft PVC sticker	45 x 6.5 cm

## SPRINKLER

SPENGLER ANLAGE / SPRINKLER

## STICKER, SPRINKLER

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.400	soft PVC sticker	15 x 3 cm
10.57.402	soft PVC sticker	45 x 6.5 cm

## GASOLIETRIM

GASÖL TRIMME / DIESEL TRIM

## STICKER, DIESEL TRIM

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.410	soft PVC sticker	15 x 3 cm
10.57.412	soft PVC sticker	45 x 6.5 cm

## THERMISCHE OLIE

THERMISCHES ÖL / THERMAL OIL

## STICKER, THERMAL OIL

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.420	soft PVC sticker	15 x 3 cm
10.57.422	soft PVC sticker	45 x 6.5 cm

## STRIPLEIDING

STRIPLEITUNG / STRIP LINE

## STICKER, STRIP LINE

ARTIKELNR	MATERIAL	DIMENSIONS
10.57.430	soft PVC sticker	15 x 3 cm
10.57.432	soft PVC sticker	45 x 6.5 cm

## STICKER, OPERATING BOX FIRE FIGHTING INSTALLATION ENGINE ROOM

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.167	soft PVC sticker	23.5 x 10 cm



## STICKER, EX (ATEX)

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.180	soft PVC sticker	5 x 5 x 5 cm





## STICKER, NOTSTOPP

**NOTSTOPP**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.150	soft PVC sticker	15 x 3 cm

## STICKER, HYDRAULIKÖL

**HYDRAULIKÖL**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.245	soft PVC sticker	10 x 2 cm

## STICKER, NOODUITGANG

**Nooduitgang**

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.149	soft PVC sticker	15 x 3 cm
10.58.150	soft PVC sticker	30 x 12 cm

**NOODUITGANG**

## STICKER, NOODDEUR VRIJHOUDEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.155	soft PVC sticker	18 x 22 cm



## STICKER, FIRE EXTINGUISH INSTALLATION

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.160	soft PVC sticker	10 x 10 cm



## STICKER, FIRE EXTINGUISH INSTALLATION WITH TEXT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.163	soft PVC sticker	10 x 15 cm
10.58.164	small hard plastic sign, 2 mm thick	10 x 15 cm



## STICKER, F

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.170	soft PVC sticker	17 x 11 cm





## STICKER, FIRE EXTINGUISHER POSITION

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.171	soft PVC sticker	10 x 10 cm
10.58.172	soft PVC sticker	20 x 20 cm
10.58.173	small hard plastic sign, 2 mm thick	10 x 10 cm



## STICKER, FIRE EXTINGUISHER + FLAME

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.174	soft PVC sticker	10 x 10 cm



## STICKER, FIRE HOSE POSITION

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.175	soft PVC sticker	10 x 10 cm
10.58.176	soft PVC sticker	20 x 20 cm



## STICKER, FIRE HOSE + FLAME

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.177	soft PVC sticker	10 x 10 cm



## STICKER, FIRE AX

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.178	soft PVC sticker	15 x 15 cm



## STICKER, FIRST AID BOX

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.180	soft PVC sticker	10 x 10 cm
10.58.181	soft PVC sticker	15 x 15 cm

## STICKER, STRETCHER

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.185	soft PVC sticker	10 x 10 cm
10.58.186	soft PVC sticker	15 x 15 cm



## STICKER, EMERGENCY SHOWER

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.191	soft PVC sticker	10 x 10 cm
10.58.192	soft PVC sticker	20 x 20 cm



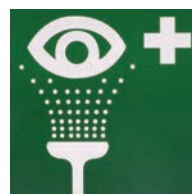
## STICKER, AED

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.193	soft PVC sticker	10 x 10 cm
10.58.194	soft PVC sticker	15 x 15 cm
10.58.195	soft PVC sticker	20 x 20 cm



## STICKER, EYE SHOWER

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.196	soft PVC sticker	10 x 10 cm
10.58.198	soft PVC sticker	20 x 20 cm



## STICKER, EMERGENCY ROUTE

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.199	soft PVC sticker	15 x 15 cm
10.58.200	soft PVC sticker	25 x 8 cm



## STICKER, EMERGENCY ESCAPE ROUTE RIGHT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.201	soft PVC sticker	21 x 10 cm





## STICKER, EMERGENCY ESCAPE ROUTE LEFT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.202	soft PVC sticker	21 x 10 cm



## STICKER, EMERGENCY ESCAPE ROUTE UPSTAIRS RIGHT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.301	soft PVC sticker	21 x 10 cm



## STICKER, EMERGENCY ESCAPE ROUTE DOWNSTAIRS RIGHT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.302	soft PVC sticker	21 x 10 cm



## STICKER, EMERGENCY ESCAPE ROUTE UPSTAIRS LEFT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.311	soft PVC sticker	21 x 10 cm



## STICKER, EMERGENCY ESCAPE ROUTE DOWNSTAIRS LEFT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.312	soft PVC sticker	21 x 10 cm



## STICKER, EXIT: SYMBOL

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.410	soft PVC sticker	10 x 10 cm
10.58.420	soft PVC sticker	20 x 20 cm

## STICKER, EXIT: SYMBOL, LUMINESCENT

ARTIKELNR	MATERIAL	DIMENSIONS
<b>10.58.416</b>	soft PVC sticker: luminiscent	15 x 15 cm
<b>10.58.421</b>	soft PVC sticker	20 x 20 cm



## STICKER, UITGANG

ARTIKELNR	MATERIAL	DIMENSIONS
<b>10.58.430</b>	soft PVC sticker	30 x 12 cm

**UITGANG**

## STICKER, ASSEMBLY POINT: SYMBOL

ARTIKELNR	MATERIAL	DIMENSIONS
<b>10.58.495</b>	soft PVC sticker	30 x 12 cm
<b>10.58.497</b>	soft PVC sticker	30 x 30 cm
<b>10.58.498</b>	hard plastic sign, 4 mm thick	printed on 1 side, 40 x 40 cm



## STICKER, LIFE-JACKETS WITH TEXT

ARTIKELNR	MATERIAL	DIMENSIONS
<b>10.58.499</b>	soft PVC sticker	4.5 x 4.5 cm



## STICKER, LIFE-JACKETS

ARTIKELNR	MATERIAL	DIMENSIONS
<b>10.58.500</b>	soft PVC sticker	17.5 x 15 cm



## STICKER, LIFERAFT

ARTIKELNR	MATERIAL	DIMENSIONS
<b>10.58.504</b>	soft PVC sticker: luminiscent	15 x 15 cm





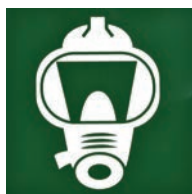
## STICKER, LIFEBOUY WITH TEXT, LUMINESCENT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.501	soft PVC sticker: luminescent	15 x 15 cm
10.58.502	soft PVC sticker: luminescent	30 x 30 cm



## STICKER, SURVIVALSUIT, LUMINESCENT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.505	soft PVC sticker: luminescent	15 x 15 cm



## STICKER, ESCAPE MASK, LUMINESCENT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.520	soft PVC sticker	15 x 15 cm
10.58.521	soft PVC sticker	20 x 20 cm



## STICKER, ESCAPE MASK WITH TEXT

ARTIKELNR	MATERIAL	DIMENSIONS
10.58.525	soft PVC sticker	15 x 15 cm



## STICKER, CAMERA SURVEILLANCE

ARTIKELNR	MATERIAL	DIAMETER
10.59.000	soft PVC sticker	13.5 cm



## SIGN, CAMERA SURVEILLANCE

ARTIKELNR	MATERIAL	DIMENSIONS
10.59.004	small hard plastic sign, 5 mm thick	23 x 23 cm

## STICKER, HEAD PROTECTION MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.011	soft PVC sticker	10 cm
10.59.012	soft PVC sticker	20 cm



## STICKER, EYE PROTECTION (GLASSES) MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.021	soft PVC sticker	10 cm
10.59.022	soft PVC sticker	20 cm



## STICKER, HEARING PROTECTION MUST BE WORN

ARTIKELNR	MATERIAL	DIMENSIONS
10.59.050	soft PVC sticker	17 x 6 cm
10.59.051	soft PVC sticker	10 cm
10.59.052	soft PVC sticker	20 cm



## STICKER, DUST MASK MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.211	soft PVC sticker	10 cm
10.59.212	soft PVC sticker	20 cm



## STICKER, BREATHING PROTECTION MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.221	soft PVC sticker	10 cm
10.59.222	soft PVC sticker	20 cm



## STICKER, FOOT PROTECTION MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.311	soft PVC sticker	10 cm
10.59.312	soft PVC sticker	20 cm





## STICKER, HAND PROTECTION MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.331	soft PVC sticker	10 cm
10.59.332	soft PVC sticker	20 cm



## STICKER, SAFETY APRON MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.351	soft PVC sticker	10 cm
10.59.352	soft PVC sticker	20 cm



## STICKER, LIFE-JACKETS MUST BE WORN

ARTIKELNR	MATERIAL	DIAMETER
10.59.601	soft PVC sticker	10 cm
10.59.602	soft PVC sticker	20 cm
10.59.615	soft PVC sticker	15 cm



## STICKER, READ THE INSTRUCTION MANUAL

ARTIKELNR	MATERIAL	DIAMETER
10.59.701	soft PVC sticker	5 cm



## STICKER, CAUTION, GENERAL

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.001	soft PVC sticker	9 x 9 x 9 cm
10.60.002	soft PVC sticker	20 x 20 x 20 cm



## STICKER, STIKSTOF

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.008	soft PVC sticker	20 x 20 x 20 cm



## STICKER, CAUTION, DANGER

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.011	soft PVC sticker	9 x 9 x 9 cm
10.60.012	soft PVC sticker	18 x 18 x 18 cm
10.60.014	soft PVC sticker	40 x 40 x 40 cm



## STICKER, CAUTION, ELECTRICITY

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.021	soft PVC sticker	9 x 9 x 9 cm
10.60.022	soft PVC sticker	18 x 18 x 18 cm



## STICKER, CAUTION, FLAMMABLE SUBSTANCES

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.031	soft PVC sticker	9 x 9 x 9 cm
10.60.032	soft PVC sticker	18 x 18 x 18 cm



## STICKER, CAUTION, SLIPPERY SURFACE

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.041	soft PVC sticker	9 x 9 x 9 cm
10.60.042	soft PVC sticker	18 x 18 x 18 cm



## STICKER, CAUTION, EXPLOSION

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.051	soft PVC sticker	9 x 9 x 9 cm
10.60.052	soft PVC sticker	18 x 18 x 18 cm



## STICKER, CAUTION, BATTERY FUMES

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.061	soft PVC sticker	5 x 5 x 5 cm
10.60.062	soft PVC sticker	9 x 9 x 9 cm
10.60.063	soft PVC sticker	18 x 18 x 18 cm





## STICKER, HAND PINCH HAZARD

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.071	soft PVC sticker	10 x 10 x 10 cm



## STICKER, CO2

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.081	soft PVC sticker	9 x 9 x 9 cm
10.60.082	soft PVC sticker	18 x 18 x 18 cm



## STICKER, AGGRESSIVE SUBSTANCES

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.100	soft PVC sticker	5 x 5 x 5 cm



## STICKER, ENGINE STARTS AUTOMATICALLY

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.150	soft PVC sticker	5 x 5 x 5 cm



## STICKER, BEWARE! HOT!

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.170	soft PVC sticker	5 x 5 x 5 cm

**Brandblusinstallatie  
Bij brand of brandalarm  
Ruimte onmiddellijk verlaten**

## STICKER, BRANDBLUSINSTALLATIE BIJ BRAND OF BRANDALARM RUIMTE ONMIDDELIJK VERLATEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.60.200	soft PVC sticker	12 x 25 cm

**STICKER, MAST STROOMLOOS MAKEN ALVORENS TE LATEN ZAKKEN**



ARTIKELNR	MATERIAL	DIMENSIONS
10.60.250	soft PVC sticker	10 x 15 cm

**STICKER, NEUE PUTZLAPPEN**



ARTIKELNR	MATERIAL	DIMENSIONS
10.61.105	soft PVC sticker	18 x 10 cm

**STICKER, ÖLHALTIGE PUTZLAPPEN**



ARTIKELNR	MATERIAL	DIMENSIONS
10.61.110	soft PVC sticker	18 x 10 cm

**STICKER, ÖLBINDEMITTEL**



ARTIKELNR	MATERIAL	DIMENSIONS
10.61.115	soft PVC sticker	18 x 10 cm

**STICKER, FESTE ÖLHALTIGE ABFÄLLE**



ARTIKELNR	MATERIAL	DIMENSIONS
10.61.120	soft PVC sticker	18 x 10 cm

**STICKER, ÜBERIGE FLÜSSIGE SONDERABFÄLLE**



ARTIKELNR	MATERIAL	DIMENSIONS
10.61.125	soft PVC sticker	18 x 10 cm

**HAUSMÜLL**

**STICKER, HAUSMÜLL**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.135	soft PVC sticker	18 x 10 cm

**Betreten  
verboten**

**STICKER, BETRETEN VERBOTEN**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.160	soft PVC sticker	25 x 12 cm

**Quetschgefahr**

**STICKER, QUETSCHGEFAHR**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.165	soft PVC sticker	35 x 10 cm

**Kollisionsschott  
Tür nach Durchgang  
sofort schließen**

**STICKER, KOLLISIONSSCHOTT**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.170	soft PVC sticker	25 x 12 cm

**Nicht im  
Ladungsbereich  
verwenden !**

**STICKER, NICHT IM LADUNGSBEREICH VERWENDEN!**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.200	soft PVC sticker	20 x 10 cm

**Quittierung  
Voralarm**

**STICKER, QUITTIERUNG VORALARM**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.210	soft PVC sticker	15 x 6 cm

**STICKER, SWL 500 KG.**

**SWL 500 KG.**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.220	soft PVC sticker	100 x 15 cm

**STICKER, SCHMIERÖL**

**SCHMIERÖL**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.250	soft PVC sticker	10 x 3 cm

**STICKER, TRINKWASSER**

**Trinkwasser**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.255	soft PVC sticker	10 x 5 cm

**STICKER, GASÖL**

**GASÖL**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.260	soft PVC sticker	10 x 3 cm

**STICKER, VAPOUR**

**Vapour**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.270	soft PVC sticker	20 x 10 cm
10.61.271	soft PVC sticker	15 x 10 cm
10.61.272	soft PVC sticker	15 x 3 cm

**< Vapour >**

**Vapour**

**STICKER, LIQUID**

**Liquid**

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.280	soft PVC sticker	20 x 10 cm
10.61.281	soft PVC sticker	15 x 10 cm
10.61.282	soft PVC sticker	15 x 3 cm

**< Liquid >**

**Liquid**



## STICKER, BRANDSCHUTZPLAN

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.300	soft PVC sticker	20 x 18 cm



## STICKER, ACHTUNG! STEUERHAUS FRÜHZEITIG ABSENKEN!

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.305	soft PVC sticker	18 x 10 cm



## STICKER, BILGENALARM

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.400	soft PVC sticker	10 x 3 cm



## STICKER, BEI BRAND SCHLIESSEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.410	soft PVC sticker	14 x 10 cm



## STICKER, FEUERKLAPPE IM BRANDFALL SCHLIESSEN

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.415	soft PVC sticker	14 x 10 cm



## STICKER, SCHNELLSCHLUSSBRENNSTOFF

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.420	soft PVC sticker	13 x 5 cm

## STICKER, NOT/AUS

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.430	soft PVC sticker	8 x 10 cm
10.61.431	soft PVC sticker	15 x 10 cm

**NOT / AUS**

## STICKER, ANKERWINDE

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.435	soft PVC sticker	8 x 10 cm

**Ankerwinde**

## STICKER, LADUNGSSYSTEM

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.440	soft PVC sticker	8 x 10 cm

**Ladungssystem**

## STICKER, FEUERLÖSCHPUMPE

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.445	soft PVC sticker	10 x 15 cm

**Feuerlösch-  
pumpe**

## STICKER, DIRECTION OF ROTATION

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.459	soft PVC sticker	2 x 0.5 cm
10.61.460	soft PVC sticker	8 x 2.5 cm



## STICKER, TREPPE RÜCKWÄRTS

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.470	soft PVC sticker	30 x 10 cm

Die Treppe rückwärts herunter-  
gehen und am Geländer festhalten!  
Trap achterwaarts afdalen en  
vasthouden aan de leuning



## STICKER, NOTAUSGANG

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.480	soft PVC sticker	30 x 10 cm

**Notausgang**

## Ausgang

### STICKER, AUSGANG

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.485	soft PVC sticker	30 x 10 cm

Während des Ladens,  
Löschens und Entgasens  
nicht ohne Erlaubnis des  
Schiffsführers öffnen.  
Sofort wieder schließen.

### STICKER, WÄHREND DES LADENS

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.500	soft PVC sticker	18 x 10 cm

↓  
Dieselkraftstoff  
EN 12827 - 1 - 50

### STICKER, DIESELKRAFTSTOFF EN 12827-1-50

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.530	soft PVC sticker	10 x 4 cm

## Überfüllsicherung

### STICKER, ÜBERFÜLLSICHERUNG

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.540	soft PVC sticker	10 x 4 cm

## Not-Stop Bordpumpe

### STICKER, NOT-STOP BORDPUMPE

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.550	soft PVC sticker	10 x 3 cm

## Grenzwertgeber Brennstoffbunker

### STICKER, GRENZWERTGEBER BRENNSTOFFBUNKER

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.560	soft PVC sticker	10 x 4 cm

Druck max. 15,8 bar  
Temp. max. +40C°  
Temp. min. -10 C°

### STICKER, DRUCK MAX. 15,8 BAR

ARTIKELNR	MATERIAL	DIMENSIONS
10.61.570	soft PVC sticker	10 x 10 cm



**RULES AND SHIPPING BOOKS**

For most loose-leaf publications it is possible to take out a subscription from the publisher directly for additions and changes.



ARTIKELNR	DESCRIPTION	LANGUAGE	VERSION	BOUND OR LOOSE LEAF
10.65.105	BPR, Inland waters police rules	Dutch	pocket book February 2020, 27th print	bound
10.65.110	RPR, Rhine shipping police rules	Dutch	pocket book February 2020, 16th edition	bound
10.65.115	BPR + RPR, Special Volume	Dutch	A5 binder	loose-leaf
10.65.116	Miscellaneous, Special Volume II	Dutch	A5 binder	loose-leaf
10.65.130	ADN Volumes I, II and III	Dutch	A5 binder	loose-leaf
10.65.133	ADN checklist	Dutch, English, German, French	25 set, 2 sheets	bound

*ADN checklist concerning the observance of safety provisions and implementation of the necessary measures for loading and unloading hazardous substances.*

*The amended ADN came into effect for the countries associated to this treaty, the Netherlands included, on 1 January 2015 and (in relation to the transitional provisions) became compulsory for all inland shipping within Europe as of 1 July 2015.*

*The hard copy version of the ADN checklist (section 8.6.3 of the ADN) consists of a cover page with explanation and four forms with a yellow carbon paper.*

*The cover page comes with additional cardboard that can be placed between the forms to prevent the writing come through onto the next page.*

*The form is available in Dutch, German, French and English and can therefore be used for all inland shipping within Europe.*

10.65.150	Nautical radio manual, 1/6M	Dutch	A5 binder	loose-leaf
10.65.220	Volume 1, General	Dutch	A5 binder	loose-leaf
10.65.223	Volume 1T, Explanatory notes	Dutch	A5 binder	loose-leaf
10.65.230	Volume 2, Northwest navigation area	Dutch	A5 binder	loose-leaf
10.65.235	Volume 3, Southwest navigation area	Dutch	A5 binder	loose-leaf
10.65.240	Volume 4, Southeast navigation area	Dutch	A5 binder	loose-leaf
10.65.245	Volume 5, Northeast navigation area	Dutch	A5 binder	loose-leaf
10.65.250	Volume 6, Rhine shipping	Dutch	A5 binder	loose-leaf
10.65.260	Volume 7, BVW/BVB/BVR	Dutch	A5 binder	loose-leaf
10.65.261	Volume 7A, BVW/BVR/ROSR/ES-TRIN	Dutch	A5 binder	loose leaf
10.65.320	Shipping rules Westerschelde	Dutch	A5 folder	loose-leaf
10.65.330	Shipping rules Gent-Terneuzen Canal	Dutch	A5 folder	loose-leaf
10.65.340	Shipping rules Eemsmonding	Dutch	A5 folder	loose-leaf
10.65.370	Volume 7D, Inland shipping navigation times	Dutch	A5 folder	loose-leaf
10.65.570	Rheinschiffahrtspolizeiverordnung	German	A4 folder 2017	loose-leaf
10.65.571	Moselschiffahrtspolizeiverordnung	German	A4 folder 2017	loose-leaf
10.65.572	Donauschiffahrtspolizeiverordnung	German	A4 folder 2017	loose-leaf
10.65.573	Binnenschiffahrtsstraßen-Ordnung	German	A4 binder 2017	loose-leaf
10.65.574	ADN-Gefahrgutregelwerk	German	A5 boek 2019	bound
10.65.575	Handbuch Binnenschiffahrtfunk	German	A4 binder 2016-2017	loose-leaf



## WINDSOCK

Simple windsock that can be used on every flagpole.  
Is hoisted like a flag

material : polyglans polyester fabric, 120 grams  
 dimensions: : 46 x 200 x 23 cm  
 colours : red/white/red/white/red  
 fixing : ring at the front with loops and hoisting eye

ARTIKELNR	DESCRIPTION
<b>11.00.001</b>	Windsock



## PROFI WINDSOCK

Made from lightweight spinnaker fabric, for use in light winds.

material : lightweight spinnaker fabric  
 dimensions: : 30 x 125 x 15 cm  
 colours : red/white/red/white/red  
 fixing : by means of press-stud

ARTIKELNR	DESCRIPTION
<b>11.00.003</b>	Profi Windsock
<b>11.00.004</b>	Profi Windsock heavy



## MAST PROFI WINDSOCK

Robust stainless steel mast.

ARTIKELNR	DESCRIPTION
<b>11.00.005</b>	Top mast for windsock Profi
<b>11.00.006</b>	Lower mast for windsock Profi

## FLAGS, GENERAL INFORMATION

Remove at wind force greater than 6. Lifetime approx. 3 to 4 months, depending on weather, wind, colour and print.

## FLAG CLIP INGLEFIELD



ARTIKELNR	DESCRIPTION
11.01.001	Flag clip Inglefield

## FLAG, DUTCH



ARTIKELNR	DIMENSIONS	FLAGPOLE LENGTH
11.01.020	20 x 30 cm	
11.01.030	30 x 45 cm	
11.01.040	40 x 60 cm	
11.01.050	50 x 75 cm	125 cm
11.01.070	70 x 100 cm	150 cm
11.01.080	80 x 120 cm	175 cm
11.01.100	100 x 150 cm	200 cm
11.01.120	120 x 180 cm	250 / 500 cm
11.01.150	150 x 225 cm	600 cm
11.01.200	200 x 300 cm	700 cm
11.01.225	225 x 350 cm	800 cm
11.01.300	300 x 450 cm	900 cm
11.01.500	300 x 500 cm	1,000 cm
11.01.600	300 x 600 cm	1,200 cm
11.01.675	450 x 675 cm	1,500 cm

## PENNANT, DUTCH



ARTIKELNR	DIMENSIONS
11.03.020	20 x 30 cm
11.03.030	30 x 45 cm
11.03.040	40 x 60 cm
11.03.050	50 x 75 cm

## FLAG, FORMER DUTCH

The blue in this flag is navy blue.



ARTIKELNR	DIMENSIONS
11.03.062	20 x 30 cm
11.03.064	30 x 45 cm
11.03.066	40 x 60 cm
11.03.068	50 x 75 cm
11.03.070	70 x 100 cm
11.03.080	80 x 120 cm
11.03.100	100 x 150 cm
11.03.120	120 x 180 cm
11.03.150	150 x 225 cm
11.03.200	200 x 300 cm



## STREAMER, ORANGE WITH TASSEL

ARTIKELNR	LENGTH	FOR FLAG
<b>11.04.180</b>	180 cm	100 x 150 cm
<b>11.04.215</b>	215 cm	120 x 180 cm
<b>11.04.270</b>	250 cm	150 x 225 cm
<b>11.04.360</b>	360 cm	200 x 300 cm
<b>11.04.415</b>	415 cm	225 x 350 cm



## STREAMER, DUTCH - WELCOME STREAMER

ARTIKELNR	DIMENSIONS	FLAGPOLE LENGTH
<b>11.04.920</b>	200 x 25 cm	500 cm
<b>11.04.925</b>	250 x 25 cm	500 cm
<b>11.04.930</b>	300 x 25 cm	600 cm
<b>11.04.935</b>	350 x 30 cm	600 cm
<b>11.04.940</b>	400 x 30 cm	700 cm
<b>11.04.945</b>	450 x 30 cm	700 cm
<b>11.04.950</b>	500 x 30 cm	800 cm



## FLAG, ORANGE HOLLAND

Supporters flag with print.

ARTIKELNR	DIMENSIONS
<b>11.04.970</b>	70 x 100 cm
<b>11.04.972</b>	150 x 225 cm



## FLAG, ORANGE DUTCH

Orange flag with a red/white/blue horizontal strip in the middle.  
Picture of black lion over almost the entire height.

ARTIKELNR	DIMENSIONS
<b>11.04.975</b>	100 x 150 cm

## FLAG, HOORAY! A GIRL!

Has only Dutch text.

ARTIKELNR	DIMENSIONS
<b>11.05.100</b>	100 x 150 cm

HOERA! EEN MEISJE!



## FLAG, HOORAY! A BOY!

Has only Dutch text.

ARTIKELNR	DIMENSIONS
<b>11.06.100</b>	100 x 150 cm

HOERA! EEN JONGEN!



## FLAG, JOLLY ROGER

ARTIKELNR	DIMENSIONS
<b>11.10.960</b>	60 x 90 cm



## PENNANT WITH NAME – BANNER WITH NAME

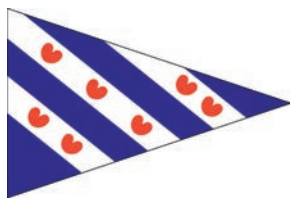
**Delivery time approx. 1 to 2 weeks!**

Blue background with stitched on white letters.

Letters legible on one side, other side mirror writing.

ARTIKELNR	DIMENSIONS
<b>11.00.030</b>	75 x 300 cm
<b>11.00.040</b>	100 x 400 cm
<b>11.00.050</b>	125 x 500 cm





## PENNANT, FRIESLAND

ARTIKELNR	DIMENSIONS
<b>11.11.002</b>	20 x 30 cm
<b>11.11.003</b>	30 x 45 cm
<b>11.11.004</b>	40 x 60 cm
<b>11.11.005</b>	50 x 75 cm



## FLAG, FRIESLAND

ARTIKELNR	DIMENSIONS
<b>11.11.020</b>	20 x 30 cm
<b>11.11.030</b>	30 x 45 cm
<b>11.11.040</b>	40 x 60 cm
<b>11.11.050</b>	50 x 75 cm
<b>11.11.070</b>	70 x 100 cm
<b>11.11.100</b>	100 x 150 cm
<b>11.11.150</b>	150 x 225 cm
<b>11.11.200</b>	200 x 300 cm



## FLAG, GRONINGEN

ARTIKELNR	DIMENSIONS
<b>11.12.020</b>	20 x 30 cm
<b>11.12.030</b>	30 x 45 cm
<b>11.12.040</b>	40 x 60 cm
<b>11.12.050</b>	50 x 75 cm
<b>11.12.070</b>	70 x 100 cm
<b>11.12.100</b>	100 x 150 cm
<b>11.12.150</b>	150 x 225 cm
<b>11.12.200</b>	200 x 300 cm



## FLAG, DRENTHE

ARTIKELNR	DIMENSIONS
<b>11.13.020</b>	20 x 30 cm
<b>11.13.030</b>	30 x 45 cm
<b>11.13.040</b>	40 x 60 cm
<b>11.13.050</b>	50 x 75 cm
<b>11.13.070</b>	70 x 100 cm
<b>11.13.100</b>	100 x 150 cm
<b>11.13.150</b>	150 x 225 cm
<b>11.13.200</b>	200 x 300 cm

**FLAG, OVERIJSEL**

ARTIKELNR	DIMENSIONS
11.14.020	20 x 30 cm
11.14.030	30 x 45 cm
11.14.040	40 x 60 cm
11.14.050	50 x 75 cm
11.14.070	70 x 100 cm
11.14.100	100 x 150 cm
11.14.150	150 x 225 cm
11.14.200	200 x 300 cm



**FLAG, GELDERLAND**

ARTIKELNR	DIMENSIONS
11.15.020	20 x 30 cm
11.15.030	30 x 45 cm
11.15.040	40 x 60 cm
11.15.050	50 x 75 cm
11.15.070	70 x 100 cm
11.15.100	100 x 150 cm
11.15.150	150 x 225 cm
11.15.200	200 x 300 cm



**FLAG, UTRECHT**

ARTIKELNR	DIMENSIONS
11.16.020	20 x 30 cm
11.16.030	30 x 45 cm
11.16.040	40 x 60 cm
11.16.050	50 x 75 cm
11.16.070	70 x 100 cm
11.16.100	100 x 150 cm
11.16.150	150 x 225 cm
11.16.200	200 x 300 cm



**FLAG, NORTH-HOLLAND**

ARTIKELNR	DIMENSIONS
11.17.020	20 x 30 cm
11.17.030	30 x 45 cm
11.17.040	40 x 60 cm
11.17.050	50 x 75 cm
11.17.070	70 x 100 cm
11.17.100	100 x 150 cm
11.17.150	150 x 225 cm
11.17.200	200 x 300 cm





## FLAG, SOUTH-HOLLAND

ARTIKELNR	DIMENSIONS
11.18.020	20 x 30 cm
11.18.030	30 x 45 cm
11.18.040	40 x 60 cm
11.18.050	50 x 75 cm
11.18.070	70 x 100 cm
11.18.100	100 x 150 cm
11.18.150	150 x 225 cm
11.18.200	200 x 300 cm



## FLAG, ZEELAND

ARTIKELNR	DIMENSIONS
11.19.020	20 x 30 cm
11.19.030	30 x 45 cm
11.19.040	40 x 60 cm
11.19.050	50 x 75 cm
11.19.070	70 x 100 cm
11.19.100	100 x 150 cm
11.19.150	150 x 225 cm
11.19.200	200 x 300 cm

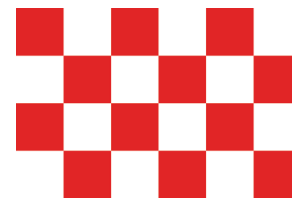


## STREAMER, ZEELAND

ARTIKELNR	DIMENSIONS	FLAGPOLE LENGTH
11.19.225	300 x 25 cm	600 cm



**FLAG, NORTH-BRABANT**



ARTIKELNR	DIMENSIONS
11.20.020	20 x 30 cm
11.20.030	30 x 45 cm
11.20.040	40 x 60 cm
11.20.050	50 x 75 cm
11.20.070	70 x 100 cm
11.20.100	100 x 150 cm
11.20.150	150 x 225 cm
11.20.200	200 x 300 cm

**FLAG, LIMBURG**



ARTIKELNR	DIMENSIONS
11.21.020	20 x 30 cm
11.21.030	30 x 45 cm
11.21.040	40 x 60 cm
11.21.050	50 x 75 cm
11.21.070	70 x 100 cm
11.21.100	100 x 150 cm
11.21.150	150 x 225 cm
11.21.200	200 x 300 cm

**FLAG, FLEVOLAND**



ARTIKELNR	DIMENSIONS
11.22.020	20 x 30 cm
11.22.030	30 x 45 cm
11.22.040	40 x 60 cm
11.22.050	50 x 75 cm
11.22.070	70 x 100 cm
11.22.100	100 x 150 cm
11.22.150	150 x 225 cm
11.22.200	200 x 300 cm



## FLAG, AMSTERDAM

ARTIKELNR	DIMENSIONS
11.27.020	20 x 30 cm
11.27.030	30 x 45 cm
11.27.040	40 x 60 cm
11.27.050	50 x 75 cm
11.27.070	70 x 100 cm
11.27.100	100 x 150 cm
11.27.150	150 x 225 cm
11.27.200	200 x 300 cm



## PENNANT, ROTTERDAM

ARTIKELNR	DIMENSIONS
11.28.003	30 x 45 cm



## FLAG, ROTTERDAM



ARTIKELNR	DIMENSIONS
11.28.020	20 x 30 cm
11.28.030	30 x 45 cm
11.28.040	40 x 60 cm
11.28.050	50 x 75 cm
11.28.070	70 x 100 cm
11.28.100	100 x 150 cm
11.28.150	150 x 225 cm
11.28.200	200 x 300 cm



## FLAG, ROTTERDAM WITH COAT OF ARMS

ARTIKELNR	DIMENSIONS
11.29.100	100 x 150 cm

## FLAG, BELGIUM



ARTIKELNR	DIMENSIONS
11.30.020	20 x 30 cm
11.30.030	30 x 45 cm
11.30.040	40 x 60 cm
11.30.050	50 x 75 cm
11.30.070	70 x 100 cm
11.30.100	100 x 150 cm
11.30.150	150 x 225 cm
11.30.200	200 x 300 cm

## FLAG, LUXEMBOURG



ARTIKELNR	DIMENSIONS
11.32.020	20 x 30 cm
11.32.030	30 x 45 cm
11.32.040	40 x 60 cm
11.32.050	50 x 75 cm
11.32.070	70 x 100 cm
11.32.100	100 x 150 cm
11.32.150	150 x 225 cm
11.32.200	200 x 300 cm

## FLAG, LUXEMBOURG SHIPPING

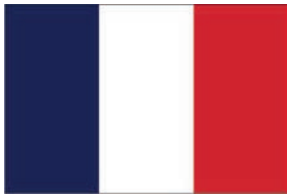


ARTIKELNR	DIMENSIONS
11.33.100	100 x 150 cm

## FLAG, GERMANY



ARTIKELNR	DIMENSIONS
11.36.020	20 x 30 cm
11.36.030	30 x 45 cm
11.36.040	40 x 60 cm
11.36.050	50 x 75 cm
11.36.070	70 x 100 cm
11.36.080	80 x 120 cm
11.36.100	100 x 150 cm
11.36.120	120 x 180 cm
11.36.150	150 x 225 cm
11.36.200	200 x 300 cm



## FLAG, FRANCE

ARTIKELNR	DIMENSIONS
11.38.020	20 x 30 cm
11.38.030	30 x 45 cm
11.38.040	40 x 60 cm
11.38.050	50 x 75 cm
11.38.070	70 x 100 cm
11.38.100	100 x 150 cm
11.38.150	150 x 225 cm
11.38.200	200 x 300 cm



## FLAG, UNITED KINGDOM MERCHANT NAVY

ARTIKELNR	DIMENSIONS
11.39.040	40 x 60 cm
11.39.050	50 x 75 cm
11.39.070	70 x 100 cm
11.39.100	100 x 150 cm



## FLAG, UNITED KINGDOM (UNION JACK)

ARTIKELNR	DIMENSIONS
11.39.504	40 x 60 cm
11.39.505	50 x 75 cm
11.39.507	70 x 100 cm
11.39.510	100 x 150 cm
11.39.515	150 x 225 cm



## FLAG, SWITZERLAND

ARTIKELNR	DIMENSIONS
11.40.020	20 x 30 cm
11.40.030	30 x 45 cm
11.40.040	40 x 60 cm
11.40.050	50 x 75 cm
11.40.070	70 x 100 cm
11.40.100	100 x 150 cm
11.40.150	150 x 225 cm
11.40.200	200 x 300 cm
11.41.100	100 x 100 cm
11.41.150	150 x 150 cm
11.41.200	200 x 200 cm

**FLAG, AUSTRIA (DORDRECHT, HOORN)**

ARTIKELNR DIMENSIONS

**11.42.030** 30 x 45 cm

**11.42.040** 40 x 60 cm

**11.42.070** 70 x 100 cm

**11.42.100** 100 x 150 cm

**11.42.150** 150 x 225 cm



**FLAG, CZECH REPUBLIC**

ARTIKELNR DIMENSIONS

**11.44.070** 70 x 100 cm

**11.44.100** 100 x 150 cm

**11.44.150** 150 x 225 cm



**FLAG, SLOVAKIA**

ARTIKELNR DIMENSIONS

**11.46.070** 70 x 100 cm

**11.46.100** 100 x 150 cm



**FLAG, HUNGARY**

ARTIKELNR DIMENSIONS

**11.48.030** 30 x 45 cm

**11.48.070** 70 x 100 cm

**11.48.100** 100 x 150 cm



**FLAG, BOSNIA-HERZEGOVINA**

ARTIKELNR DIMENSIONS

**11.50.100** 100 x 150 cm



**FLAG, CROATIA**

ARTIKELNR DIMENSIONS

**11.51.100** 100 x 150 cm





## FLAG, SERBIA

ARTIKELNR	DIMENSIONS
<b>11.52.070</b>	70 x 100 cm
<b>11.52.100</b>	100 x 150 cm



## FLAG, ROMANIA

ARTIKELNR	DIMENSIONS
<b>11.54.070</b>	70 x 100 cm
<b>11.54.100</b>	100 x 150 cm



## FLAG, BULGARIA

ARTIKELNR	DIMENSIONS
<b>11.56.070</b>	70 x 100 cm
<b>11.56.100</b>	100 x 150 cm



## FLAG, MOLDAVIA

ARTIKELNR	DIMENSIONS
<b>11.57.100</b>	100 x 150 cm



## FLAG, UKRAINE

ARTIKELNR	DIMENSIONS
<b>11.58.100</b>	100 x 150 cm

**FLAG, POLAND**

ARTIKELNR	DIMENSIONS
11.60.070	70 x 100 cm
11.60.100	100 x 150 cm



**FLAG, UNITED STATES (USA)**

ARTIKELNR	DIMENSIONS
11.62.070	70 x 100 cm
11.62.100	100 x 150 cm



**FLAG, 16 NATIONS**

Flag with flags of 16 well-known countries from all over the world.

ARTIKELNR	DIMENSIONS
11.66.100	100 x 150 cm



**FLAG, EU + 15 NATIONS**

ARTIKELNR	DIMENSIONS
11.67.100	100 x 150 cm



**FLAG, EU**

ARTIKELNR	DIMENSIONS
11.68.020	20 x 30 cm
11.68.030	30 x 45 cm
11.68.040	40 x 60 cm
11.68.050	50 x 75 cm
11.68.070	70 x 100 cm
11.68.100	100 x 150 cm
11.68.150	150 x 225 cm
11.68.200	200 x 300 cm



## SHIPPING FLAGS



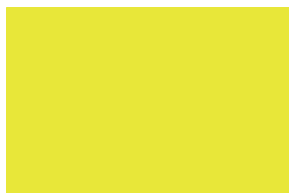
### FLAG, RED (WARNING FLAG, PROTEST FLAG)

ARTIKELNR	DIMENSIONS
<b>11.79.040</b>	40 x 60 cm
<b>11.79.050</b>	50 x 75 cm
<b>11.79.070</b>	70 x 100 cm
<b>11.79.080</b>	80 x 120 cm
<b>11.79.100</b>	100 x 150 cm



### PENNANT, RED (PRIORITY PENNANT)

ARTIKELNR	DIMENSIONS
<b>11.79.980</b>	200 x 80 cm



### FLAG, YELLOW (QUARANTINE FLAG)

ARTIKELNR	DIMENSIONS
<b>11.80.040</b>	40 x 60 cm
<b>11.80.050</b>	50 x 75 cm
<b>11.80.070</b>	70 x 100 cm
<b>11.80.080</b>	80 x 120 cm
<b>11.80.100</b>	100 x 150 cm



### FLAG, WHITE (WATERFLAG)

ARTIKELNR	DIMENSIONS
<b>11.81.040</b>	40 x 60 cm
<b>11.81.050</b>	50 x 75 cm
<b>11.81.070</b>	70 x 100 cm
<b>11.81.080</b>	80 x 120 cm
<b>11.81.100</b>	100 x 150 cm



### FLAG, RED/WHITE (INDONESIA, MONACO)

ARTIKELNR	DIMENSIONS
<b>11.82.070</b>	70 x 100 cm
<b>11.82.080</b>	80 x 120 cm
<b>11.82.100</b>	100 x 150 cm



**FLAG, POLLUTION**

ARTIKELNR DIMENSIONS

**11.83.070** 70 x 100 cm

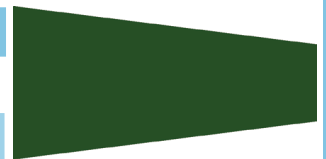
**11.83.100** 100 x 150 cm



**FLAG, CUSTOMS**

ARTIKELNR DIMENSIONS

**11.85.075** 75 x 150 x 12 cm

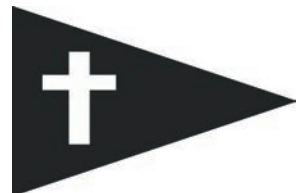


**FLAG, MOURNING (CATHOLIC)**

ARTIKELNR DIMENSIONS MODEL

**11.87.070** 70 x 100 cm pennant

**11.87.100** 100 x 150 cm flag

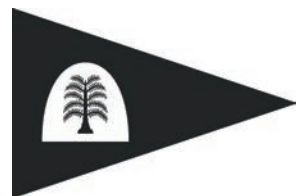


**FLAG, MOURNING (PROTESTANT)**

ARTIKELNR DIMENSIONS MODEL

**11.87.071** 70 x 100 cm pennant

**11.87.101** 100 x 150 cm pennant



**STREAMER, MOURNING (PLAIN BLACK)**

ARTIKELNR DIMENSIONS

**11.87.200** 173 x 18 cm





## FLAG, TOWING

ARTIKELNR	DIMENSIONS
<b>11.89.020</b>	20 x 30 cm
<b>11.89.030</b>	30 x 45 cm
<b>11.89.040</b>	40 x 60 cm
<b>11.89.050</b>	50 x 75 cm
<b>11.89.070</b>	70 x 100 cm
<b>11.89.100</b>	100 x 150 cm



## ENSIGN

ARTIKELNR	DIMENSIONS
<b>11.91.020</b>	20 x 30 cm
<b>11.91.030</b>	30 x 45 cm
<b>11.91.040</b>	40 x 60 cm
<b>11.91.050</b>	50 x 75 cm



## ENSIGN, RED (BOATING)

ARTIKELNR	LENGTH
<b>11.92.100</b>	100 cm
<b>11.92.150</b>	150 cm
<b>11.92.200</b>	200 cm
<b>11.92.300</b>	300 cm



## ENSIGN, BLUE (COMMERCIAL SHIPPING)

ARTIKELNR	LENGTH
<b>11.93.100</b>	100 cm
<b>11.93.150</b>	150 cm
<b>11.93.200</b>	200 cm
<b>11.93.300</b>	300 cm



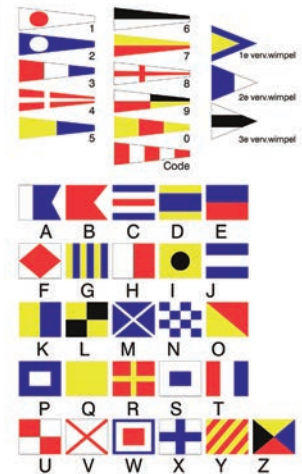
## FLAG, DIVING

Signal flag A: I have a diver underwater (white with blue).

ARTIKELNR	DIMENSIONS
<b>11.94.300</b>	20 x 24 cm
<b>11.94.302</b>	37 x 45 cm
<b>11.94.303</b>	75 x 90 cm
<b>11.94.304</b>	100 x 120 cm

## FLAG, SET OF 40 SIGNAL FLAGS, INTERNATIONAL

- A I have a diver down.
- B I have hazardous substances on board.
- C Yes, affirmative.
- D I have difficulty manoeuvring.
- E I am altering my course to starboard.
- F I am disabled, communicate with me.
- G I require a pilot.
- H I have a pilot on board.
- E I am changing course to port side.
- J I am on fire and have a dangerous cargo on board.
- K I want to make contact with you.
- L You should leave your vessel immediately.
- M My vessel is stopped.
- N No, negative.
- O Man overboard.
- P In port: everyone on board we are departing. At sea: I require a pilot. Fishery: my nets are caught in an obstacle.
- Q My vessel is 'healthy' and I request free pratique.
- R I received your last signal.
- S I am operating astern propulsion.
- T I am pair trawling.
- U You are steering a dangerous course.
- V I need assistance.
- W I require medical assistance.
- X Stop carrying out your intentions and watch for my signals.
- Y I am dragging my anchor.
- Z I require a tug.



ARTIKELNR	DIMENSIONS
11.93.620	20 x 24 cm
11.93.630	30 x 36 cm
11.93.637	37 x 45 cm
11.93.675	75 x 90 cm
11.93.699	100 x 120 cm

## FLAG, STRING OF FLAGS

R/W/B = Red, White and Blue.  
Plain = 6 different coloured plain flags.

ARTIKELNR	DESCRIPTION	MATERIAL	DIMENSIONS	LENGTH	NUMBER OF FLAGS
11.94.949	R/W/B coloured flags	Polyethylene	20 x 30 cm	10 m	25
11.94.952	R/W/B coloured flags	Polyester (110 gr)	20 x 30 cm	12 m	30
11.94.950	Plain coloured flags (6 colours)	Polyethylene	20 x 30 cm	10 m	25
11.94.951	Plain coloured flags (6 colours)	Polyester (110 gr)	20 x 30 cm	12 m	30
11.94.953	Orange coloured flags	Polyester (110 gr)	20 x 30 cm	12 m	30
11.94.955	International national flags	Spun-Poly (160 gr)	25 x 37 cm	12 m	30
11.94.958	International national flags	Spun-Poly (160 gr)	30 x 50 cm	16 m	16

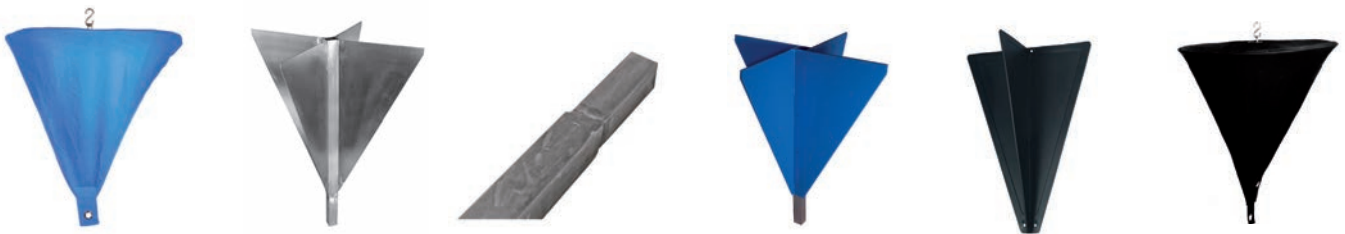


## SIGNAL BALL



ARTIKELNR	COLOUR	DIAMETER	MATERIAL	DESCRIPTION
11.95.035	black	35 cm	plastic	ship at anchor
11.95.060	black	60 cm	canvas	ship at anchor
11.95.063	black	60 cm	PVC netting cloth	ship at anchor
11.95.065	black	60 cm	aluminium	ship at anchor
11.95.160	yellow	60 cm	canvas	last ship in tow
11.95.260	red	60 cm	canvas	object in fairway, closed side
11.95.360	green	60 cm	canvas	ferry

## SIGNAL CONE



ARTIKELNR	COLOUR	DIMENSIONS	MATERIAL	DESCRIPTION
11.96.060	blue	60 x 60 cm	canvas	A.D.N. cone
11.96.062	plain (not painted)	60 x 60 cm	aluminium	A.D.N. cone
11.96.063	plain (not painted)	200 cm, 40 x 36 x 2 mm	aluminium	foot post
11.96.064	plain (not painted)	100 cm, 40 x 36 x 2 mm	aluminium	middle post
11.96.065	blue	60 x 60 cm	aluminium	A.D.N. cone
11.96.067	plain (not painted)	18 cm, 40 x 36 x 2 mm	stainless steel 316	signal cone base, deck mounting
11.96.071	blue	60 x 60 cm	impact proof plastic (solid blue)	A.D.N. cone
11.96.246	black	46 x 46 cm	plastic	motor sailing
11.96.260	black	60 x 60 cm	canvas	motor sailing
11.96.265	black	60 x 60 cm	aluminium	motor sailing

## SIGNAL DIAMOND

Small sizes are meant for inland shipping, larger sizes for sea shipping



ARTIKELNR	COLOUR	DIMENSIONS	MATERIAL	DESCRIPTION
11.97.061	black	60 x 120 cm	canvas	restricted manoeuvrability
11.97.062	black	60 x 120 cm	PVC/nylon	restricted manoeuvrability
11.97.063	black	60 x 120 cm	PVC netting cloth	restricted manoeuvrability
11.97.065	black	60 x 120 cm	aluminium	restricted manoeuvrability
11.97.160	green	50 x 80 cm	PVC/nylon	safe to pass side of vessel operating in fairway
11.97.165	yellow	50 x 80 cm	PVC/nylon	passenger ship less than 20 m
11.97.170	black	50 x 80 cm	PVC/nylon	restricted manoeuvrability
11.97.175	black	50 x 80 cm	aluminium	restricted manoeuvrability

## SIGNAL CYLINDER

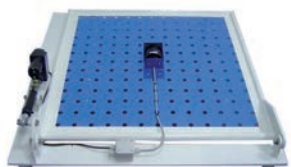
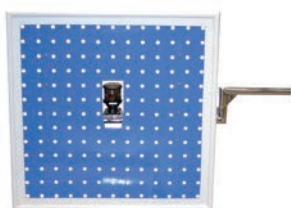
ARTIKELNR	COLOUR	DIMENSIONS	MATERIAL	DESCRIPTION
11.98.060	black, white, yellow	50 x 80 cm	canvas	inland waters tug
11.98.061	black, white, yellow	50 x 80 cm	PVC netting cloth	inland waters tug
11.98.160	black	60 x 120 cm	canvas	vessel limited by its draught



## CANVAS DIABOLO FOR FISHING

ARTIKELNR	COLOUR	DIMENSIONS	MATERIAL	DESCRIPTION
11.99.060	black	120 x 60 cm	canvas	vessel engaged in fishing activities





## BLUE SIGN

For inland waterway shipping, a blue sign with a 360 degree white flashing light is a day and night signal with which passing ships can communicate, so that people can meet each other starboard to starboard instead of the usual port to port side.

The sign must be easily visible from the front and the back.

The colour of the sign is bright blue (RAL 5017) and the sign has a white edge of at least 5 cm.

Any frame and/or bars, as well as the lamp housing, must have a dark colour.

The dimensions must guarantee good visibility; this is satisfied if the length and the width of the sign are at least 1 metre.

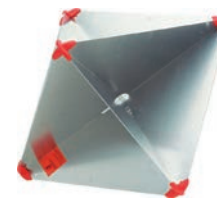
Voltage	: 24 volt
Amperage	: 1.5 A
Materials	: plate : aluminium
	: frame : aluminium
	: rotating shaft : stainless steel
	: cylinder : nickel-plated steel
	: mounting pipe : stainless steel

ARTIKELNR	DESCRIPTION	TYPE
12.03.001	control panel blue board (including indicator unit)	24 V
12.03.005	blue sign spare motor	24 V
12.03.008	fuse for blue sign	
12.03.010	Weld bracket	stainless steel
12.03.050	vertical installation with pipe	manually operated
12.03.110	vertical installation with pipe	electric, 24 V
12.03.140	horizontal installation	electric, 24 V
12.03.160	roof installation	electric, 24 V

## RADAR REFLECTOR

Made from anodized aluminium.  
Royal Ocean Racing Club (RORC).  
International Offshore Rule (IOR).

ARTIKELNR	TYPE	REFLECTION CAPACITY	INSPECTION	DIMENSIONS	WEIGHT
12.05.510	small	3 m <sup>2</sup>		215 x 215 x 300 mm	450 gr
12.05.515	middle	5 m <sup>2</sup>	RORC	305 x 305 x 415 mm	650 gr
12.05.520	medium	7 m <sup>2</sup>	RORC + IOR	340 x 340 x 470 mm	1,000 gr



## ANCHOR BUOY

ARTIKELNR	DESCRIPTION	MATERIAL	DIMENSIONS	COLOUR
12.07.528	Without radar reflector	steel	100 x Ø 50 cm	yellow
12.07.530	With radar reflector, meets requirements of the RPR.	steel	100 x Ø 50 cm	yellow



## MIRROR

Made from low maintenance material.

ARTIKELNR	DESCRIPTION	MATERIAL
12.09.422	mirror fixing	stainless steel 316 and plastic
12.09.426	mirror pole (Ø 20 mm)	stainless steel 316 and plastic

ARTIKELNR	DESCRIPTION	DIMENSIONS
12.09.560	convex	425 x 233 mm
12.09.565	convex + heating (24 volt)	424 x 233 mm





## SHIP'S BELL, BSH LIGHT

Polished brass, light model.  
Meets the IMO requirements, 110 dB at 1 metre.  
Comes with **BSH-mark and certificate** (for the German sea water canals, such as the Kielercanal).

### H-SHACKLE, brass

See article : 06.03.504 through 06.03.508

ARTIKELNR	LOWER DIAMETER	HEIGHT	WEIGHT	INSPECTION
12.09.930	30 cm	180 / 230 mm	9.8 kg	BSH



## SHIP'S BELL

Polished brass.  
From 21 cm meets the IMO requirements, 110 dB at 1 metre.  
30 cm model comes with **BSH-mark and certificate** (for the German sea water canals, such as the Kielercanal).

### H-SHACKLE, brass

See article : 06.03.504 through 06.03.508

ARTIKELNR	LOWER DIAMETER	HEIGHT	WEIGHT	INSPECTION
12.10.017	17 cm	120 / 160 mm	2.5 kg	-
12.10.019	19 cm	140 / 190 mm	3.7 kg	-
12.10.021	21 cm	170 / 230 mm	6.0 kg	-
12.10.025	25 cm	190 / 260 mm	10.0 kg	-
12.10.030	30 cm	230 / 330 mm	17.2 kg	BSH



## SHIP'S BELL, DUTCH MODEL

Polished brass, top class Dutch product.  
Heavy model and fine tone.  
Meets the IMO requirements, 110 dB at 1 metre.

### H-SHACKLE, brass

See article : 06.03.504 through 06.03.508

ARTIKELNR	LOWER DIAMETER	HEIGHT	WEIGHT
12.10.325	25 cm	190 / 260 mm	6.9 kg
12.10.327	27 cm	210 / 280 mm	11.2 kg
12.10.330	30 cm	230 / 310 mm	12.4 kg
12.10.335	35 cm	280 / 370 mm	16.2 kg
12.10.340	40 cm	330 / 430 mm	25.0 kg



## SHIP'S BELL, CHROME

A chrome ship's bell requires considerably less maintenance than pure brass.  
Chrome also has a disadvantage, however, in that it also shows all the irregularities which you do not see in a pure polished bell.  
It is also possible for small casting bubbles to become visible during one of the acid baths.  
We are therefore unable to guarantee high quality and chrome plating will only be done at your own risk.

ARTIKELNR	FOR BELL DIAMETER
12.10.415	15 to 23 cm
12.10.425	25 to 30 cm
12.10.435	35 to 40 cm



## SHIP'S BELL, WALL BRACKET

ARTIKELNR	FOR BELL DIAMETER	BRACKET LENGTH MEASURED ALONG CURVE	JAW WIDTH
12.10.753	15 to 19 cm	approx. ca. 308 mm	20 mm
12.10.757	21 to 30 cm	approx. 350 mm (no holes)	28 mm



## BELL LANYARD

Knotted from twisted polypropylene or woven nylon cord.

ARTIKELNR	LENGTH	FOR BELL DIAMETER	COLOUR	COUNTRY
12.10.806	6 cm	10 / 12 cm	manila/hemp	
12.10.808	8 cm	15 / 17 cm	manila/hemp	
12.10.812	12 cm	15 / 17 cm	manila/hemp	
12.10.814	14 cm	15 / 19 cm	manila/hemp	
12.10.820	20 cm	20 / 25 cm	manila/hemp	
12.10.825	25 cm	25 / 40 cm	manila/hemp	



12.10.855	6 cm	10 / 12 cm	white	
12.10.860	10 cm	15 / 17 cm	white	
12.10.865	15 cm	15 / 19 cm	white	
12.10.870	20 cm	20 / 25 cm	white	
12.10.875	25 cm	25 / 40 cm	white	

12.10.906	6 cm	10 / 12 cm	red/white/blue	Dutch/French
12.10.910	10 cm	15 / 17 cm	red/white/blue	Dutch/French
12.10.915	15 cm	15 / 19 cm	red/white/blue	Dutch/French
12.10.920	20 cm	20 / 25 cm	red/white/blue	Dutch/French
12.10.925	25 cm	25 / 40 cm	red/white/blue	Dutch/French

12.11.006	6 cm	10 / 12 cm	red/yellow/black	Belgian/German
12.11.010	10 cm	15 / 17 cm	red/yellow/black	Belgian/German
12.11.015	15 cm	15 / 19 cm	red/yellow/black	Belgian/German
12.11.020	20 cm	20 / 25 cm	red/yellow/black	Belgian/German
12.11.025	25 cm	25 / 40 cm	red/yellow/black	Belgian/German

## SHIP'S BELL, ENGRAVING

The engraved characters are always painted in black.

Other colours may be possible on request, sometimes the characters are also left plain.

**Delivery time : approx. 1-2 weeks**

ARTIKELNR	DESCRIPTION
12.11.090	set-up charges for ship's bell up to 250 mm
12.11.091	set-up charges for ship's bell of 260 mm to 400 mm

12.11.093	Engraving per character with a size of up to 20 mm height
12.11.094	Engraving per character with a size of 21 mm to 40 mm height



## MEGAPHONE – SPEAKING TUBE DHR

ARTIKELNR	DIMENSIONS	MATERIAL
12.20.201	200 mm	polished brass
12.20.361	360 mm	polished brass
12.20.431	430 mm	polished brass





## SIGNALLING HORN – FOGHORN DHR

ARTIKELNR	DIMENSIONS	MATERIAL
12.30.331	330 mm	polished brass
12.30.391	390 mm	polished brass



## SIGNALLING HORN WITH GAS BOTTLE

Sturdy plastic horn.  
In blister packaging.

ARTIKELNR	DESCRIPTION
12.30.830	Horn with click system + 200 ml gas bottle
12.30.832	Seperate 200 ml gas bottle



## AIR HORN WATER SPORTS DHR 100 SERIES

For yachts and other small vessels.

air consumption : 2 litres per second  
air pressure : 0,5 - 1 bar  
material : Stainless steel 316 membrane holder  
provided with : quick coupling 8 mm

ARTIKELNR	HORN MODELL	DIMENSIONS LXD	NOISE	FINISH HORN	TYPE
12.37.001	DHR H100C	378 x 100 mm	118 dB(A) - 387 Hz	chrome-plated	10002
12.37.002	DHR H100B	378 x 100 mm	118 dB(A) - 387 Hz	matt black	10012



## AIR COMPRESSOR WATER SPORTS DHR

Compressor, provided with quick coupling 8 mm.  
Including relay.

type : MC4+  
capacity : maximum of 2 litres per second  
pressure : 1.9 bar

ARTIKELNR	DIMENSIONS	VOLTAGE	DHR TYPE NUMBER
12.37.112	108 x 68 mm	12 V	90120
12.37.124	108 x 68 mm	24 V	90150

## AIR HORN DHR 300 SERIES (BURTONE)

A robust Dutch-made air horn, well regarded for years.

air consumption : 1,5 - 2 litres per second  
 air pressure : 1 - 2 bar  
 has : 8 mm quick coupling

ARTIKELNR	HORN MODELL	DIMENSIONS LXD	NOISE	FINISH HORN	LENGTH OF SHIP INLAND/ SEAGOING	TYPE
<b>12.37.205</b>	DHR H330	780 x 150 mm	132 dB(A) - 184 Hz	chromed	+20 m	30004
<b>12.37.210</b>	DHR H320	690 x 150 mm	132 dB(A) - 216 Hz	chromed	+20 m	30003
<b>12.37.215</b>	DHR H310	605 x 125 mm	122 dB(A) - 216 Hz	chromed		30002
<b>12.37.220</b>	DHR H300	560 x 125 mm	122 dB(A) - 224 Hz	chromed	-20 m / -20 m	30001



## AIR HORN DHR 200 SERIES (SONABEL)

A robust Dutch-made air horn, well regarded for years.

air consumption : 2 - 3,5 litres per second  
 air pressure : 2 - 10 bar  
 has : 8 mm quick coupling

ARTIKELNR	HORN MODELL	DIMENSIONS LXD	NOISE	FINISH HORN	TYPE
<b>12.37.230</b>	DHR H200	198 x 130 mm	116/138 dB(A) - 660 Hz	matt black	20001
<b>12.37.235</b>	DHR H210	387 x 160 mm	116/132 dB(A) - 377 Hz	matt black	20002
<b>12.37.240</b>	DHR H220	450 x 130 mm	116/132 dB(A) - 307 Hz	matt black	20003



## COMPRESSOR FOR 1 HORN DHR BURTONE

Compressor, has 8 mm quick coupling.

type : M3000  
 capacity : maximum of 2.5 litres per second at 1 bar  
 pressure : 1.5 - 2 bar  
 voltage : 24 volt  
 amperage : 13 A, transient 30 amp (use thick cables)

ARTIKELNR	DESCRIPTION	TYPE
<b>12.37.293</b>	DHR Burtone compressor for 1 horn	90150



## COMPRESSOR FOR 3 HORNS DHR BURTONE

Unique compressor, very high efficiency, has 8 mm quick coupling.

capacity : maximum of 3 litres per second  
 pressure : maximum 2 bar  
 voltage : 24 volt  
 amps : 35 A, transient 50 amp (use thick cables)

ARTIKELNR	DESCRIPTION	TYPE
<b>12.37.302</b>	DHR Burtone compressor for 3 horns	90100





## AIR HORN DHR 100/200/300 SERIES, ACCESSORIES

ARTIKELNR	DESCRIPTION	TYPE
12.37.371	push button for use with single air horn	90002
12.37.375	relay, 24V, max 65 amp. for compressor	90001
12.37.380	separate electric air valve + 8 mm quick coupling, 24V	90004
12.37.391	control panel DHR 300 with 4 signals (radar navigation, keep your distance, fog, manual operation)	90200
12.37.402	separate front support for trumpet DHR 300	30000
12.37.431	separate membrane DHR 300 series, diameter 52 x 0.15 mm	30005
12.37.432	separate 8 mm x 1/4" ET quick coupling	90005
12.37.433	separate 3 x 8 mm T connector	90006
12.37.440	DHR / SONABEL reducing ring	30002
12.37.471	separate DHR 200 membrane, 78 x 0.5 mm	20051
12.37.472	separate DHR 200 membrane, 78 x 0.2 mm	20052



## AIR HORN DHR 400 SERIES (MARITONE)

For seagoing vessels with a length up to 75 metres.

**COLREG 72 approved.**

**Dutch Human Environment and Transport Inspectorate (IL&T) approved.**

air consumption : 8 - 12 litres per second

operating pressure : 7 - 9 bar

equipped with : quick coupling 10 mm

ARTIKELNR	HORN MODELL	DIMENSIONS LXD	NOISE	FINISH HORN	LENGTH OF SHIP INLAND/ SEAGOING	TYPE
12.37.607	H400-75A	360 x 180 mm	142 dB(A) - 440 Hz	316 stainless steel membrane housing and white/red lacquered brass	+20 m / -75 m	40001

## AIR HORN DHR 400 SERIES (MARITONE), ACCESSORIES

ARTIKELNR	DESCRIPTION	TYPE
12.37.371	push button for use with single air horn	90002
12.37.375	relay, 24V, max 65 amp. for compressor	90001
12.37.681	control panel DHR 400 with 4 different signals (radar navigation, keep your distance, fog, manual op	40020
12.37.682	separate electric air valve + quick coupling 10 mm. 24V	40051
12.37.691	separate support for trumpet DHR 400	40010
12.37.693	separate membrane DHR 400, diameter 76 x 0.5 mm	40054
12.37.694	separate 10 mm x 1/4" ET quick coupling	40052
12.37.695	separate 10 mm x 3/8" ET quick coupling	40053
12.37.699	air line 10 mm	40050



**SEARCHLIGHT DHR**

Materials : housing : stainless steel or chromed sea waterresistant aluminium  
 : other components : non-corroding and non-magnetic  
 Finish : stainless steel or UV-resistant epoxy coating, white RAL 9016

**SEARCHLIGHT DHR150**

Searchlight for water sports.

Optics : LED insert with mirror reflector  
 Insulation class : class IP66

**SEARCHLIGHT DHR180**

Searchlight for water sports and inland shipping.

Optics : sealed beam lamp with mirror reflector  
 Insulation class : class IPX6

**SEARCHLIGHT DHR220**

Affordable searchlight for inland shipping, coastal shipping and fisheries.

Optics : toughened glass window, polished anodized reflector Ø 200 mm  
 Insulation class : class IP66

**SEARCHLIGHT DHR230**

Searchlight for inland shipping and water sports.

Optics : LED, toughened glass window, parabolic mirror reflector Ø 230 mm  
 Insulation class : class IP66

**SEARCHLIGHT DHR260**

New modern searchlight for seagoing and inland shipping.

Optics : toughened glass or toughened glass with UV filter, parabolic mirror reflector Ø 260 mm, adjustable focus  
 Insulation class : class IP66 for searchlight, IP 32 for transformer

**SEARCHLIGHT DHR350**

Heavy duty searchlight for seagoing and inland shipping.

Optics : toughened glass window, parabolic mirror reflector Ø 340 mm DS-CS/ Ø 420 mm (RCN/RCB)  
 Insulation class : class IP66, 1.5 m silicone cable, cable gland PG9

**SEARCHLIGHT, LAMPS FOR**

See article : 14.21.012 through 14.22.810

## SEARCHLIGHT, BOW LAMP, SERIES DS



ARTIKELNR	TYPE LAMP	MODEL LAMP	FITTING	CONTROLS	VERSION	VOLTAGE	WATT	RANGE	WEIGHT	DHR TYPE NUMBER
12.43.235	halogen	lamp	G6.35	none	low	24 V	250 W	664 m	3.0 kg	220DS024
12.43.287	halogen	lamp	G6.35	none	low	230 V	300 W	345 m	3.0 kg	220DS220
12.62.303	LED	LED	-	none	low	230 V	75 W	775 m	13.0 kg	230DS220
12.48.435	halogen	lamp	G6.35	none	low	24 V	250 W	1,100 m	11.0 kg	260DS024
12.48.477	halogen	lamp	G6.35	none	low	230 V	250 W	1,100 m	11.0 kg	260DS220
12.48.487	metal halide	lamp	GZY9.5	none	low	230 V	200 W	1,800 m	14.5 kg	260DS070
12.53.435	halogen	lamp	G6.35	none	low	24 V	250 W	904 m	10.0 kg	350DS024
12.53.487	halogen	lamp	GX9.5	none	low	230 V	1,000 W	1,104 m	10.0 kg	350DS220

## SEARCHLIGHT, BELOW-DECK CONTROL, SERIES CB/CS/CC



ARTIKELNR	TYPE LAMP	MODEL LAMP	FITTING	CONTROLS	VERSION	VOLTAGE	WATT	RANGE	WEIGHT	DHR TYPE NUMBER
12.44.235	halogen	lamp	G6.35	ball	low	24 V	250	664 m	3.2 kg	220CB024
12.44.287	halogen	lamp	G6.35	ball	low	230 V	300 W	345 m	3.2 kg	220CB220
12.45.235	halogen	lamp	G6.35	bracket	low	24 V	250 W	664 m	4.4 kg	220CS024
12.45.287	halogen	lamp	G6.35	bracket	low	230 V	300 W	345 m	4.4 kg	220CS220
12.45.735	halogen	lamp	G6.35	bracket	high	24 V	250 W	664 m	8.0 kg	220CC024
12.45.787	halogen	lamp	G6.35	bracket	high	230 V	300 W	345 m	8.0 kg	220CC220
12.50.635	halogen	lamp	G6.35	bracket	no controls included	24 V	250 W	1,100 m	8.5 kg	260CS024
12.50.677	halogen	lamp	G6.35	bracket	no controls included	230 V	250 W	1,100 m	10.5 kg	260CS220
12.50.687	metal halide	lamp	GZY9.5	bracket	no controls included	230 V	200 W	1,800 m	15.5 kg	260CS070
12.55.635	halogen	lamp	G6.35	bracket	no controls included	24 V	250 W	904 m	11.0 kg	350CS024
12.55.687	halogen	lamp		bracket	no controls included	230 V	1,000 W	1,104 m	11.0 kg	350CS220

for current prices, visit [www.hoenderop.com](http://www.hoenderop.com)

## SEARCHLIGHT, BELOW-DECK CONTROL, SERIES CB/CS/CC, ACCESSORIES

ARTIKELNR	DESCRIPTION	WEIGHT	DHR TYPE NUMBER
12.55.991	260/350 below-deck controls (low+high)	2.3 kg	35,006
12.55.992	260/350 tie rod 535 mm (low)	0.8 kg	35,011
12.55.993	260/350 post 800 mm (high)	4.8 kg	35,013
12.55.994	260/350 tie 1,400 mm (high)	2.0 kg	35,014



## SEARCHLIGHT, REMOTE CONTROL, SERIES UC

Electrical using joystick with 24 volt supply.  
Joystick and control unit NOT included in the price.



ARTIKELNR	TYPE LAMP	MODEL LAMP	FITTING	VOLTAGE	WATT	RANGE	WEIGHT	DHR TYPE NUMBER
12.61.533	LED	LED	insert	12/24 V	10 W	447 m	3.8 kg	150UC-LED
12.41.802	halogen	sealed beam	PAR56	24 V	170 W	480 m	4.2 kg	180UC024
12.42.802	halogen	sealed beam		24 V	250 W	700 m	4.6 kg	210UC024
12.42.823	halogen	sealed beam	PAR64	230 V	1,000 W	630 m	4.6 kg	210UC220
12.46.102	halogen	lamp	G6.35	24 V	250 W	664 m	4.4 kg	220UC024
12.46.123	halogen	lamp	G6.35	230 V	300 W	345 m	4.4 kg	220UC220

## SEARCHLIGHT, REMOTE CONTROL, SERIES UC, ACCESSORIES

ARTIKELNR	DESCRIPTION	DHR TYPE NUMBER
12.46.951	UC control unit, including joystick	UC02
12.46.953	stainless steel connection piece + M6 set screw	UC04
12.46.954	Cable UC, 4x0.75 and 3x2.5 mm per metre	UC05



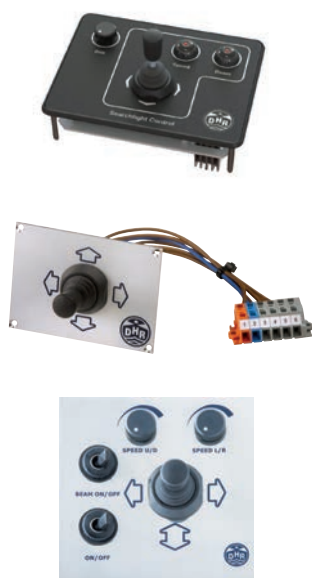
## SEARCHLIGHT, REMOTE CONTROL, SERIES RC

Electrical using joystick with 24 volt supply.  
Joystick and control unit NOT included in the price.



ARTIKELNR	TYPE LAMP	MODEL LAMP	FITTING	VOLTAGE	WATT	RANGE	WEIGHT	DHR TYPE NUMBER
<b>12.46.235</b>	halogen	lamp	G6.35	24 V	250 W	664 m	9.2 kg	220RCN024
<b>12.46.287</b>	halogen	lamp	G6.35	230 V	300 W	345 m	9.2 kg	220RCN220
<b>12.62.353</b>	LED	LED	-	230 V	75 W	775 m	16.0 kg	230RCB220
<b>12.51.835</b>	halogen	lamp	G6.35	24 V	250 W	1,100 m	7.5 kg	260RCN024
<b>12.51.877</b>	halogen	lamp	G6.35	230 V	250 W	1,100 m	10.5 kg	260RCN220
<b>12.51.887</b>	metal halide	lamp	GZY9.5	230 V	200 W	1,800 m	14.5 kg	260RCN070
<b>12.56.835</b>	halogen	lamp	G6.35	24 V	250 W	904 m	16.6 kg	350RCN024
<b>12.56.887</b>	halogen	lamp	GX9.5	230 V	1,000 W	1,104 m	16.6 kg	350RCN220

## SEARCHLIGHT, REMOTE CONTROL, SERIES RC, ACCESSORIES



ARTIKELNR	DESCRIPTION	DHR TYPE NUMBER
<b>12.46.997</b>	RCN/RCB control unit, including joystick	PAN2019NF
<b>12.46.998</b>	RCN/RCB joystick	JOY2011
<b>12.46.999</b>	RCN control unit, including joystick	PAN2011
<b>12.47.000</b>	RCN wireless control unit, 24 Volt	RADIORC

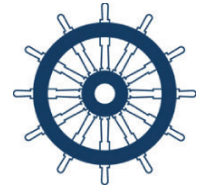


## DHR80 LED SEAGOING SHIPPING LIGHT

For all seagoing vessels which are 20 metres long or longer.  
For Rhine and European inland shipping vessels.  
Complies with the international IEC standard.  
Tested for shocks and vibration in accordance with Lloyd's Register regulations.  
Including factory certificate with approval of NSI and various other countries.

**SOLAS - MED 96/98/EC approved. Meets the requirements of the ES-TRIN, RPR/BPR.**

Power supply	: 24 volts DC, (-20% to +30%)
Light output	: constant from 18 to 32 volts
Power consumption	: 3 to 16 watts, depending on the model
LEDs	: main LED with built-in spare LED
Safety	: protected against incorrect connection
Clear lens	: LED module with more than sufficient light output, so ribbed lens is unnecessary
Condensation	: Goretex breathable membrane to reduce condensation present
Heat	: heat discharge by heavy aluminium casing
Materials	: matt black hard anodised seawater-resistant aluminium casing and lens made from toughened glass



## DHR80 LED SECTOR LIGHT

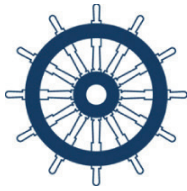
ARTIKELNR	TYPE SECTIONAL	COLOUR	TYPE	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
12.95.810	top	white, clear	single	3.5 kg	6 N.M.	80.03.00.00
12.95.820	starboard	green	single	3.5 kg	3 N.M.	80.01.00.00
12.95.830	port side	red	single	3.5 kg	3 N.M.	80.02.00.00
12.95.840	stern	white	single	3.5 kg	3 N.M.	80.04.00.00
12.95.841	stern, train	yellow	single	3.5 kg	3 N.M.	80.04.09.00



## DHR80 LED 360 DEGREE NAVIGATION LIGHT

ARTIKELNR	COLOUR	TYPE	DESCRIPTION	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
12.95.851	white, clear	single		3.4 kg	3 N.M.	80.06.00.00
12.95.852	white, strong	single	manoeuvring light	3.4 kg	5 N.M.	80.06.10.00
12.95.853	red	single		3.4 kg	3 N.M.	80.07.00.00
12.95.854	green	single		3.4 kg	3 N.M.	80.08.00.00
12.95.855	yellow	single	Kiel canal	3.4 kg	3 N.M.	80.09.00.00
12.95.856	blue	single		3.4 kg	3 N.M.	80.10.00.00





## DHR70N NAVIGATION LIGHT

Prices are without lamp.  
 For all seagoing vessels with a length of 20 metres or greater.  
 For seagoing vessels longer than 50 metres duplex lights are mandatory.  
 For Rhine and European Union inland shipping.  
 Complies with international IEC standard.  
 Tested for shocks and vibrations in accordance with Lloyd's Register's rules.  
 Includes factory certificate with approval from the NSI and various other countries.  
 Materials: matt black high-grade glass fibre reinforced polyamide, shock resistant polycarbonate and sea water resistant and anti-magnetic.  
 Comes with 1.5 metre cable H07 RNF, insulation class II, IP56, fitting P28s.

**SOLAS - MED 96/98/EC approved.**  
**Applies to demands of ES-TRIN, RPR/BPR.**

## NAVIGATION LAMP

See article : 14.20.105 through 14.20.325

## DHR70N SECTOR LIGHT



ARTIKELNR	TYPE SECTIONAL	COLOUR	TYPE	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
<b>13.00.701</b>	top	white, clear	single	2.6 kg	6 N.M.	70.13.00.00
<b>13.00.702</b>	top	white, clear	double	4.1 kg	6 N.M.	70.23.00.00
<b>13.00.711</b>	starboard	green	single	2.6 kg	3 N.M.	70.11.00.00
<b>13.00.712</b>	starboard	green	double	4.1 kg	3 N.M.	70.21.00.00
<b>13.00.721</b>	port side	red	single	2.6 kg	3 N.M.	70.12.00.00
<b>13.00.722</b>	port side	red	double	4.1 kg	3 N.M.	70.22.00.00
<b>13.00.731</b>	stern	white	single	2.6 kg	3 N.M.	70.14.00.00
<b>13.00.732</b>	stern	white	double	4.1 kg	3 N.M.	70.24.00.00
<b>13.00.741</b>	stern, train	yellow	single	2.6 kg	3 N.M.	70.15.00.00
<b>13.00.742</b>	stern, train	yellow	double	4.1 kg	3 N.M.	70.25.00.00
<b>13.00.749</b>	stern, Suez	red	single	2.6 kg	3 N.M.	70.14.17.00

## DHR70N 360 DEGREE NAVIGATION LIGHT

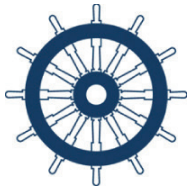


ARTIKELNR	COLOUR	TYPE	DESCRIPTION	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
<b>13.00.751</b>	white	single		2.3 kg	3 N.M.	70.16.00.00
<b>13.00.752</b>	white	double		3.6 kg	3 N.M.	70.26.00.00
<b>13.00.759</b>	white, clear	single	manoeuvring light	2.3 kg	5 N.M.	70.16.10.00
<b>13.00.761</b>	red	single		2.3 kg	3 N.M.	70.17.00.00
<b>13.00.762</b>	red	double		3.6 kg	3 N.M.	70.27.00.00
<b>13.00.771</b>	green	single		2.3 kg	3 N.M.	70.18.00.00
<b>13.00.772</b>	green	double		3.6 kg	3 N.M.	70.28.00.00
<b>13.00.781</b>	yellow	single	Kiel canal	2.3 kg	3 N.M.	70.19.00.00
<b>13.00.782</b>	yellow	double	Kiel canal	3.6 kg	3 N.M.	70.29.00.00
<b>13.00.791</b>	red above green	double	passing light	3.6 kg	3 N.M.	70.17.18.00
<b>13.00.792</b>	green above red	double	passing light	3.6 kg	3 N.M.	70.18.17.00

## DHR70N ACCESSORIES

ARTIKELNR	DESCRIPTION	DHR TYPE NUMBER
<b>13.00.796</b>	conversion set to hoistable	70.99.99.00





## DHR60 LED NAVIGATION LIGHT

For all seagoing vessels shorter than 50 metres.  
For all Rhine and European inland waterway shipping.

**SOLAS - MED 96/98/EC approved.**  
**Applies to demands of ES-TRIN, RPR/BPR.**

Power supply	: 24 volts DC, (-20% to +30%)
Light output	: constant from 18 to 32 volts
Power consumption	: 3 to 9 watts, depending on the model
LEDs	: main LED with built-in spare LED
Safety	: protected against incorrect connection
Clear lens	: LED module with more than sufficient light output, so ribbed lens is unnecessary
Condensation	: Goretex breathable membrane to reduce condensation present
Heat	: heat discharge by heavy aluminium casing
Materials	: matt black hard anodised seawater-resistant aluminium casing and lens made from toughened glass

## DHR60 LED SECTOR LIGHT



ARTIKELNR	TYPE SECTIONAL	COLOUR	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
<b>13.10.610</b>	top	white	2.12 kg	5 N.M.	60.03.00.00
<b>13.10.620</b>	starboard	green	2.12 kg	2 N.M.	60.01.00.00
<b>13.10.630</b>	port side	red	2.12 kg	2 N.M.	60.02.00.00
<b>13.10.640</b>	stern	white	2.12 kg	2 N.M.	60.04.00.00
<b>13.10.641</b>	stern, train	yellow	2.12 kg	2 N.M.	60.04.09.00



## DHR60 LED 360 DEGREE NAVIGATION LIGHT

ARTIKELNR	COLOUR	DESCRIPTION	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
<b>13.10.651</b>	white, clear		2.12 kg	2 N.M.	60.06.00.00
<b>13.10.652</b>	white, strong	manoeuvring light	2.12 kg	2 N.M.	60.06.10.00
<b>13.10.653</b>	red		2.12 kg	2 N.M.	60.07.00.00
<b>13.10.654</b>	green		2.12 kg	2 N.M.	60.08.00.00
<b>13.10.655</b>	yellow		2.12 kg	2 N.M.	60.09.00.00
<b>13.10.656</b>	blue		2.12 kg	2 N.M.	60.10.00.00

## DHR55N NAVIGATION LIGHT

Prices are without lamp.

For all seagoing vessels with a length less than 50 metres.

For all Rhine and European Union inland shipping.

Includes factory certificate with approval from the NSI and various other countries.

Materials: matt black high-grade glass fibre reinforced polycarbonate, shock resistant polycarbonate Fresnel lens, non-corroding, sea water resistant and non-magnetic.

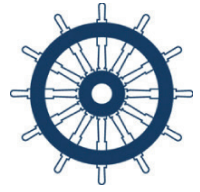
Insulation class II, IP56, fitting bay 15d.

PG13 cable gland on base and side.

Dimensions: 160 x 160 x 222 mm

**SOLAS - MED 96/98/EC approved.**

**Applies to demands of ES-TRIN, RPR/BPR.**



## NAVIGATION LAMP

See article : 14.20.105 through 14.20.325

## DHR55N SECTOR LIGHT



ARTIKELNR	TYPE SECTIONAL	COLOUR	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
13.11.551	top	white	1.0 kg	5 N.M.	55.03.00.00
13.11.552	starboard	green	1.0 kg	2 N.M.	55.01.00.00
13.11.553	port side	red	1.0 kg	2 N.M.	55.02.00.00
13.11.554	stern	white	1.0 kg	2 N.M.	55.04.00.00
13.11.555	stern, train	yellow	1.0 kg	2 N.M.	55.04.09.00
13.11.556	Sector 60°, Panama, Suez, Kiel	blue	1.0 kg	-	55.10.00.05

## DHR55N 360 DEGREE NAVIGATION LIGHT



ARTIKELNR	COLOUR	DESCRIPTION	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
13.12.551	white, clear		0.8 kg	2 N.M.	55.06.00.00
13.12.552	white, strong	manoeuvring light	0.8 kg	5 N.M.	55.06.10.00
13.12.553	red		0.8 kg	2 N.M.	55.07.00.00
13.12.554	green		0.8 kg	2 N.M.	55.08.00.00
13.12.555	yellow		0.8 kg	2 N.M.	55.09.00.00
13.12.556	blue		0.8 kg	1 N.M.	55.10.00.00

## DHR55N ACCESSORIES



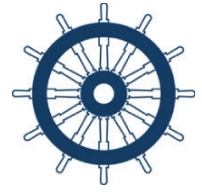
ARTIKELNR	DESCRIPTION	DHR TYPE NUMBER
<b>13.13.551</b>	Side mounting, SB, BB, TOP, HEK	55.99.90.00
<b>13.13.553</b>	Conversion, hoistable	55.99.85.00
<b>13.13.554</b>	Pivot bracket, round mast	55.99.75.00
<b>13.13.555</b>	Pivot bracket, diamond-formed mast	55.99.80.00
<b>13.13.556</b>	Axle for pivot bracket	55.99.70.00

## DHR40 LED NAVIGATION LIGHT

For all seagoing vessels shorter than 20 metres.  
For all Rhine and European inland waterway shipping.

**SOLAS - MED 96/98/EC approved.**  
**Applies to demands of ES-TRIN, RPR/BPR.**

Power supply	: 24 volts DC, (-20% to +30%)
Light output	: constant from 18 to 32 volts
Power consumption	: 3 to 4 watts, depending on the model
LEDs	: high quality and economic
Safety	: protected against incorrect connection
Clear lens	: LED module with more than sufficient light output, so ribbed lens is unnecessary
Condensation	: Goretex breathable membrane to reduce condensation present
Heat	: heat discharge by heavy aluminium casing
Materials	: matt black hard anodised seawater-resistant aluminium casing and lens made from toughened glass
Attachment	: with base, side and pipe mounting



## DHR40 LED SECTOR LIGHT

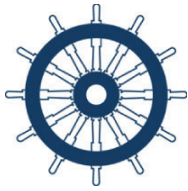


ARTIKELNR	TYPE SECTIONAL	COLOUR	TYPE	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
13.19.401	top	white	base mounting	0.5 kg	3 N.M.	40.03.00.00
13.19.402	starboard	green	base mounting	0.5 kg	2 N.M.	40.01.00.00
13.19.403	port side	red	base mounting	0.5 kg	2 N.M.	40.02.00.00
13.19.404	stern	white	base mounting	0.5 kg	2 N.M.	40.04.00.00
13.19.405	stern, train	yellow	base mounting	0.5 kg	2 N.M.	40.04.09.00
13.19.411	top	white	side mounting	0.5 kg	3 N.M.	40.03.00.01
13.19.412	starboard	green	side mounting	0.5 kg	2 N.M.	40.01.00.01
13.19.413	port side	red	side mounting	0.5 kg	2 N.M.	40.02.00.01
13.19.414	stern	white	side mounting	0.5 kg	2 N.M.	40.04.00.01
13.19.415	stern, train	yellow	side mounting	0.5 kg	2 N.M.	40.04.09.01

## DHR40 LED 360 DEGREE NAVIGATION LIGHT

ARTIKELNR	COLOUR	TYPE	DESCRIPTION	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
13.19.451	white, clear	base mounting	anchor light	0.5 kg	2 N.M.	40.06.00.00
13.19.453	red	base mounting		0.5 kg	2 N.M.	40.07.00.00
13.19.454	green	base mounting		0.5 kg	2 N.M.	40.08.00.00
13.19.455	yellow	base mounting	whistle light	0.5 kg	2 N.M.	40.09.00.00
13.19.456	blue	base mounting		0.5 kg	2 N.M.	40.10.00.00
13.19.461	white, clear	pipe mounting	anchor light	0.5 kg	2 N.M.	40.06.00.02
13.19.463	red	pipe mounting		0.5 kg	2 N.M.	40.07.00.02
13.19.464	green	pipe mounting		0.5 kg	2 N.M.	40.08.00.02
13.19.465	yellow	pipe mounting	whistle light	0.5 kg	2 N.M.	40.09.00.02
13.19.466	blue	pipe mounting		0.5 kg	2 N.M.	40.10.00.02





## DHR35 NAVIGATION LIGHT

Prices are without lamp.

For all seagoing vessels less than 20 metres in length.

For all Rhine and European Union inland shipping.

Materials: matt black, high-grade, glass fibre reinforced polycarbonate, shock resistant polycarbonate Fresnel lens, non-corroding, seawater resistant and non-magnetic.

Insulation class II, IP56, fitting bay 15d.

PG9 cable gland on base.

**SOLAS - MED 96/98/EC approved.**

**Applies to demands of ES-TRIN, RPR/BPR.**

## NAVIGATION LAMP

See article : 14.20.105 through 14.20.325

## DHR35 SECTOR LIGHT



ARTIKELNR	TYPE SECTIONAL	COLOUR	TYPE	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
<b>13.23.351</b>	top	white	side mounting	0.3 kg	3 N.M.	TW35Z
<b>13.23.352</b>	top	white	base mounting	0.3 kg	3 N.M.	TW35V
<b>13.23.353</b>	starboard	green	side mounting	0.3 kg	2 N.M.	SB35Z
<b>13.23.354</b>	starboard	green	base mounting	0.3 kg	2 N.M.	SB35V
<b>13.23.355</b>	port side	red	side mounting	0.3 kg	2 N.M.	BB35Z
<b>13.23.356</b>	port side	red	base mounting	0.3 kg	2 N.M.	BB35V
<b>13.24.351</b>	stern	white	side mounting	0.3 kg	2 N.M.	HW35Z
<b>13.24.352</b>	stern	white	base mounting	0.3 kg	2 N.M.	HW35V
<b>13.24.353</b>	stern, train	yellow	side mounting	0.3 kg	2 N.M.	HGL35Z
<b>13.24.354</b>	stern, train	yellow	base mounting	0.3 kg	2 N.M.	HGL35V
<b>13.25.351</b>	bi-colour light	green/red	side mounting	0.3 kg	2 N.M.	TKL35Z
<b>13.25.352</b>	bi-colour light (starboard + port)	green/red	base mounting	0.3 kg	2 N.M.	TKL35V
<b>13.25.353</b>	tri-colour light (starboard + port + stern)	green/red/white	base mounting	0.3 kg	2 N.M.	DKL35V



## DHR35 360 DEGREE NAVIGATION LIGHT



ARTIKELNR	COLOUR	TYPE	DESCRIPTION	WEIGHT	MIN. VISIBILITY	DHR TYPE NUMBER
13.20.351	white	pipe mounting	1/2" internal thread, anchor light	0.3 kg	2 N.M.	RW35P
13.20.352	white	base mounting	anchor light	0.3 kg	2 N.M.	RW35V
13.20.353	white	hoistable	anchor light	0.3 kg	2 N.M.	RW35H
13.20.354	yellow	pipe mounting	1/2" internal thread, whistle light	0.3 kg	2 N.M.	RGL35P
13.20.355	yellow	base mounting	whistle light	0.3 kg	2 N.M.	RGL35V
13.20.357	blue	pipe mounting	1/2" internal thread	0.3 kg	2 N.M.	RBL35P
13.20.358	blue	base mounting		0.3 kg	2 N.M.	RBL35V
13.21.351	red	pipe mounting	1/2" internal thread	0.3 kg	2 N.M.	RR35P
13.21.352	red	base mounting		0.3 kg	2 N.M.	RR35V
13.21.353	red	hoistable		0.3 kg	2 N.M.	RR35H
13.21.354	green	pipe mounting	1/2" internal thread	0.3 kg	2 N.M.	RGR35P
13.21.355	green	base mounting		0.3 kg	2 N.M.	RGR35V
13.21.356	green	hoistable		0.3 kg	2 N.M.	RGR35H
13.22.355	-	side mounting	navigation light	0.3 kg	-	ST35Z

## DHR35 ACCESSORIES



ARTIKELNR	DESCRIPTION	DHR TYPE NUMBER
13.22.351	single	ST35E
13.22.352	double	ST35D
13.25.354	indicator holder for tri-colour light	VKH35



## FLASHING LIGHT

Signalling light with halogen lamp and rotating mirror.

glass colour : white/clear or orange  
 voltage : 24 volt  
 capacity : 70 watt, halogen  
 dimensions : foot, hxd= 220 x 160 mm  
 : pipe, hxd= 250 x 140 mm

ARTIKELNR	DESCRIPTION	
<b>13.39.020</b>	Slip-on tube 138 P	
ARTIKELNR	KLEUR	T YPE
<b>13.39.424</b>	white/clear	base mounting
<b>13.39.425</b>	white/clear	pipe mounting Ø 24 mm (slip-on tube 138 P excluded)
<b>13.39.524</b>	orange	base mounting
<b>13.39.525</b>	orange	pipe mounting Ø 24 mm (slip-on tube 138 P excluded)



## FLASHING LIGHT, SEPARATE LENS

ARTIKELNR	COLOUR
<b>13.39.591</b>	white/clear
<b>13.39.592</b>	orange
<b>13.39.593</b>	red
<b>13.39.594</b>	blue
<b>13.39.595</b>	green



## SIGNALLING HORN WITH LIGHT

Electrical horn with signaling light mounted on it (not flashing).  
 Light bulb Included.  
 Ideal as bilge alarm.

type : E 4143  
 light colour : orange  
 voltage : 24 volt  
 sound intensity : 98 decibels, measured at a distance of 1 metre  
 capacity : 30 watt  
 dimensions : hxl = 229 x 78 mm

ARTIKELNR	DESCRIPTION
<b>13.39.624</b>	Signalling horn with light
<b>13.39.640</b>	Separate lamp

## LIGHTHOUSE ANCHOR LIGHT WITH PHOTOELECTRIC CELL

Anchor light with its own power source (dry battery).  
A photoelectric switch ensures that the light is automatically switched on at nightfall.  
The lamp is supplied with a steady or flashing light (60 times per minute).

The battery's running time depends on the type of light.

height	: 375 mm (with support bracket folded down)
diameter	: 190 mm
weight	: 5.7 kg
lens	: 360 degree 4 x 3.1/2"
lamp	: 1 watt, 6 volt
battery	: 6 volt, (type: V-501)
running time	: 400 hours

ARTIKELNR	DESCRIPTION	TYPE	SERIAL NUMBER
<b>13.45.050</b>	steady light	Konsta	107,35
<b>13.45.052</b>	flashing light	Winko	107,45



## LIGHTHOUSE ANCHOR LIGHT, SPARE BATTERY V-501, 6 VOLT

ARTIKELNR	DESCRIPTION	TYPE	SERIAL NUMBER
<b>13.45.106</b>	for Konsta or Winko	90 ampère	102,501



## LIGHTHOUSE ANCHOR LIGHT LED WITH PHOTOELECTRIC CELL

Anchor light with its own power source (dry battery).  
A photoelectric switch ensures that the light is automatically switched on at nightfall.  
The lamp is supplied with a steady or flashing light (60 times per minute).

The battery's running time depends on the type of light.

height	: 375 mm (with support bracket folded down)
diameter	: 190 mm
weight	: 3.0 kg
lens	: 360 degree 4 x 3.1/2"
lamp	: 4 LEDs
battery	: 5.6 volt, (type: V-502)
running time	: 650 hours

ARTIKELNR	DESCRIPTION	TYPE	SERIAL NUMBER
<b>13.45.150</b>	steady light	Konsta LED	107,351
<b>13.45.151</b>	flashing light	Winko LED	107,451





## LIGHTHOUSE ANCHOR LIGHT LED, SPARE BATTERY V-502, 5.6 VOLT

ARTIKELNR	DESCRIPTION	TYPE	SERIAL NUMBER
13.45.155	for Konsta LED or Winko LED	30 ampère	102,5



## LIGHTHOUSE ANCHOR LIGHT, ANTI-THEFT BRACKET

ARTIKELNR	DESCRIPTION
13.45.190	Anti-theft bracket



## LIGHTHOUSE ANCHOR LIGHT, PARTS

ARTIKELNR	DESCRIPTION
13.45.215	Spare lamp 5 volt, 0.15 amp
13.45.219	Plug for battery (while stocks last)
13.45.220	Relay with photoelectric cell
13.45.222	Pressure switch
13.45.225	Separate lens (plain)
13.45.605	Yellow colour filter
13.45.610	Blue colour filter
13.45.615	Red colour filter
13.45.620	Green colour filter



## NITRA LED ANCHOR LIGHT + PHOTO CELL

Anchor light on batteries (not supplied).  
A photo-electric switch ensures automatic switch-on at nightfall.

brightness	: approx 2 cd
dimensions	: hwxwd = 320/280 x 180 x 110 mm
weight	: 680 gram
lens	: 360°
lamp	: 1 x LED
energy supply	: 2 block batteries of 6 Volt, NOT supplied (15.10.370, 15.10.570)
running time	: with 7-9 Ah approx 250 hours (15.10.370)
	: with 50 Ah approx 1.500 hours (15.10.570)

ARTIKELNR	DESCRIPTION
13.45.701	Key to open battery housing
13.45.703	Suspension bracket
13.45.705	with white lens
13.45.710	with red lens



## NITRA LED ANCHOR LIGHT + PHOTO CELL

Anchor light on battery (not supplied).  
A photo-electric switch ensures automatic switch-on at nightfall.  
Complete with wall mounting and battery housing key.

brightness	: approx 5 cd
dimensions	: hxxxd = 320/280 x 120 x 110 mm
weight	: 560 gram
lens	: 360°
lamp	: 4 x LED
energy supply	: 1 block battery of 6 Volt, NOT supplied (15.10.370, 15.10.570)
running time	: with 79 Ah approx 150 hours (15.10.370) : with 50 Ah approx 550 hours (15.10.570)

ARTIKELNR	DESCRIPTION
<b>13.45.751</b>	with white lens
<b>13.45.755</b>	losse witte lens



## MCDERMOTT NAVIGATION LIGHTS

Anchor and navigation lights with independent power source, by means of dry batteries or solar panels.  
Economical and bright LED lighting with long running time.  
Power supply from 6 V block batteries, inexpensive and durable.  
Extremely sturdy design made from highquality polycarbonate and if necessary, provided with magnetic mounts.  
A photoelectric switch ensures automatic activation of the light at dusk.  
Delivered with battery.

## MCDERMOTT ALLROUND LIGHT + PHOTOELECTRIC CELL

visible	: 1 nautical mile, 1.845 kilometres, allround
light bulb	: LEDs for long service life and low power consumption
power source	: 1 or 2 block batteries of 6 volts (7-9Ah), inclusive

## MCD76 ANCHOR LIGHT, WHITE

Simple and inexpensive anchor light, small and practical.

factory number	: ANCHOR-266-SP
visible	: 1 nautical mile, 1.845 kilometres, all-round
light bulb	: LEDs for long service life and low power consumption
power source	: 1 block battery of 6 volts (7-9 Ah), inclusive
running time	: 90 nights, with block battery 7-9 Ah (15.10.370) : 550 nights, with block battery 50 Ah (15.10.570)
dimensions	: lxxh= 75 x 90 x 100 mm
weight	: 0.13 kg, without block battery
colour	: orange

ARTIKELNR	DESCRIPTION
<b>13.46.110</b>	MCD76 anchor light, white





## MCD108 ALL-ROUND, RED

Simple light for emergency lighting, small and practical.

factory number	: ANCHOR-266-SP-R
visible	: 1 nautical mile, 1.845 kilometres, all-round
light bulb	: LEDs for long service life and low power consumption
power source	: 1 block battery of 6 volts (7-9 Ah), inclusive
running time	: 90 nights, with block battery 7-9 Ah (15.10.370)
	: 550 nights, with block battery 50 Ah (15.10.570)
dimensions	: lxbxh= 75 x 90 x 100 mm
weight	: 0.13 kg, without block battery
colour	: orange

ARTIKELNR	DESCRIPTION
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13.46.111	MCD108 all-round, red
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## MCD1 ANCHOR LIGHT, WHITE

Simple anchor light, with suspension loop, 1 magnetic mount and large lens.

factory number	: ANCLTLED-BZ-6L6V-.02EYE-MAG
visible	: 1 nautical mile, 1.845 kilometres, all-round
light bulb	: LEDs for long service life and low power consumption
power source	: 1 block battery of 6 volts (7-9 Ah), inclusive
running time	: 90 nights, with block battery 7-9 Ah (15.10.370)
	: 550 nights, with block battery 50 Ah (15.10.570)
dimensions	: lxbxh= 120 x 120 x 350 mm
weight	: 0.85 kg, without block battery
colour	: black

ARTIKELNR	DESCRIPTION
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13.46.120	MCD1 anchor light, white
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## MCD49 ALL-ROUND, RED

Simple light for emergency lighting, with suspension loop, 1 magnetic mount and large lens.

factory number	: BZLED-6L6V-.04 02EYE-MAGPE-RED
visible	: 1 nautical mile, 1.845 kilometres, all-round
light bulb	: LEDs for long service life and low power consumption
power source	: 1 block battery of 6 volts (7-9 Ah), inclusive
running time	: 90 nights, with block battery 7-9 Ah (15.10.370)
	: 550 nights, with block battery 50 Ah (15.10.570)
dimensions	: lxbxh= 120 x 120 x 350 mm
weight	: 0.85 kg, without block battery
colour	: black

ARTIKELNR	DESCRIPTION
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13.46.121	MCD49 all-round, red
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## MCD84, RED / WHITE / RED

Emergency lighting set with 3 lights: 2 red lights and 1 white light.  
With suspension loop on top and bottom and large lens.

factory number : BZLED-NWC-RWR  
visible : 1 nautical mile, 1.845 kilometres, all-round  
light bulb : LEDs for long service life and low power consumption  
power source : 1 block battery of 6 volts (7-9 Ah), inclusive  
running time : 90 nights, with block battery 7-9 Ah (15.10.370)  
: 550 nights, with block battery 50 Ah (15.10.570)  
dimensions : lxbxh= 120 x 120 x 350 mm  
weight : 0.85 kg, without block battery  
colour : black



ARTIKELNR	DESCRIPTION
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13.46.125	MCD84 acnhor light, red / white / red
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## MCD75

Attractive and sturdy anchor light, with 1 magnetic mount, switch and small lens.

factory number : ANCHOR-RR-DELUX  
visible : 1 nautical mile, 1.845 kilometres, all-round  
light bulb : LEDs for long service life and low power consumption  
power source : 1 block battery of 6 volts (7-9 Ah), inclusive  
running time : 90 nights, with block battery 7-9 Ah (15.10.370)  
: 550 nights, with block battery 50 Ah (15.10.570)  
dimensions : lxbxh= 115 x 90 x 220 mm  
weight : 0.64 kg, without block battery  
colour : yellow



ARTIKELNR	DESCRIPTION
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13.46.130	MCD75 anchor light
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## MCD77

Attractive and sturdy anchor light, with double power source, 2 magnetic mounts, switch, comfortable carrying handle and small lens.

factory number : ANCHOR-888-DELUX  
visible : 1 nautical mile, 1.845 kilometres, all-round  
light bulb : LEDs for long service life and low power consumption  
power source : 2 block batteries of 6 volts (7-9 Ah), inclusive  
running time : 180 nights, with 2 block batteries 7-9 Ah (15.10.370)  
: 1125 nights, with 2 block batteries 50 Ah (15.10.570)  
dimensions : lxbxh= 180 x 170 x 220 mm  
weight : 1.41 kg, without block batteries  
colour : yellow



ARTIKELNR	DESCRIPTION
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13.46.140	MCD77 acnhor light
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## MCD2

Attractive and sturdy anchor light, with double power source, 2 magnetic mounts, switch, comfortable carrying handle and large lens.

factory number : ANCLTED-888-6L12V-.012-BH-MAG  
 visible : 1 nautical mile, 1.845 kilometres, all-round  
 light bulb : LEDs for long service life and low power consumption  
 power source : 2 block batteries of 6 volts (7-9 Ah), inclusive  
 running time : 180 nights, with 2 block batteries 7-9 Ah (15.10.370)  
                   : 1125 nights, with 2 block batteries 50 Ah (15.10.570)  
 dimensions : lxbxh= 180 x 170 x 340 mm  
 weight : 1.79 kg, without block batteries  
 colour : yellow

ARTIKELNR	DESCRIPTION
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13.46.150	MCD2 anchor light
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## MCD80 / MCD125

Attractive and sturdy anchor light, with solar panel, switch and large lens.

factory number : TOPHATX-FLAT-6L4V-.02-CLEAR SOLAR  
 visible : 1 nautical mile, 1.845 kilometres, all-round  
 light bulb : LEDs for long service life and low power consumption  
 power source : rechargeable battery for use from 3 to 5 years  
 running time : 10 days without sunshine are possible  
 dimensions : lxbxh= 165 x 165 x 145 mm  
 weight : 1.15 kg  
 colour : black

ARTIKELNR	DESCRIPTION
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13.46.160	MCD80 anchor light, solar
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13.46.165	MCD125 flashing light, solar
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## MCDERMOTT TOP LIGHT + PHOTOELECTRIC CELL

visible : 3 nautical miles, 5.535 kilometres, sector light  
 light bulb : LEDs for long service life and low power consumption  
 power source : 2 block batteries of 6 volts, inclusive

## MCD10

Attractive and sturdy top light, with double power source, 2 magnetic mounts, switch, comfortable carrying handle and large lens.

factory number : MAST888-9L12V-.060-MAGPEBH  
 visible : 3 nautical miles, 5.535 kilometres, sector light  
 light bulb : LEDs for long service life and low power consumption  
 power source : 2 block batteries of 6 volts (7-9 Ah), inclusive  
 running time : 20 nights, with 2 block batteries 7-9 Ah (15.10.370)  
                   : 125 nights, with 2 block batteries 50 Ah (15.10.570)  
 dimensions : lxbxh= 180 x 170 x 340 mm  
 weight : 1.82 kg, without block batteries  
 colour : yellow

ARTIKELNR	DESCRIPTION
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13.46.310	MCD10 top light
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## MCDERMOTT SET NAVIGATION LIGHTS + PHOTOELECTRIC CELL

visible : 3 nautical miles, 5.535 kilometres, sector light  
 light bulb : LEDs for long service life and low power consumption  
 power source : 2 block batteries of 6 volts (7-9Ah), inclusive

## MCD4, BATTERY

Set of 3 navigation lights: starboard, port and stern lights with double power source, 2 magnetic mounts, switch, comfortable carrying handle and large lens.

factory number : BGLED888-KIT-STERN-NOBATT PORT, STARBOARD & STERN  
 visible : 3 nautical miles, 5.535 kilometres, sector lights  
 light bulb : LEDs for long service life and low power consumption  
 power source : 2 block batteries of 6 volts (7-9 Ah), inclusive  
 running time : 20 nights, with 2 block batteries 7-9 Ah (15.10.370)  
                   : 125 nights, with 2 block batteries 50 Ah (15.10.570)  
 dimensions : lxbxh= 180 x 170 x 290 mm  
 weight : 1.88 kg, without block batteries  
 colour : yellow



ARTIKELNR	DESCRIPTION
13.46.520	MCD4 set navigation lights, battery

## MCD21, SOLAR

Set of 3 navigation lights: starboard, port and stern lights with solar panel, each packed in a sturdy plastic case. Also equipped with 4 magnetic mounts, switch, handle and large lens. Rechargeable for 2 to 4 years.

factory number : BGLEDCASE -KIT-STERN-MAG-4.5-SOLAR, PORT, STARBOARD & STERN CASE MODEL SOLAR MAGNET MOUNT  
 visible : 3 nautical miles, 5.535 kilometres, sector lights  
 light bulb : LEDs for long service life and low power consumption  
 power source : rechargeable battery for use over 2 to 4 years  
 running time : 25 days without sunshine are possible  
 dimensions : lxbxh= 370 x 330 x 290 mm  
 weight : 9.35 kg  
 colour : black



ARTIKELNR	DESCRIPTION
13.46.560	MCD21 set navigation lights, solar



## OIL LAMP DHR, 360 DEGREE

materials : lens : glass  
 : burner : brass  
 : housing : galvanized steel  
 version : hoistable  
 type of lens : 360 degree  
 lens dimensions : diameter 6", height 5"  
 light source : 10" oil burner  
 weight : approx. 3.25 kg  
 approval : N. 80.104 "ANKER" (anchor)



ARTIKELNR	COLOUR	RUNNING TIME	CAPACITY	DHR TYPE NUMBER
<b>13.49.535</b>	white/clear	30 hours	300 cc	603W
<b>13.49.540</b>	red	30 hours	300 cc	603R



## HELLA 7118 DECK FLOODLIGHT

Comes with 70 watt, 24 volt halogen lamp.  
 The impact resistant and maintenance free plastic light fitting has a stainless steel mounting bracket.

Voltage : 24 volt  
 Watt : 70 watt

ARTIKELNR	DESCRIPTION
<b>13.80.070</b>	Hella 7,118 deck floodlight

### LAMPS, NAVIGATION

The lamps with the anchor indication meet the requirements of Shipping Inspectorate and/or KNMI.

ARTIKELNR	FITTING	FOR ARTICLE	ANCHOR INDICATION	VOLTAGE	WATT
<b>14.20.105</b>	Bay15d	-	yes	12 V	10 W
<b>14.20.110</b>	Bay15d	DHR35/DHR55N	yes	12 V	25 W
<b>14.20.115</b>	Bay15d	-	yes	24 V	10 W
<b>14.20.120</b>	Bay15d	DHR35/DHR55N	yes	24 V	25 W
<b>14.20.128</b>	Bay15d	-	no	28 V	25 W
<b>14.20.130</b>	Bay15d	-	no	110 V	47 W
<b>14.20.140</b>	Bay15d	-	no	230 V	53 W
<b>14.20.320</b>	P28s	DHR70N	yes	24 V	40 W
<b>14.20.324</b>	P28s	DHR70N	yes	110 V	60 W
<b>14.20.325</b>	P28s	DHR70N	yes	230 V	65 W



### LAMPS LED, NAVIGATION

LED navigation lights consume extremely little power in comparison with normal light bulbs.

While normal light bulbs have a service life of around 1,000 to 1,500 burning-hours, an LED light will last for longer than 50,000 hours.

LED lights are highly shock-resistant.

A 3.5 watt LED light replaces a 25 watt light bulb.



ARTIKELNR	FITTING	VOLTAGE	WATT	COLOUR
<b>14.20.200</b>	Bay15d	10-30 V	3.5 W	white
<b>14.20.210</b>	Bay15d	10-30 V	3.5 W	green
<b>14.20.220</b>	Bay15d	10-30 V	3.5 W	red

### LAMPS, SEARCHLIGHT

ARTIKELNR	FITTING	VOLTAGE	WATT	TYPE
<b>14.21.012</b>	G6.35	12 V	100 W	halogen
<b>14.21.024</b>	G6.35	24 V	250 W	halogen
<b>14.21.220</b>	G6.35	230 V	300 W	halogen
<b>14.21.232</b>	GX9.5	240 V	1,000 W	halogen
<b>14.22.810</b>	PAR64	230 V	1000 W	sealed beam



### LAMPS, OTHER

ARTIKELNR	FITTING	VOLTAGE	WATT	TYPE	APPLICATION
<b>14.23.424</b>	H1	24 V	70 W	halogen	flashing light





## BATTERY, CARBON ZINC

Carbon zinc, robust and cheap.  
With use by date.  
Prices include waste disposal fee.

ARTIKELNR	DESCRIPTION	NUMBER PER PACKAGE	VOLTAGE	TYPE	NUMBER PER BOX
15.10.370	block	1 piece	6.0 V (7 - 9 Ah)	4R25-veer	20



## BATTERY, ALKALINE

Alkaline-lasts 5 times longer than an ordinary (carbon zinc) battery.  
With use by date.  
Prices include waste disposal fee.

ARTIKELNR	DESCRIPTION	NUMBER PER PACKAGE	VOLTAGE	TYPE
15.10.510	micro penlight	2 pieces	1.5 V	LR61 or AAAA
15.10.520	mini penlight	10 pieces	1.5 V	R03 or AAA
15.10.530	penlight	40 pieces	1.5 V	R06 or AA
15.10.540	British bar	20 pieces	1.5 V	R14 or C cell
15.10.550	wide bar	20 pieces	1.5 V	R20 or D cell
15.10.560	flat battery	20 pieces	4.5 V	3R12
15.10.570	block	12 pieces	6.0 V (50 Ah)	4R25-veer
15.10.580	block	20 pieces	9.0 V	6F22



## BATTERY, BUTTON

Lithium or silver oxide, long lifetime.  
With use by date.  
Prices include waste disposal fee.

ARTIKELNR	SERIAL NUMBER	VOLTAGE	TYPE	NUMBER PER BOX
15.11.004	(L)SR44	1.5 V	silver oxide	10
15.11.203	CR2032	3.0 V	lithium	10



**HEADLIGHT**

Comes with 3 adjustable elastic head straps for comfort and an adjustable torch  
 The torch has 3 LED lamps for short distances and 1 xenon lamp for long distances.  
 The torch can be turned to 3 different on positions. 1 LED lamp on, 3 LED lamps on (80 running hours), 1 xenon lamp on (2.5 running hours).



ARTIKELNR	DESCRIPTION	BATTERY
15.21.034	Headlight	3 x mini penlight AAA (R03)

**FLASHLIGHT, FLAT**

New model with replaceable battery.  
 Various colours.



ARTIKELNR	DESCRIPTION	BATTERY	NUMBER PER BOX
15.21.115	Flashlight, flat	1x flat battery (3R12)	12

**FLASHLIGHT WITH MAGNET**

Conventional torch, robust aluminium body.



ARTIKELNR	DESCRIPTION	BATTERY	NUMBER PER BOX
15.21.155	Flashlight with magnet	2x wide bar D (R20)	12

**FLASHLIGHT, RUBBER KRYPTON**

Modern design, waterproof with wrist strap.



ARTIKELNR	DESCRIPTION	BATTERY	NUMBER PER BOX
15.21.162	Flashlight, rubber Krypton	2x wide bar D (R20)	10

**FLASHLIGHT, FLOATING**

Floating model.



ARTIKELNR	DESCRIPTION	BATTERY
15.21.191	Flashlight, floating	4x wide bar D (R20) or 1x block battery (4R25)

**FLASHLIGHT EEX, BRIGHT STAR 2206**

Completely renewed 1995 model, with many improvements.  
 More light because of improved mirror!  
 Gas tight and floating, NOT waterproof.  
 Comes with circuit breaker to prevent sparking in case of lamp breakage.

material : oil and petrol resistant antistatic plastic (**not ATEX**)



ARTIKELNR	DESCRIPTION	BATTERY
15.21.193	Flashlight EEX Bright Star 2206	1x block battery (4R25)

CE-markering Conformité Européenne  
Vrije handel van waren binnen de EU

**CE 0035**

Identificatienummer van de Notified  
Body die het productieproces controleert

TÜV 0035 Ger  
DEKRA 0344 NI  
LCIE 0081 Fr

BSI 0086 UK  
DNV 0575 Nor  
LOM 0163 Sp

### Merkteken EU

ATEX RL 114 (2014/34/EU)\* I Mijnbouw  
voor EX apparatuur. II Anders dan mijnbouw



Categorie	beschermingsniveau	gas	stof
Cat.1	zeer hoog	Zone 0, 1, 2	20, 21, 22.
Cat.2	hoog	Zone 1, 2.	21, 22.
Cat.3	normaal	Zone 2.	22.

\* Voorheen ATEX RL 95 (94/9/EG)  
Cat.(1) Uitgang geschikt voor categorie 1 apparatuur  
Cat.1/2 Sensor geschikt voor zone 0, behuizing voor zone 1

Certificaatnummer, typegoedkeuring:  
Respectievelijk: keuringsinstantie,  
jaar van typekeuring, ATEX RL 114,  
certificaatnummer betreffend jaar

**TÜV 15 ATEX 12547**

**X**

Materiaal zonder bijzondere beperkingen –  
(gebruiksaanwijzing is voldoende)  
Bijzondere richtlijnen voor veilig gebruik X  
Ex - component U

CE 0035

EX II 2 G

Ex ib IIC T4 Gb

TÜV 15 ATEX 12547 X

# EX MARKERING

Ex Mondiaal (IEC)  
E Ex EU (EN)  
A Ex USA (NEC)

# EX

ib<sup>☆</sup>  
tb

IIC  
IIIC

T4

T 240 °C

Gb

Db



Apparaat	Symbol	Standaard	Nieuw	Beschermingswijze	Cat.	EPL		Zone								
						Gas	Stof	0	1	2	20	21	22			
E <sub>G</sub>		op_	op_a	optische straling	1	Ga										
E <sub>G</sub>		op_	op_b	optische straling	2	Gb										
E <sub>G</sub>		op_	op_c	optische straling	3	Gc										
E		ia	ia	intrinsiek	1	Ga	Da									
E		ib	ib	intrinsiek	2	Gb	Db									
E		ic	ic	intrinsiek (Ex nL)	3	Gc	Dc									
E		ma	ma	ingegoten	1	Ga	Da									
E		mb	mb	ingegoten (voorheen Ex m)	2	Gb	Db									
E		mc	mc	ingegoten	3	Gc	Dc									
E <sub>G</sub>		px	pxb	overdruk (inwendig NGG)	2	Gb										
E <sub>G</sub>		py	pyb	overdruk (inwendig Cat. 3 / Gc)	2	Gb										
E <sub>G</sub>		pz	pzc	eenvoudige overdruk	3	Gc										
E <sub>D</sub>		p	pb	overdruk	2		Db									
E <sub>D</sub>		p	pc	overdruk	3		Dc									
M		p	p/h	overdruk	2	Gb	Db									
E <sub>G</sub>		d	db	drukvast	2	Gb										
M		d	d/h	drukvast	2	Gb	Db									
E <sub>D</sub>		ta	ta	bescherming door behuizing	1		Da									
E <sub>D</sub>		tb	tb	bescherming door behuizing	2		Db									
E <sub>D</sub>		tc	tc	bescherming door behuizing	3		Dc									
E <sub>G</sub>		e	eb	verhoogd veilig	2	Gb										
E <sub>G</sub>		o	ob	oliegevuld	2	Gb										
E <sub>G</sub>		q	qb	zandgevuld	2	Gb										
E <sub>G</sub>		nA	nAc	niet-vonkend	3	Gc										
E <sub>G</sub>		nC	nCc	vonkend materieel	3	Gc										
E <sub>G</sub>		nR	nRc	bepoort ademend	3	Gc										
M		fr		bepoort ademend	3	Gc	Dc									
M		c	c/h	constructieve veiligheid	1				*		*					
M		b	b/h	gecontroleerde ontstekingsbron	1				*		*					
M		k	k/h	vloeistof	1				*		*					

\* Op voorwaarde dat er een beoordeling plaatsgevonden heeft waaruit blijkt dat er geen ontstekingsbron is onder normale omstandigheden en geen kan ontstaan, na het optreden van een voorspelbare en van een zeldzame fout.

### EPL: Equipment Protection Level

Beschermings-niveau	EPL	Gaszone	EPL	Stofzone
Zeer hoog	Ga	0, 1, 2	Da	20, 21, 22
Hoog	Gb	1, 2	Db	21, 22
Normaal	Gc	2	Dc	22

Gebied	Toegelaten materiaal	Ontsteking gas	Materiaal	Toegelaten in gebied
T1	T1 - T6	> 450 °C	T1	T1
T2	T2 - T6	> 300 °C	T2	T1 - T2
T3	T3 - T6	> 200 °C	T3	T1 - T3
T4	T4 - T6	> 135 °C	T4	T1 - T4
T5	T5 - T6	> 100 °C	T5	T1 - T5
T6	T6	> 85 °C	T6	T1 - T6

Op stofapparatuur is de maximale oppervlaktetemperatuur weergegeven als bijvoorbeeld: T 250 °C

Houd rekening met het bereik van de aangegeven omgevingstemperatuur, anders wordt de temperatuurklasse niet gegarandeerd.

Toevoeging: T<sub>amb</sub> of T<sub>amb</sub>: -xx °C ... +xx °C

Standaard: -20 °C ... +40 °C

Gebied	Toegelaten materiaal	Referentie-gas	Materiaal	Toegelaten in gebied
I	I	Methaan	I	I
IIA	IIA, IIB, IIC	Propan	IIA	IIA
IIB	IIB, IIC	Ethyleen	IIB	IIA, IIB
IIC	IIC	Waterstof	IIC	IIA, IIB, IIC
Soort stof			II*	IIA, IIB, IIC
IIIA	IIIA, IIIB, IIIC	brandbaar	IIIA	IIIA
IIIB	IIIB, IIIC	niet-geleidend	IIIB	IIIA, IIIB
IIIC	IIIC	geleidend	IIIC	IIIA, IIIB, IIIC

\* 'Niet gasgroep gevoelig' gelijk aan IIC

### Beschermingsgraad door omhulsels (IP-grad):

1e kerncijfer (vaste voorwerpen)	2e kerncijfer (vloeistoffen)
0 geen bescherming	0 geen bescherming
1 voorwerpen ≥ 50 mm	1 druipwaterdicht
2 voorwerpen ≥ 12,5 mm	2 druipwaterdicht 15°
3 voorwerpen ≥ 2,5 mm	3 regenwaterdicht
4 voorwerpen ≥ 1 mm	4 spatwaterdicht
5 stofbestendig	5 spuitwaterdicht
6 stofdicht	6 drukspuitwaterdicht
	7 waterdicht
	8 drukwaterdicht

Een omhulsel waarvan het tweede kerncijfer voor de beschermingsgraad een 7 of 8 is, moet geacht worden niet geschikt te zijn voor blootstelling aan waterstralen (kerncijfer 5 of 6), tenzij het omhulsel door een dubbele codering is gekenmerkt.

### Varianten op de code

<sup>☆</sup>[Ex ib] Bijbehorende apparaat: Apparaat niet Ex  
[ib] Inwendige beschermingswijze Apparaat Ex

## PELI 1965, ZONE 0 ATEX FLASHLIGHT

When working in hazardous locations, always remember that a flashlight can be an ignition source. If you want the latest and brightest LED technology in a compact shape, choose the new MityLite™ 1965Z0 LED from Peli. Small enough to fit in your pocket and yet bright enough to illuminate your work area. Long-lasting, energy efficient, bright LEDs, along with its compact design, make the new MityLite™ 1965Z0 LED the appropriate safety-approved flashlight for the task. Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux : 34 lumen  
 Operating time : 3 hours and 45 minutes  
 Distance of the light beam : 45 metres  
 Light intensity : 512 cd  
 Fall resistance : 2 metres  
 Water resistance : IPX7 (waterproof up to a depth of 1 metre)

Base : anti-static impact resistant PC / PBT  
 O-ring : EPDM  
 Lens : clear Polycarbonate (PC)  
 Casing : anti-static impact resistant PC / PBT  
 Contact, spring and holder : phosphor bronze  
 Length : 13.9 cm  
 Weight including batteries : 54 gr  
 Weight without batteries : 31 gr  
 Type of lamp : LED  
 Battery : 2 x Alkaline, AAA  
 Batteries included : yes  
 Volt : 3.0 V  
 Type of switch : turning the head  
 Light modes : on / off  
 Certificate : II 1 G Ex ia IIC T4 Ga  
 : II 1 D Ex ia IIIC T90°C Da



ARTIKELNR	DESCRIPTION
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15.23.555	Peli 1965, Zone 0 ATEX flashlight
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## BRIGHT STAR RAZOR LED, ZONE 0 ATEX FLASHLIGHT

The Bright Star Razor is made of a durable polypropylene that can withstand the most demanding environments. The Razor has an ergonomically designed push button and an ergonomic grip for easy operation. Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux : 125 lumen  
 Operating time : 26 hours  
 Distance of the light beam : 170 metres  
 Light intensity : 7000 cd  
 Fall resistance : 9 metres  
 Water resistance : IPX7 (waterproof up to a depth of 1 metre)

Lens : Polycarbonate with Thermoplastic Elastomer (TPE)  
 Reflector : Ultem 1000  
 Casing : impact-resistant plastic  
 Contact strip : brass spring  
 Switch button : Thermoplastic Elastomer (TPE)  
 Length : 18.1 gr  
 Weight without batteries : 130 gr  
 Type of lamp : LED  
 Battery : 3 x Alkaline, AA  
 Batteries included : no  
 Type of switch : push button  
 Light modes : on / off  
 Certificate : II1GD Ex ia IIC T3 Ga  
 : Ex ia IIIB T195°C Da



ARTIKELNR	DESCRIPTION
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15.23.557	Bright Star Razor LED, Zone 0 ATEX flashlight
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## PELI 3315, ZONE 0 ATEX FLASHLIGHT

The new 3315Z0 LED lamp: the lightweight, compact design includes 3AA batteries that provide a single led with 138 lumens of super bright LED light.  
Safety approved for the most difficult working conditions.  
Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux	: 138 lumen
Operating time	: 19 hours
Distance of the light beam	: 146 metres
Light intensity	: 5350 cd
Water resistance	: IP67 (dust and waterproof up to a depth of 1 metre)
Base	: anti-static impact resistant PC / PBT
O-ring	: EPDM
Lens	: anti-static coated Polycarbonate (PC)
Length	: 15.6 cm
Weight including batteries	: 176 gr
Weight without batteries	: 105 gr
Type of lamp	: LED
Battery	: 3 x Alkaline, AA
Batteries included	: yes
Volt	: 4.5 V
Type of switch	: push button
Light modes	: on / off
Certificate	: II 1 G Ex ia IIC T4 Ga : II 1 D Ex ia IIIC T130°C Da

ARTIKELNR	DESCRIPTION
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15.23.560	Peli 3315, Zone 0 ATEX flashlight
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## PELI 2410, ZONE 0 ATEX FLASHLIGHT

This StealthLite 2410Z0 flashlight features a bright directional LED light beam.  
The 2410Z0 StealthLite LED is resistant to corrosion and extreme temperatures and is submersible.  
Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux	: 153 lumen
Operating time	: 5 hours and 45 minutes
Distance of the light beam	: 165 metres
Light intensity	: 6837 cd
Water resistance	: IPX7 (waterproof up to a depth of 1 metre)
Base	: anti-static impact resistant PC / PBT
O-ring	: Ethylene Propylene
Lens	: anti-static PMMA
Casing	: anti-static impact resistant PC / PBT
Contact, spring and holder	: stainless steel / phosphor bronze
Length	: 17.8 cm
Weight including batteries	: 207 gr
Weight without batteries	: 105 gr
Type of lamp	: LED
Battery	: 4 x Alkaline, AA
Batteries included	: yes
Volt	: 6.0 V
Type of switch	: switch that can be operated with one hand
Light modes	: on / off
Certificate	: II 1 G Ex ia IIC T4 Ga : II 1 D Ex ia IIIC T135°C Da

ARTIKELNR	DESCRIPTION
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15.23.580	Peli 2410, Zone 0 ATEX flashlight
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## PELI 2010, ZONE 0 ATEX FLASHLIGHT

The SabreLite 2010Z0 LED is the LED flashlight of Peli.

The LED technology not only produces a white, directional beam of light that is as bright as a light bulb, it also provides a 10,000-hour lifetime for the lamp and a very long battery life.

The robust lightweight ABS resin housing is waterproof.

Turning on and off by turning the lens avoids accidental discharge.

Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux : 109 lumen  
 Operating time : 32 hours  
 Distance of the light beam : 144 metres  
 Light intensity : 5189 cd  
 Water resistance : IPX7 (waterproof up to a depth of 1 metre)

Base : EXL  
 O-ring : Ethylene Propylene  
 Lens : Polycarbonate (PC)  
 Casing : ABS  
 Clip : ABS  
 Contact, spring and holder : stainless steel / phosphor bronze  
 Length : 20.6 cm  
 Weight including batteries : 380 gr  
 Weight without batteries : 153 gr  
 Type of lamp : LED  
 Battery : 3 x Alkaline, C  
 Batteries included : yes  
 Volt : 4.5 V  
 Type of switch : turning the head  
 Light modes : on / off  
 Certificate : II 1 G Ex ia IIC T4 T3 Ga  
                   : II 1 D ia IIIC T135c T200c Da IP6X



ARTIKELNR	DESCRIPTION
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15.23.585	Peli 2010, Zone 0 ATEX flashlight
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## PELI 3315R, ZONE 0 ATEX FLASHLIGHT

The unique lightweight Peli 3315RZ0 LED features a rechargeable lithium-ion battery with a life cycle of 2,000 cycles, which is more than 4 times as much as the 500 cycles of a normal battery. Features three different light modes (high/low/flashing) and a continuous battery level indicator. The Peli 3315RZ0 also features an ergonomically shaped housing and a safety cord. Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux : 132 / 15 lumen (high / low)  
 Operating time : 5 / 34 hours (high / low)  
 Distance of the light beam : 146 / 35 metres (high / low)  
 Light intensity : 5350 / 308 cd (high / low)  
 Water resistance : IPX7 (waterproof up to a depth of 1 metre)

Base : anti-static PC / PBT  
 O-ring : NBR  
 Lens : anti-static coated Polycarbonate (PC)  
 Casing : anti-static PC / PBT  
 Length : 15.5 cm  
 Weight including batteries : 176 gr  
 Weight without batteries : 105 gr  
 Type of lamp : LED  
 Battery : 1 x Lithium-Ion  
 Batteries included : yes  
 Charging time : 5 hours  
 Battery level indicator : RGB LED  
 Volt : 3.2 V  
 Type of switch : push button  
 Light modes : high/low/flashing  
 Certificate : II 1 G Ex ia IIC T4 Ga

ARTIKELNR	DESCRIPTION
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15.23.590	Peli 3315R, Zone 0 ATEX flashlight
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## PELI 3415M, ZONE 0 ATEX FLASHLIGHT

The PELI 3415MZ0 LED features a 90-degree articulating head, mounting clip and powerful magnet for attaching to metal surfaces. Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux : 329/174/185 lumen (spot + searchlight/search light/spot)  
 Operating time : 6/15/14 hours (spot + searchlight/searchlight/spot)  
 Distance of the light beam : 185/135/185 metres (spot + searchlight/searchlight/spot)  
 Light intensity : 4425 cd (spot + searchlight)  
 Water resistance : IPX8 (pressure water resistance up to 1 metre deep)

Base : anti-static impact resistant PC / PBT  
 O-ring : NBR  
 Lens : anti-static coated Polycarbonate (PC)  
 Casing : anti-static impact resistant PC / PBT  
 Clip : anti-static impact resistant PC / PBT  
 Contact, spring and holder : stainless steel / phosphor bronze / brass nickel plated  
 Length : 18.9 cm  
 Weight including batteries : 272 gr  
 Weight without batteries : 201 gr  
 Type of lamp : LED  
 Battery : 3 x Alkaline, AA  
 Batteries included : no  
 Charging time : 5 hours  
 Volt : 4.5 V  
 Type of switch : push button  
 Light modes : spot + searchlight/searchlight/spot  
 Certificate : II 1 G Ex ia op is IIC T4 Ga

ARTIKELNR	DESCRIPTION
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15.23.592	Peli 3415M, Zone 0 ATEX flashlight
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## PELI 3715, ZONE 0 ATEX FLASHLIGHT

The downcast LEDs of the 3715Z0 LED that illuminate your path produce 189 lumens (High mode) and 90 lumens (Low mode) and also provide a signal mode.

Another feature is the built-in battery life indicator, so you always know the battery level before you take action.

The 3715Z0 LED is compact, sturdy and light.

Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux : 189 / 90 / 23 lumen (high / low / downcast)  
 Operating time : 4 / 7 / 31 hours (high / low / downcast)  
 Distance of the light beam : 249 / 157 / 24 metres (high / low / downcast)  
 Light intensity : 15552 / 6150 / 150 cd (high / low / downcast)  
 Water resistance : IPX7 (waterproof up to a depth of 1 metre)

Base : anti-static impact resistant PC / PBT  
 O-ring : Buna-N  
 Lens : anti-static PMMA  
 Casing : anti-static impact resistant PC / PBT  
 Clip : anti-static impact resistant PC / PBT  
 Length : 13.6 cm  
 Weight including batteries : 408 gr  
 Weight without batteries : 312 gr  
 Type of lamp : LED  
 Battery : 4 x Alkaline, AA  
 Batteries included : yes  
 Battery level indicator : 3 blue LEDs  
 Volt : 6.0 V  
 Type of switch : push button  
 Light modes : (high/low/downcast/flashing)  
 Certificate : II 1 G Ex ia IIC T4 Ga  
 : II 1 D Ex ia IIIC T130c Da



ARTIKELNR	DESCRIPTION
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15.23.600	Peli 3715, Zone 0 ATEX flashlight
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## PELI 3765, ZONE 0 ATEX FLASHLIGHT

The rechargeable Peli 3765Z0 flashlight with downcast LEDs, contains 194 lumens (high mode) and 92 lumens (low mode) as well as a flash function.

Another feature is the integrated battery life indicator, so you always know how long the flashlight will continue to work.

The lightweight 3765Z0 flashlight is extremely compact and sturdy.

Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux	: 194 / 92 / 24 lumen (high / low / downcast)
Operating time	: 3.5 hours / 6 hours and 45 min. / 20 hours (high / low / downcast)
Distance of the light beam	: 256 / 161 / 24 metres (high / low / downcast)
Light intensity	: 16392 / 6454 / 146 cd (high / low / downcast)
Water resistance	: IPX4 (spray-proof)

Base	: anti-static impact resistant PC / PBT
O-ring	: Buna-N
Lens	: anti-static PMMA
Casing	: anti-static impact resistant PC / PBT
Clip	: anti-static impact resistant PC / PBT
Length	: 13.6 cm
Weight including batteries	: 414 gr
Weight without batteries	: 312 gr
Type of lamp	: LED
Battery	: 1 x niMH, AA
Batteries included	: yes
Charging time	: 5 hours
Battery level indicator	: 3 blue LEDs
Volt	: 4.8 V
Type of switch	: push button
Light modes	: high/low/downcast/flash
Certificate	: II 1 G Ex ia op is IIC T3

ARTIKELNR	DESCRIPTION
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15.23.610	Peli 3765, Zone 0 ATEX flashlight
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## PELI 2610, ZONE 0 ATEX HEADLIGHT

The 2610Z0 offers hands-free light where and when you need it. A dual-mode button activates all 3 LEDs for full brightness, or only 1 to extend battery life. The adjustable fabric strap fits easily and safely on your head while the rubber strap securely attaches to safety helmets and other helmets. Both are included, as well as 3 AAA alkaline batteries. Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux	: 30 / 14 lumen (high / low)
Operating time	: 19 / 47 hours (high / low)
Distance of the light beam	: 28 / 19 metres (high / low)
Light intensity	: 194 / 91 cd (high / low)
Water resistance	: IPX4 (spray-proof)
Base	: anti-static impact resistant PC / PBT
O-ring	: Ethylene Propylene
Lens	: anti-static coated Polycarbonate (PC)
Contact, spring and holder	: stainless steel / brass nickel
Length	: 3.8 cm
Head strap	: 2 units, 1 x fabric for use on the head and 1 x rubber for on helmets
Weight including batteries	: 91 gr
Weight without batteries	: 54 gr
Type of lamp	: LED
Battery	: 3 x Alkaline, AAA
Batteries included	: yes
Volt	: 4.5 V
Type of switch	: push button
Light modes	: on / off
Certificate	: II 1 G Ex ia IIC T4 Ga



ARTIKELNR	DESCRIPTION
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<b>15.24.100</b>	Peli 2610, Zone 0 ATEX headlight
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## PELI 2690, ZONE 0 ATEX HEADLIGHT

The 2690ZO HeadsUp Lite™ will never leave you in the dark, regardless of the season. With 74 lumens of LED luminous intensity, 11 hours of battery life and a weight of 117 grams, the headlight is brighter, more efficient, more compact and lighter than other headlights in its class.

The 'no-nonsense', rotatable, grooved switch is easy to operate even when wearing heavy gloves.

The 2690ZO is made of Anti-static Impact Modified PC/PBT that is shock resistant and resistant to chemicals as well as waterproof for use in all weather conditions.

The headlight comes with an adjustable and comfortable fabric strap as well as a rubber strap for heavy use, which will remain firmly on your helmet.

The 2690ZO HeadsUp Lite™ penlight is ideal for professionals working in the chemical, pharmaceutical, energy, oil and gas and firefighting industries.

Provided with ATEX Certificate Zone 0 (Category 1).

Luminous flux	: 74 lumen
Operating time	: 11 hours
Distance of the light beam	: 92 metres
Light intensity	: 2124 cd
Water resistance	: IPX7 (waterproof up to a depth of 1 metre)
Base	: anti-static impact resistant PC / PBT
O-ring	: EPDM
Lens	: Polycarbonate (PC)
Casing	: anti-static impact resistant PC / PBT
Contact, spring and holder	: nickel plated phosphor bronze
Length	: 7.1 cm
Head strap	: 2 units, 1 x fabric for use on the head and 1 x rubber for on helmets
Weight including batteries	: 116 gr
Weight without batteries	: 79 gr
Type of lamp	: LED
Battery	: 3 x Alkaline, AAA
Batteries included	: yes
Volt	: 4.5 V
Type of switch	: turning the head
Light modes	: on / off
Certificate	: I M1 Ex ia I Ma : II 1 G Ex ia IIC T4 Ga, : II 1D Ex ia IIIC T65°C Da

ARTIKELNR	DESCRIPTION
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15.24.110	Peli 2690, Zone 0 ATEX headlight
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**INSPECTION LAMP, PLASTIC**

Comes with 5 metre cable and plug.  
Plastic protective cage and hook for hanging up.

ARTIKELNR	DESCRIPTION	VOLT
<b>15.25.150</b>	Inspection lamp, plastic	230 V

**INSPECTION LAMP, RUBBER**

Comes with 5 metre cable and plug.  
Steel protective cage and hook for hanging up.  
All steel parts are galvanized

ARTIKELNR	DESCRIPTION	VOLT
<b>15.25.160</b>	Inspection lamp, rubber	230 V

**INSPECTION LAMP LED, PVC**

Comes with 9 watt LED bulb (clear white 4000K-4500K), switch, handle, 10 metre cable and plug.  
Steel protective cage and hook for hanging up and magnet.  
All steel parts are galvanized.

ARTIKELNR	DESCRIPTION	VOLT
<b>15.25.250</b>	Inspection lamp LED, PVC	230 V

**INSPECTION LAMP, FLUORESCENT**

This lamp is very shock resistant and uses little current.  
Comes with 8 watt fluorescent lamp, handle, 5 metre cable, plug and hook for hanging up.

ARTIKELNR	DESCRIPTION	VOLT
<b>15.25.850</b>	Inspection lamp, fluorescent	230 V



## ION EXCHANGER WP 78

For making your own battery or demineralized water (can be used as distilled water).

### Instructions:

The WP 78 is connected to a cold water system, the valve is opened and the water flows through the WP 78, in which resin removes mineral salts such as calcium, iron, magnesium, nitrates, chlorides, sulphates and carbonates.

When the colour indicator shows (by changing from green to blue) that the charge is spent, it is easy to replace it with new resin.

### Quality water.

The capacity of the WP 78 varies, this is because it depends on the quality of the water that has to be purified. A DH analysis is necessary for an accurate determination.

capacity max. in litres	contamination per litre
750	3d ( 50 ppm)
400	6d (100 ppm)
200	11d (200 ppm) Rotterdam water
130	17d (300 ppm)
90	22d (400 ppm)
40	28d (500 ppm)

water flow rate	: max. 45 litres per hour
max water pressure in device	: 0.63 bar
max water supply pressure	: 3.5 bar
WP 78 water quality	: 1.5/0.5 micro Siemens per cm <sup>3</sup> (0.7 2 mega Ohm per cm <sup>3</sup> )
pH	: 6.0 - 7.0 (7.0 is drinking water)
quality control	: colour indicator
dimensions	: diameter 90 mm, height 520 mm
weight	: 2.25 kg

ARTIKELNR	DESCRIPTION
<b>15.18.500</b>	WP 78 ion exchanger
<b>15.18.510</b>	WP 78 resin refill charge





## GEFO MINITOP BATTERY HYDROMETER

Robust design, all parts are plastic.  
 Works with only a very small quantity of liquid.  
 Double scale graduation, a plus/minus scale for a quick indication and a numerical scale for accurate readings.  
 No drips if cap is used.  
 Instructions on the packaging in 5 languages.

ARTIKELNR	DESCRIPTION	TYPE
15.19.105	GEFO Minitop battery hydrometer	6000



## BATTERY HYDROMETER GEFO CENTRA

Universal workshop tools, robust design with plastic cylinder without thickening.  
 Works with a small quantity of liquid.  
 Large float with clearly legible scale, with colour and numerical graduations.  
 After liquid has been drawn in, the float does not oscillate or stick to the wall thanks to a special spacer.  
 Instructions on the packaging in 5 languages.

ARTIKELNR	DESCRIPTION	TYPE
15.19.110	GEFO Centra battery hydrometer	6300



## BATTERY HYDROMETER GEFO S/TH

Professional workshop tool, with precise reading.  
 Thickened glass cylinder.  
 Built in thermometer for correct temperature correction.  
 Large float with clearly legible scale, and colour and numerical graduations.  
 Instructions on the packaging in 5 languages.

ARTIKELNR	DESCRIPTION	TYPE
15.19.125	GEFO S/TH battery hydrometer	6600





## ANTIFREEZE HYDROMETER GEFO MINIFROST

Suitable for ethylene glycol (ethanediol) -water mixtures.  
New technical principle, simple, quick and precise measurement.  
Stable plastic housing with eye on the suction membrane.  
Instructions on the packaging in 5 languages.

ARTIKELNR	DESCRIPTION	TYPE
15.19.150	GEFO Minifrost antifreeze hydrometer	5400



## ANTIFREEZE HYDROMETER GEFO GLYCOMAT

Suitable for ethylene glycol (ethanediol) -water mixtures.  
New technical principle, simple, quick and precise measurement.  
Stable plastic housing with eye on the suction membrane.  
Oscillation free indicator. It is not necessary to hold the device upright.  
Automatic temperature correction so it is possible to read off immediately to what temperature the coolant is protected against freezing.  
The device will not drip after the valve has been closed.  
Instructions in 8 languages on the packaging and also on the device.

ARTIKELNR	DESCRIPTION	TYPE
15.19.155	GEFO Glycomat antifreeze hydrometer	1100



## ANTIFREEZE HYDROMETER GEFO COLDOMAT

Suitable for ethylene glycol (ethanediol) -water mixtures.  
Professional workshop tool, with very precise reading.  
Thickened glass cylinder.  
Built in thermometer for the correct temperature correction with built in correction table.  
Large float with clearly legible scale, and colour and numerical graduations.  
Instructions on the packaging in 20 languages.

ARTIKELNR	DESCRIPTION	TYPE
15.19.170	GEFO Coldomat antifreeze hydrometer	5100



## REFRAKTOMETER GEFO, ANTIFREEZE AND BATTERY HYDROMETER

Suitable for ethylene and propylene glycol water mixtures and battery acid.  
Professional workshop tool, with very precise reading.  
Very economical, uses only 1 to 2 drops.  
High-quality lens.  
Instructions in the packaging.

ARTIKELNR	DESCRIPTION	TYPE
15.19.180	GEFO refraktometer. antifreeze and battery hydrometer	2600

## MOTOR SAFETY SWITCH

Thermal-magnetic design.

The best investment for every electric motor, on average it delivers 75% confidence that there will be no burnouts.

Mounting and cable glands not included.

housing	: plastic
waterproof	: IP55
voltage	: max 380 volt
connections	: 3 pole + earth
cable gland	: metric thread M25

ARTIKELNR	SETTING RANGE
<b>15.39.006</b>	0.6 - 1.0 A
<b>15.39.010</b>	1.0 - 1.6 A
<b>15.39.016</b>	1.6 - 2.5 A
<b>15.39.025</b>	2.5 - 4.0 A
<b>15.39.040</b>	4.0 - 6.3 A
<b>15.39.063</b>	6.3 - 10.0 A
<b>15.39.100</b>	10.0 - 16.0 A
<b>15.39.160</b>	16.0 - 20.0 A
<b>15.39.200</b>	20.0 - 25.0 A
<b>15.39.299</b>	empty housing for 0.6 through 16.0 A motor safety switch





## HEAVY DUTY RUBBER PLUG, 220 V

Splash proof, industrial plug, robust construction, fracture-proof cable inlet sleeve with membrane, fracture-proof, corrosion-resistant (brass).

2 pole + earth, 10/16A, 250 volt.

Specially for 3 x 2.5 mm<sup>2</sup> H 07 RN F cable.

ARTIKELNR	DESCRIPTION	NUMBER PER BOX
15.40.010	Heavy duty rubber plug, 220 V	10



## CEE PLUG

IP44, splash proof.

ARTIKELNR	VOLTAGE	AMPERAGE	NUMBER POLES	IP CLASS	COLOUR
15.40.026	24 V	16 A	2	IP44	purple (A.C.)
15.40.030	220 V	16 A	3	IP44	blue
15.40.032	220 V	32 A	3	IP44	blue
15.40.035	380 V	16 A	4	IP44	red
15.40.040	380 V	32 A	4	IP44	red
15.40.042	380 V	63 A	4	IP44	red
15.40.050	380 V	16 A	5	IP44	red
15.40.055	380 V	32 A	5	IP44	red
15.40.057	380 V	63 A	5	IP67	red



## HEAVY DUTY RUBBER CONNECTOR PLUG, 220 V

Splash proof because of snap collar, industrial connector plug, robust construction, fracture-proof cable inlet sleeve with membrane, fracture-proof, corrosion-resistant.

Rubber provision collar with steel reinforcing ring.

2 pole + earth, 10/16A, 250 volt.

Specially for 3 x 2.5 mm<sup>2</sup> H 07 RN F cable.

ARTIKELNR	DESCRIPTION	NUMBER PER BOX
15.41.010	Heavy duty rubber connector plug, 220 V	10

**CEE CONNECTOR PLUG**

IP44, splash proof.

ARTIKELNR	VOLTAGE	AMPERAGE	NUMBER POLES	IP CLASS	COLOUR
<b>15.41.026</b>	24 V	16 A	2	IP44	purple (A.C.)
<b>15.41.030</b>	220 V	16 A	3	IP44	blue
<b>15.41.032</b>	220 V	32 A	3	IP44	blue
<b>15.41.035</b>	380 V	16 A	4	IP44	red
<b>15.41.040</b>	380 V	32 A	4	IP44	red
<b>15.41.043</b>	380 V	63 A	4	IP44	red
<b>15.41.050</b>	380 V	16 A	5	IP44	red
<b>15.41.055</b>	380 V	32 A	5	IP44	red
<b>15.41.057</b>	380 V	63 A	5	IP67	red

**CEE SURFACE MOUNTED SOCKET**

IP44, splash proof.

ARTIKELNR	VOLTAGE	AMPERAGE	NUMBER POLES	IP CLASS	COLOUR
<b>15.42.026</b>	24 V	16 A	2	P44	purple (A.C.)
<b>15.42.030</b>	220 V	16 A	3	IP44	blue
<b>15.42.032</b>	220 V	32 A	3	IP44	blue
<b>15.42.035</b>	380 V	16 A	4	IP44	red
<b>15.42.040</b>	380 V	32 A	4	IP44	red
<b>15.42.050</b>	380 V	16 A	5	IP44	red
<b>15.42.055</b>	380 V	32 A	5	IP44	red





## SHRINK SLEEVE

For giving a cable connection a watertight seal.

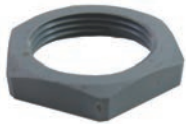
ARTIKELNR	DESCRIPTION
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<b>15.49.910</b>	for cable approx. 6 through 28 mm thick, length approx. 30 cm
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## CABLE GLAND, NEW MODEL METRIC THREAD

ARTIKELNR	SIZE	MATERIAL	GRIPPING RANGE	THREAD LENGTH	TENSION RELIEF
<b>15.50.344</b>	M16	hard plastic	4 - 8 mm	25 mm	yes
<b>15.50.345</b>	M16	hard plastic	4 - 8 mm	7 mm	yes
<b>15.50.346</b>	M20	hard plastic	7 - 12 mm	7 mm	yes
<b>15.50.348</b>	M25	hard plastic	9 - 16 mm	7 mm	yes



## NUT FOR CABLE GLAND, METRIC

ARTIKELNR	THREAD	MATERIAL
<b>15.50.516</b>	M16	hard plastic
<b>15.50.520</b>	M20	hard plastic
<b>15.50.525</b>	M25	hard plastic



## REDUCING RING FOR CABLE GLAND, METRIC

ARTIKELNR	OUTSIDE THREAD	INTERNAL THREAD	MATERIAL
<b>15.50.720</b>	M25	M20	hard plastic
<b>15.50.755</b>	M25	PG16	hard plastic



## CABLE TIE ASSORTMENT IN CONTAINER, 100 PIECES

Total of 100 pieces:

25 pieces 100 mm, width 2.5 mm, black  
25 pieces 160 mm, width 2.5 mm, natural

25 pieces 200 mm, width 3.6 mm, orange  
25 pieces 200 mm, width 3.6 mm, green

ARTIKELNR	DESCRIPTION
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<b>15.50.992</b>	Cable tie assortment in container, 100 pieces
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## CABLE TIE ASSORTMENT IN CONTAINER, 900 PIECES

Total of 900 pieces:

100 pieces 100 mm, width 2.5 mm, natural  
100 pieces 100 mm, width 2.5 mm, black  
100 pieces 100 mm, width 2.5 mm, red  
100 pieces 100 mm, width 2.5 mm, pink  
100 pieces 100 mm, width 2.5 mm, blue  
100 pieces 100 mm, width 2.5 mm, orange  
100 pieces 100 mm, width 2.5 mm, brown  
100 pieces 100 mm, width 2.5 mm, yellow  
100 pieces 100 mm, width 2.5 mm, green

ARTIKELNR	DESCRIPTION
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<b>15.50.996</b>	Cable tie assortment in container, 900 pieces
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## CABLE TIE ASSORTMENT IN CONTAINER, 650 PIECES

Total of 650 pieces:

100 pieces 200 mm, width 4.8 mm, natural  
100 pieces 200 mm, width 4.8 mm, black  
50 pieces 250 mm, width 4.8 mm, red  
50 pieces 300 mm, width 4.8 mm, black  
50 pieces 368 mm, width 4.8 mm, blue

50 pieces 140 mm, width 3.6 mm, natural

50 pieces 100 mm, width 2.5 mm, blue  
50 pieces 100 mm, width 2.5 mm, yellow  
50 pieces 100 mm, width 2.5 mm, green  
50 pieces 100 mm, width 2.5 mm, orange  
50 pieces 100 mm, width 2.5 mm, black

ARTIKELNR	DESCRIPTION
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<b>15.51.001</b>	Cable tie assortment in container, 650 pieces
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## CABLE TIE ASSORTMENT IN CONTAINER, 650 PIECES + CABLE TIE PISTOL

Total of 650 pieces + 1 cable tie pistol:

100 pieces 200 mm, width 4.8 mm, natural  
 100 pieces 200 mm, width 4.8 mm, black  
 50 pieces 250 mm, width 4.8 mm, red  
 50 pieces 300 mm, width 4.8 mm, black  
 50 pieces 368 mm, width 4.8 mm, blue

50 pieces 140 mm, width 3.6 mm, natural

50 pieces 100 mm, width 2.5 mm, blue  
 50 pieces 100 mm, width 2.5 mm, yellow  
 50 pieces 100 mm, width 2.5 mm, green  
 50 pieces 100 mm, width 2.5 mm, orange  
 50 pieces 100 mm, width 2.5 mm, black

1 piece cable tie pistol

ARTIKELNR	DESCRIPTION
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15.51.002	Cable tie assortment in container, 650 pieces + pistol
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## CABLE TYING TAPE

ARTIKELNR	WIDTH X LENGTH	COLOUR	NUMBER PER BAG
15.51.022	2.5 x 100 mm	black	100
15.51.024	2.5 x 120 mm	black	100
15.51.026	2.5 x 160 mm	black	100
15.51.028	2.5 x 200 mm	black	100
15.51.032	3.6 x 140 mm	black	100
15.51.034	3.6 x 200 mm	black	100
15.51.036	3.6 x 290 mm	black	100
15.51.038	3.6 x 368 mm	black	100
15.51.041	4.8 x 120 mm	black	100
15.51.042	4.8 x 160 mm	black	100
15.51.043	4.8 x 188 mm	black	100
15.51.044	4.8 x 200 mm	black	100
15.51.045	4.8 x 250 mm	black	100
15.51.046	4.8 x 300 mm	black	100
15.51.047	4.8 x 370 mm	black	100
15.51.048	4.8 x 430 mm	black	100
15.51.072	7.6 x 200 mm	black	100
15.51.074	7.6 x 300 mm	black	100
15.51.076	7.6 x 380 mm	black	100
15.51.082	8.0 x 450 mm	black	100
15.51.084	8.0 x 540 mm	black	100
15.51.092	9.0 x 775 mm	black	100
15.51.122	12.7 x 230 mm	black	100
15.51.124	12.7 x 580 mm	black	100



## NEOPRENE CABLE H07 RN F

Excellent and supple quality.  
Made from synthetic rubber, quality H07 RN F, and therefore suitable for submersible pumps.



### SCALE:

Per role extra B

ARTIKELNR	THICKNESS	ROLL LENGTH
15.56.215	2 x 1.5 mm <sup>2</sup>	100 m
15.56.225	2 x 2.5 mm <sup>2</sup>	100 m
15.56.315	3 x 1.5 mm <sup>2</sup>	100 m
15.56.325	3 x 2.5 mm <sup>2</sup>	100 m
15.56.415	4 x 1.5 mm <sup>2</sup>	100 m
15.56.425	4 x 2.5 mm <sup>2</sup>	100 m
15.56.525	5 x 2.5 mm <sup>2</sup>	100 m



## JUNCTION BOX

The junction boxes are made of dark blue shatter-proof and impact-resistant plastic and feature an optimal handle and integrated winding knob.

All models have 4 earthed outlets as well as thermal protection.

The reels are equipped with a vinyl cable (H05VV-F) with a moulded angled plug.

outlets : 4 x 230 V connections for earthed plugs with thermal protection  
load wound / unwound : 750 / 2300 watt  
dimensions : LxWxH = 220 x 110 x 270 mm

ARTIKELNR	LENGTH	TYPE CABLE	THICKNESS	CONNECTION	VOLTAGE
15.60.040	15 m	vinyl	3 x 1.0 mm <sup>2</sup>	4 + earth	230 V
15.60.050	15 m	vinyl	3 x 1.5 mm <sup>2</sup>	4 + earth	230 V



## CABLE REEL

The cable reels are made of a shatter-proof and impact-resistant plastic drum mounted on a steel frame.

They have 4 earthed outlets, thermal protection and a retractable winding knob.

The reels are fitted with an angled plug and have a flange diameter of 295mm.

Considering the quality of this cable reel, it is extremely well-priced.

outlets : 4 x 230 V connections for earthed plugs with thermal protection  
load wound / unwound : 1000 / 3600 watt  
dimensions : LxWxH = 321 x 271 x 385 mm

ARTIKELNR	LENGTH	TYPE CABLE	THICKNESS	CONNECTION	VOLTAGE
15.60.110	50 m	vinyl	3 x 1.5 mm <sup>2</sup>	4 + earth	230 V
15.60.114	50 m	rubber	3 x 1.5 mm <sup>2</sup>	4 + earth	230 V
15.60.115	40 m	rubber	3 x 2.5 mm <sup>2</sup>	4 + earth	230 V





# Group 2

Helm seats  
Operator seats  
Miscellaneous accessories





## HELMSMAN'S SEAT WOOD

Simple yet very robust chair made of untreated oak.

Seat width : 46 cm  
 Seat depth : 48 cm  
 Backrest height : 51 cm  
 Dimensions : wxdxh = approx. 55 x 72 x 133 cm

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.00.403	fabric	blue	with base
20.00.423	vinyl	blue	with base



## FOLD DOWN SEAT, FIRE RETARDENT

Fold down seat with fire retardant upholstery and foam.  
 The hinge is made of stainless steel and the frame is made of aluminum.  
 Seat folds down.



**Fire retardant: IMO Resolution MSC 307 (88) Annex 1 Part 8.**  
**SOLAS MED - 96/98 / EC approved.**

Seat width : 44 cm  
 Seat depth : 38 cm

Fold down seat dimensions : wxdxh= approx. 48.8 x 40.4 x 18.5 cm

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR
20.18.001	fold down seat, fire-retardent	synthetic leather	black



## TIP-UP SEAT

Simple folding seat, ideal as an extra chair that never gets in the way.  
 Seat folds upwards.

Seat width : 45 cm  
 Seat depth : 40 cm

Tip-up seat dimensions : wxdxh= approx. 52.3 x 47.9 x 10 cm  
 Back dimensions : wxdxh= approx. 45 x 30 x 4/6 cm

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR
20.18.010	tip-up seat	synthetic leather	black
20.18.040	back (fixed mounting)	synthetic leather	black

## OFFICE CHAIR

Sturdy office chair with fabric seat and mesh backrest and plastic 3D armrests with soft pads. Equipped with a synchronised mechanism and chrome-plated steel base. The wheels are suitable for both hard and soft floors.

Seat width : 49 cm  
 Seat depth : 48/55 cm  
 Backrest height : 57 cm  
 Dimensions : wxlh = approx. 70 x 70 x 107 cm  
 Hours usage : > 5 hours  
 Weight limit : up to 120 kg

standard M = manual  
 adjustable E = electrical

Seat height M  
 Seat length M : 7 cm  
 Lumbar support M  
 Seat tilt M : weight dependent  
 Armrests M : height and length

ARTIKELNO	MATERIAL	COLOUR	TYPE
<b>20.34.400</b>	fabric	black	with base



## HELMSMAN'S SEAT MAINE

A classic chair with a robust design. We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 48 cm  
 Seat depth : 47 cm  
 Back height : 41 cm  
 Dimensions : wxlh = ca. 59 x 65 x 50 cm

ARTIKELNO	MATERIAL	COLOUR	TYPE
<b>20.27.000</b>	fabric	black	without base
<b>20.27.003</b>	fabric	dark blue	without base
<b>20.27.010</b>	vinyl	black	without base



## HELMSMAN'S SEAT HAYDN

Good value chair and comfortable, even for tall people. Model with integral head rest. We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 44 cm  
 Seat depth : 52 cm  
 Back height : 82 cm, incl. permanent head rest  
 Dimensions : wxlh = approx. 60 x 83 x 93 cm

standard M = manual  
 adjustable E = electrical

Back M : back folds back to horizontal position  
 Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
<b>20.30.002</b>	fabric	dark grey	without base
<b>20.30.010</b>	vinyl	black	without base





## HELMSMAN'S SEAT BACH

Particularly attractive seat for a good price, comfortable thanks to thick cushions and broad armrests. We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 47 cm  
 Seat depth : 47 cm  
 Back height : 78 cm  
 Dimensions : wlxh= approx. 61 x 80 x 90 cm

standard M = manual  
 adjustable E = electrical

Lumber support M  
 Back M : back folds back to horizontal position  
 Head rest M  
 Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.36.002	fabric	dark grey	without base
20.36.003	fabric	blue	without base



## HELMSMAN'S SEAT SCHUBERT

Simple but robust seat. We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 46 cm  
 Seat depth : 50 cm  
 Back height : 80 cm  
 Dimensions : wlxh= approx. 59 x 64 x 94 cm

standard M = manual  
 adjustable E = electrical

Lumber support M  
 Back M : back folds back to horizontal position  
 Head rest M  
 Armrests M : folding

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.42.010	vinyl	black	without base



## HELMSMAN'S SEAT MARYLAND, TIP UP

Simple but comfortable seat that tips up. Suitable for a smaller wheel house or if the second helmsman's seat may not take up too much space.

**Only suitable for Zwaardvis base!**

Seat width : 48 cm  
 Seat depth : 43 cm  
 Back height : 55 cm  
 Dimensions : wlxh= approx. 60 x 54 x 69 cm  
 Dims. folded up : wlxh= approx. 60 x 35/45 x 69 cm

standard M = manual  
 adjustable E = electrical

Seat M : folding  
 Armrests M : folding

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.54.000	fabric	black	without base
20.54.003	fabric	dark blue	without base
20.54.010	vinyl	black	without base

## HELMSMAN'S SEAT WEBER

Simple but comfortable seat that tips up. Suitable for a smaller wheel house or if the second helmsman's seat may not take up too much space.

We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width	: 45 cm
Seat depth	: 43 cm
Back height	: 54 cm
Dimensions	: wxlxh= approx. 58 x 65 x 62 cm
Dims. folded up	: wxlxh= approx. 59 x 25/40 x 62 cm

standard	M = manual
adjustable	E = electrical

Seat	M : folding
Armrests	M : folding

ARTIKELNO	MATERIAL	COLOUR	TYPE
<b>20.57.002</b>	fabric	dark grey	without base



## HELMSMAN'S SEAT STRAUSS

Chair with excellent adjustment possibilities and good seat comfort at an affordable price.

We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width	: 49 cm
Seat depth	: 46/51 cm
Backrest height	: 80 cm
Dimensions	: W x L x H = approx. 62 x 68 x 90 cm

standard	M = manual
adjustable	E = electrical

Seat height	M
Seat tilt	M
Seat length	M : 5 cm
Backrest	M : fully reclining back
Headrest	M
Armrests	M : folding

ARTIKELNO	MATERIAL	COLOUR	TYPE
<b>20.58.005</b>	fabric	black / dark grey	without base



## HELMSMAN'S SEAT RAVEL (EX RHONE)

The basic version of this seat has been on the market for 15 years. Its appearance is elegant, it has excellent quality and it is comfortable.

Note in particular the leather version - covered completely in A quality light resistant leather.

We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width	: 49 cm
Seat depth	: 46 cm
Back height	: 76 cm
Dimensions	: wxlxh= approx. 62 x 64 x 85 cm

standard	M = manual
adjustable	E = electrical

Lumber support	M
Back	M : back folds back to horizontal position
Head rest	M
Armrests	M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
<b>20.75.005</b>	fabric	black / grey	without base
<b>20.75.020</b>	leather	black	without base





## HELMSMAN'S SEAT MAHLER

Heavy duty seat, well finished and very comfortable.

We advise a Notus or Norsap Universal base, for professional use and fits almost every seat.

Seat width : 54 cm  
 Seat depth : 49 cm  
 Back height : 80 cm  
 Dimensions : wlxh= approx. 68 x 76 x 85 cm

standard M = manual  
 adjustable E = electrical

Lumber support M  
 Back M : back folds back to horizontal position  
 Head rest M  
 Armrests M : folding

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.78.005	fabric	black / grey	without base
20.78.065	leather / vinyl / fabric	black / grey	without base
20.78.070	leather / vinyl	black	without base



## HELMSMAN'S SEAT SAN DIEGO

The San Diego offers the ultimate in comfort and class.

Delivered with high pre-shaped back and solid ergonomically shaped seat.

With folds back and adjustable arm rests and adjustable back and head rests.

Available in several leather colours.

We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 54 cm  
 Seat depth : 50 cm  
 Back height : 74 cm  
 Dimensions : wlxh= approx. 66 x 67 x 90 cm

standard M = manual  
 adjustable E = electrical

Back rest M  
 Head rest M  
 Arm rests M : folds back, upholstered

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.90.020	leather	black	without base
20.90.021	leather	light grey	without base
20.90.022	leather	dark grey	without base
20.90.023	leather	dark blue	without base



## HELMSMAN'S SEAT LEHAR LUXE

Absolutely everything in this seat can be adjusted, which makes it extremely comfortable, even for people of very different sizes and shapes. We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 44 cm  
 Seat depth : 48/52 cm  
 Back height : 80 cm  
 Dimensions : wlxh= approx. 62 x 68 x 103 cm

standard M = manual  
 adjustable E = electrical

Seat height M  
 Seat angle M  
 Seat thickness M : 10 cm  
 Lumber support M : 2 above each other  
 Back M  
 Head rest M  
 Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.93.006	fabric	grey + yellow striping	without base
20.93.020	leather	black	without base
20.93.022	leather	dark grey + orange stitching	without base



## HELMSMAN'S SEAT VIVALDI

The last word in comfort! Recommended by doctors and physiotherapists. High back with integral headrest. Very suitable for medium-sized people. We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 48 cm  
 Seat depth : 49 cm  
 Back height : 78 cm  
 Dimensions : wlxh= approx. 62 x 73 x 90 cm

standard M = manual  
 adjustable E = electrical

Back M : back folds back to horizontal position  
 Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.96.002	fabric	dark grey	without base

## HELMSMAN'S SEAT CHOPIN

This beautifully made chair is particularly suitable for tall people and provides the best possible support to spine and legs. We advise a Notus or Norsap universal base, for professional use and fits "almost" every seat.

Seat width : 49 cm  
 Seat depth : 52 cm  
 Back height : 58 cm  
 Dimensions : wlxh= approx. 63 x 82 x 90 cm

standard M = manual  
 adjustable E = electrical

Back M : back folds back to horizontal position  
 Head rest M  
 Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
20.99.002	fabric	dark grey	without base





## HELMSMAN'S SEAT RECARO MARITIME ATLANTIC

The Atlantic provides excellent comfort when used for extended periods. This seat has meanwhile become a classic and is being used by many devotees. A lumbar support (22.10.950) is available as an extra. You can adjust the curvature of the back using a small manual pump.

Seat width : 56 cm  
 Seat depth : 50-55 cm  
 Back height : 78 cm  
 Dimensions : wlxh= approx. 71 x 80 x 84 cm

standard adjustable M = manual  
 E = electrical

Seat thickness M : 10 cm  
 Back M : back folds back to horizontal position  
 Head rest M  
 Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
21.10.000	fabric	black, armrests NOT covered, seat NOT extending	without base
21.20.000	fabric	black	without base
21.20.020	leather / vinyl	black	without base
21.20.040	dynamic / vinyl	black (armrests NOT covered)	without base



## HELMSMAN'S SEAT RECARO MARITIME NORTHSEA

The variable length seat provides your thighs with superior support. The profiling of the back and cushions gives your body support and comfort. A lumbar support is built in as standard. You can adjust the curvature of the back using a small manual pump.

Seat width : 57 cm  
 Seat depth : 50-55 cm  
 Back height : 81 cm  
 Dimensions : wlxh= approx. 71 x 75 x 95 cm

standard adjustable M = manual  
 E = electrical

Seat thickness M : 10 cm  
 Lumber support M  
 Back M  
 Head rest permanent  
 Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
21.30.070	leather	black	without base

## HELMSMAN'S SEAT RECARO MARITIME CASPIAN

The Caspian gives you comfort and refinement down to the last detail.  
The variable length seat provides your thighs with effective support.  
The profiled back and cushion filling gives optimal support to your whole body.  
A lumbar support is built in as standard. You can adjust the curvature of the back.

Seat width : 56 cm  
Seat depth : 50-55 cm  
Back height : 83 cm  
Dimensions : wlxh= approx. 71 x 68 x 96 cm

standard M = manual  
adjustable E = electrical

Seat thickness M : 10 cm  
Lumber support M or E, 12 volt  
Seat angle E, 12 volt  
Back M  
Head rest M  
Armrests M : folding, covered

ARTIKELNO	MATERIAL	COLOUR	TYPE
21.35.000	fabric	black	NO seat inclination, without base
21.35.020	leather	black	NO seat inclination, without base
21.45.000	fabric	black	Caspian-E, 12 volt, without base
21.45.953	Battery pack, 12 volt + charger 220 volt		
21.45.955	Converter 24V - 12V		



## HELMSMAN'S SEAT RECARO MARITIME CASPIAN DE LUXE

The Caspian gives you comfort and refinement down to the last detail.  
The variable length seat provides your thighs with effective support.  
The profiled back and cushion filling gives optimal support to your upper body.  
A lumbar support is built in as standard. You can adjust the curvature of the back.  
Complete with climate package

Seat width : 56 cm  
Seat depth : 50-55 cm  
Back height : 83 cm  
Dimensions : wlxh= approx. 71 x 68 x 96 cm

standard M = manual  
adjustable E = electrical

Seat angle E  
Seat thickness M : 10 cm  
Lumber support E  
Back E  
Head rest M  
Ventilation E  
Heating E  
Armrests M : folding, covered

Voltage : 12 volt, 16 A

ARTIKELNO	MATERIAL	COLOUR	TYPE
21.55.000	fabric	black	without base
21.55.020	leather	black	without base
21.45.955	Converter 24V - 12V		





## HELMSMAN'S SEAT RECARO MARITIME CARIBBEAN

The Caribbean is the absolute top in comfort and ease of operation. The night design controls enable you to adjust the back, height and inclination electrically. You also operate the unique Recaro Airmatic system using the same control panel. Including climate package (heating + ventilation of seat and back). You adjust the curvature of the lumbar and shoulder support using 6 built in air chambers. The base can be modified to suit any work environment. The Recaro Caribbean is available in all colours. You can also provide your own covering material.

Seat width : 56 cm  
 Seat depth : 50-55 cm  
 Back height : 83 cm  
 Dimensions : wlxh= approx. 71 x 68 x 96 cm

standard M = manual  
 adjustable E = electrical

Sides E  
 Seat height E  
 Seat angle E  
 Seat thickness M : 10 cm  
 Seat width E  
 Lumbar support E : 2 above each other  
 Back E : + folds back  
 Head rest M  
 Armrests M : folding, covered

Voltage : 12 volt, 8 A

ARTIKELNO	MATERIAL	COLOUR	TYPE
21.65.000	fabric	black	without base
21.65.020	leather	black	without base
21.45.955	Converter 24V - 12V		

## FLOOR FOOTREST

Is placed on the floor if a footrest on the seat is not possible.  
Adjustable from 8 to 29 cm.

ARTIKELNO	DESCRIPTION
21.99.030	Floor footrest



## HELMSMAN'S SEAT, WHEELS AND SLIDING FOOT

Height 50 mm and with or without brake, load capacity 50 kg per wheel.

ARTIKELNO	TYPE	WITH OR WITHOUT BRAKE	MOUNTING	DESCRIPTION
22.30.904	hard	no	pin 11 mm	Zwaardvis, Notus, Hydromar
22.30.905	hard	yes	pin 11 mm	Zwaardvis, Notus, Hydromar
22.30.906	soft	yes	pin 11 mm	Zwaardvis, Notus, Hydromar
22.30.907	hard	no	M8	Norsap old
22.30.908	hard	yes	M8	Norsap old
22.30.910	hard	yes	M10	Norsap new, around March 2009
22.30.920	sliding foot, hard and flat	no	pin 11 mm	Zwaardvis, Notus, Hydromar



## HELMSMAN'S SEAT, LUMBAR SUPPORTS

ARTIKELNO	DESCRIPTION	TYPE
22.10.950	lumbar support. 1 chamber	air, manually operated
22.10.951	lumbar support. 3 chambers	air, manually operated



## HELMSMAN'S SEAT, SEAT BELTS



ARTIKELNO	DESCRIPTION	TYPE
22.10.960	seat belt	2-point, static
22.10.961	seat belt	2-point, belt tensioner
22.10.962	seat belt	2-point, static, flexible belt insert
22.10.963	seat belt	2-point, tension roller, flexible belt insert
22.10.964	seat belt	4-point, static



## HELMSMAN'S SEAT, SUSPENDED BASE

ARTIKELNO	DESCRIPTION	TYPE
22.10.980	suspended base	mechanical, MSG85H



## HELMSMAN'S SEAT, MISCELLANEOUS

ARTIKELNO	DESCRIPTION	TYPE
22.10.995	protective nylon cover	for all seats (bag model)

## NOTUS, COMPLETE BASE

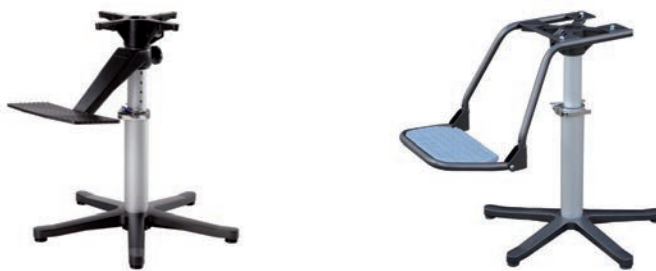
For professional use and fits every seat.

Reliable and well-finished base for small and medium-sized helmsman's seats, fits under every seat.

All parts are made from heavy duty aluminium profiles or cast iron parts and given a anthracite grey epoxy coating.

Notus, Greek god of southerly wind.

Adjustable : from 56 to 80 cm high in 3 cm steps (five star base and flat base)



ARTIKELNO	DESCRIPTION
22.30.201	standard footrest
22.30.203	folds back footrest long (steel)

## NOTUS, SEAT SUPPORT FOR 60 / 76 MM COLUMN

ARTIKELNO	DESCRIPTION	SERIAL NUMBER
22.30.210	seat support	Z.63763N



## NOTUS, SEAT SLIDE

For a maximum length adjustment of 18 cm.

ARTIKELNO	DESCRIPTION	NORSAP TYPENUMBER
22.30.215	seat slide	3701



## NOTUS, SEPERATE 60 / 76 MM COLUMN

ARTIKELNO	DESCRIPTION	HEIGHT	SERIAL NUMBER
22.30.268	standard	56 / 80 cm	Z.67561N



## NOTUS, FOOTREST FOR 60 / 76 MM COLUMN



ARTIKELNO	DESCRIPTION	TYPE	SERIAL NUMBER
<b>22.30.410</b>	five star base	diameter 680 mm, with 5 sliding feet	Z 64030N
<b>22.30.420</b>	folds back long (steel)	not adjustable in height but rotatable	Z 64301N
<b>22.30.421</b>	folds back short (steel)	not adjustable in height but rotatable	Z 64302N



## NOTUS, BASE FOR 60 / 76 MM COLUMN

ARTIKELNO	DESCRIPTION	TYPE	SERIAL NUMBER
<b>22.30.450</b>	five star base	diameter 680 mm, with 5 sliding feet	Z 64030N
<b>22.30.455</b>	flat base	diameter 249 mm, for permanent position	Z 64070N



## NOTUS, SMALL COMPONENTS

ARTIKELNO	DESCRIPTION	SERIAL NUMBER
<b>22.30.460</b>	Stainless steel protection ring	Z.64176N
<b>22.30.498</b>	column inner pipe (60mm)	72.02816
<b>22.30.499</b>	split pin	Z.64175N



## NORSAP UNIVERSAL, COMPLETE BASE

NorSap Universal base for professional use.

Highly reliable and nicely finished base from Norsap, equipped with gas spring for stepless height adjustment and 360 degrees turnable

Adapter plate : black powder-coated aluminium  
 Footrest : black powder-coated aluminium  
 Column : anodised aluminium  
 Seat support : composite (fiber-reinforced plastic)

standard M = manual  
 adjustable E = electrical

Seat slide M : 18 cm  
 Footrest M : folding  
 Rotating M : 360 degrees (2 locking positions)  
 Column M : adjustable height with gas spring and shock absorption

ARTIKELNO	DESCRIPTION	HEIGHT	NORSAP TYPENUMBER
<b>22.40.260</b>	Norsap Universal, complete flat base	56.0 / 80.0 cm	6180
<b>22.40.460</b>	Norsap Universal, complete five star base	55.5 / 79.5 cm	6190





## ZWAARDVIS, COMPLETE BASE

The column is grey anodized, the other aluminium parts have a grey epoxy coating, suitable for small and lighter seats.

ARTIKELNO	DESCRIPTION	HEIGHT
22.50.505	manual standard	56 / 80 cm
22.50.507	gas spring standard	58 / 83 cm



## ZWAARDVIS, SEAT SUPPORT FOR 60 / 76 MM COLUMN

ARTIKELNO	DESCRIPTION	SERIAL NUMBER
22.50.561	seat support for 60 / 76 mm column	Z 63760



## ZWAARDVIS, SEAT SLIDE

For a maximum length adjustment of 20 cm.

ARTIKELNO	DESCRIPTION	SERIAL NUMBER
22.50.580	seat slide	Z 64220



## ZWAARDVIS, SEPERATE 60 / 76 MM COLUMN

ARTIKELNO	TYPE	HEIGHT	MODEL	SERIAL NUMBER
22.50.606	manual	56 / 80 cm	standard	Z.62070A
22.50.710	manual	45 / 59 cm	medium	Z.62071A
22.50.720	manual	36 / 45 cm	low	Z.62080A
22.50.745	gas spring	48 / 57 cm	medium	Z.62073A
22.50.750	gas spring	58 / 83 cm	standard	Z.62510A

**ZWAARDVIS, FOOTREST FOR 60 / 76 MM COLUMN**

ARTIKELNO	MATERIAL	MOUNTING	MODEL	SERIAL NUMBER
22.50.820	aluminum	column mounting	rotating	Z.64300
22.50.824	stainless steel	seat mounting	fixed, long, folding footrest	Z.64301G
22.50.826	stainless steel	seat mounting	fixed, short, folding footrest	Z.64302G



**ZWAARDVIS, BASE FOR 60 / 76 MM COLUMN**

ARTIKELNO	MODEL	DIAMETER	SERIAL NUMBER
22.50.850	five star base	62 cm	Z.64030
22.50.871	flat base surface mounted	27 cm	Z.64065
22.50.881	flat base recessed	23 cm	Z.64015



**ZWAARDVIS, SMALL COMPONENTS**

ARTIKELNO	DESCRIPTION	TYPE	SERIAL NUMBER
22.50.933	locking clip	height adjustment	Z.64170
22.50.935	column + footrest knob	fine thread, short	12.00001
22.50.937	seat support knob	long bolt, M10	12.00002
22.50.940	column inner pipe	430 x 60 mm, aluminium	72.62070
22.50.941	column inner pipe upper bearing	Delrin	95.01102
22.50.942	cap for footrest 64015	Delrin	Z.64016
22.50.944	gas spring operating handle	stainless steel	12.00003
22.50.945	column inner pipe lower bearing	Delrin	95.01108





## HYDROMAR BASE

Unequalled quality, almost everything made from stainless steel.  
Hydromar bases fit under any helmsman's seat.



## HYDROMAR, SEAT SLIDE

Standard : 20 cm, height 25 mm

ARTIKELNO	DESCRIPTION
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22.70.068	Hydromar seat slide
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## HYDROMAR, FIVE STAR BASE

Aluminium : height approx. 8.5 cm

ARTIKELNO	DESCRIPTION
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22.70.075	Hydromar five star base
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## HYDROMAR, LD COLUMN

Hydraulic column with foot operation and seat support.  
The foot pedal is used to raise it, lower it and to prevent the seat rotating.  
Take the neutral position into account when purchasing.

height : minimum 27 cm, maximum 42 cm (= 15 cm)

colour : stainless steel

ARTIKELNO	DESCRIPTION
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22.70.110	Hydromar LD column
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## HYDROMAR, INSERT FOR FIVE STAR BASE VOET

ARTIKELNO	HEIGHT
-----------	--------

22.70.205	5 cm
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22.70.210	10 cm
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22.70.215	15 cm
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22.70.220	20 cm
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22.70.225	25 cm
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## HYDROMAR, OFFSHORE COLUMN

Extra heavy duty hydraulic column for seagoing vessels, with seat support.  
The foot pedal is used to raise it, lower it and to prevent the seat rotating.

height : minimum 36.5 cm, maximum 56 cm (= 20 cm)  
colour : stainless steel (on request available in stainless steel 316 at extra cost)

ARTIKELNO	DESCRIPTION
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22.70.510	Hydromar offshore column
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## HYDROMAR, OFFSHORE LOWER FLANGE

ARTIKELNO	HEIGHT
-----------	--------

22.70.605	5 cm
22.70.610	10 cm
22.70.615	15 cm
22.70.620	20 cm
22.70.625	25 cm
22.70.630	30 cm
22.70.635	35 cm
22.70.640	40 cm



## HYDROMAR, FOOTREST

Folding version, made completely from stainless steel.



ARTIKELNO	WITH BASE OF
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22.70.850	empty
22.70.855	duropol
22.70.860	teak
22.70.865	stainless steel



## HYDROMAR, CARBON COLUMN

Well-finished electric column with seat support.  
Control from the seat

Height : minimum 35 cm, maximum 75 cm  
Colour : Carbon, dark grey

ARTIKELNO	DESCRIPTION
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<b>22.70.910</b>	Hydromar carbon column
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## MULTI RAIL

A multifunctional rail system that enables the helmsman's seat to be moved forwards and backwards. A silent movement brings all necessary equipment within easy reach. The helmsman can concentrate fully on navigation!

The self-lubricating sliding system ensures stability, easy movement and excellent locking. These are all elements that benefit the safety of the vessel and the crew. The stainless steel construction and a special fabricfree sealing method guarantee minimum maintenance and maximum lifespan. It is possible to mount several seats on one rail system or, for example, a seat and a radar screen.

- Stainless steel construction
- Self-lubricating slides
- Built in or surface mounted system possible
- Dust proof
- Can be locked in any position
- Available in lengths up to 6 metres
- Several applications on one rail system
- Easy to install
- Electrical or foot operation



## MULTI RAIL, RAILS

Easy to install, one model for built in or surface mounted.

material : Stainless steel  
 recess depth : 40 mm  
 height : built in, 50 mm  
                   : surface mounted, 90 mm  
 width of rails : 500 mm  
 voltage : 24 volt, 8 A



ARTIKELNO	LENGTH
22.82.410	100 cm
22.82.412	120 cm
22.82.415	150 cm
22.82.420	200 cm
22.82.425	250 cm
22.82.430	300 cm



## MULTI RAIL, CENTRAL SHEET

This seals the gap between the rails.

ARTIKELNO	LENGTH	MATERIAL
<b>22.98.510</b>	100 cm	Duropol
<b>22.98.512</b>	120 cm	Duropol
<b>22.98.515</b>	150 cm	Duropol
<b>22.98.520</b>	200 cm	Duropol
<b>22.98.525</b>	250 cm	Duropol
<b>22.98.710</b>	100 cm	teak
<b>22.98.712</b>	120 cm	teak
<b>22.98.715</b>	150 cm	teak
<b>22.98.720</b>	200 cm	teak
<b>22.98.725</b>	250 cm	teak



## MULTI RAIL, FINISHING TRIM

If the Multi Rail is not built in, this finishing trim completes the installation perfectly.

material : stainless steel

ARTIKELNO	LENGTH
<b>22.98.910</b>	100 cm
<b>22.98.912</b>	120 cm
<b>22.98.915</b>	150 cm
<b>22.98.920</b>	200 cm
<b>22.98.925</b>	250 cm



## WORK SEAT NORSAP 800

Low work seat model, without footrest.  
Robust seat, with many adjustment options, special designed for continuous use under severe conditions, for example naval command centres, offshore and dredging.  
If necessary, easily interchangeable cushions.

**Column** : round Ø 80 mm  
Seat width : 47 cm  
Seat depth : 46 cm  
Back height : 76 cm

Dimensions wxlh= approx. 61 x 63 x 90 cm

standard M = manual  
adjustable E = electrical

Seat angle M  
Seat slide M : 9 cm  
Rotating M : 360 degree  
Back M  
Armrests M : folding  
Column M : gas spring

Upholstery : black leather for heavy use, other colours or material on request.

## NORSAP 800 OFFICE, FIVE STAR BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.03.450	leather	black	gas spring, adjustable: 52 / 62 cm	6150



## NORSAP 800 OPERATOR, FLAT BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.06.240	leather	black	gas spring, adjustable: 46 / 56 cm	6171
27.06.250	leather	black	gas spring, adjustable: 50 / 60 cm	6170



# HELMSMAN'S SEAT NORSAP 800

## HELMSMAN'S SEAT NORSAP 800

Robust seat, especially designed for seagoing shipping.  
Many adjustment options.  
Comes as standard with seat slide and large fold-up footrest.  
If necessary, easily interchangeable cushions.

**Column** : round Ø 80 mm  
Seat width : 47 cm  
Seat depth : 46 cm  
Back height : 76 cm

Dimensions : wlxhx= approx. 61 x 63 x 90 cm

standard M = manual  
adjustable E = electrical

Seat angle M  
Seat slide M : 9 cm  
Rotating M : 360 degrees (with the exception of the standard version, it is not rotatable)  
Back M  
Armrests M : folding  
Column M : gas spring or fixed height

Upholstery : black leather for heavy use, other colours or material on request.

## NORSAP 800 STANDARD, FLAT BASE

This standard version is not height adjustable, but it can be shortened.  
Seat cannot swivel!

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.09.280	leather	black	fixed height : 87 cm	6101



## NORSAP 800 COMFORT, FLAT BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.12.270	leather	black	gas spring, adjustable: 70 / 87 cm	6200



## NORSAP 800 COMFORT, FIVE STAR BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.12.470</b>	leather	black	gas spring, adjustable: 72 / 89 cm	6130



## NORSAP 800, SEPERATE SEAT

Separate NS 800 seat, without a base.

If mounted in combination with a bottom adapter plate (art. no. 27.99.001) the seat can also be adjusted horizontally by 9 cm. We recommend always mounting this seat on a Norsap base or on a flat stable surface together with a bottom adapter plate.

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.09.020</b>	separate seat NS 800, without base	leather	black	R-0012



## NORSAP 800, OPTIONS

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.12.905</b>	seat cover set (4 pieces)	artificial leather	black	6284
<b>27.12.906</b>	seat cover set (4 pieces)	fabric	black	6283



# HELMSMAN'S SEAT NORSAP 1000

## HELMSMAN'S SEAT NORSAP 1000

Professional seat especially for seagoing shipping with an extra heavy duty base with many adjustment options, comes as standard with seat slide and large fold-up footrest.

Extra sitting comfort because the seat depth is linked to the back: When the position of the back changes, so does the seat depth. If necessary, easily interchangeable cushions.

**Column** : round Ø 100 mm  
Seat width : 47 cm  
Seat depth : 50 cm  
Back height : 90 cm

Dimensions : wlxh= approx. 65 x 69 x 96 cm

standard M = manual  
adjustable E = electrical

Seat angle M  
Seat slide M : 9 cm  
Footrest M : folding  
Rotating M : 360 degrees (with the exception of the standard version, it is not rotatable)  
Back M  
Armrests M : folding and covered  
Column M : gas spring or fixed height

Cable duct : possibility of guiding cables through the arm rest, chair and column  
Upholstery : black leather for heavy use, other colours or material on request.

## NORSAP 1000 STANDARD, FLAT BASE

This standard version is not height adjustable, but can be shortened to approximately 530 mm, without footrest to approximately 400 mm. Seat cannot swivel!

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.15.290	leather	black	fixed height: 90 cm	6000



## NORSAP 1000 STANDARD, FIVE STAR BASE

This standard version is not height adjustable, but it can be shortened to approx. 530 mm, without footrest to approx. 400 mm. Seat cannot swivel!

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.15.480	leather	black	fixed height: 80 cm	6015



## NORSAP 1000 COMFORT, FLAT BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.18.260</b>	leather	black	gas spring, adjustable: 63 / 77 cm	6020
<b>27.18.270</b>	leather	black	gas spring, adjustable: 69 / 90 cm	6010



## NORSAP 1000 COMFORT, FIVE STAR BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.18.460</b>	leather	black	gas spring, adjustable: 65 / 79 cm	6027
<b>27.18.470</b>	leather	black	gas spring, adjustable: 71 / 92 cm	6025



## NORSAP 1000, SEPERATE SEAT

Separate NS 1000 seat, without a base.

Is used in the fishing and other industries to be mounted on a wooden crate.

If mounted in combination with a bottom adapter plate (art. no. 27.99.001) the seat can also be adjusted horizontally by 9 cm.

We recommend always mounting this seat on a Norsap base or on a flat stable surface together with a bottom adapter plate.

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.15.020</b>	separate seat NS 1000, without base	leather	black	R-0009





## NORSAP 1000, OPTIONS

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.99.000</b>	foot rail on footrest	aluminium		6030



ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.18.905</b>	seat cover set (4 pieces)	skai	black	6041
<b>27.18.906</b>	seat cover set (4 pieces)	fabric	black	6050

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.18.911</b>	arm rest left with opening for insert	leather	black	DEL-175V
<b>27.18.912</b>	arm rest right with opening for insert	leather	black	DEL-175H



ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.99.020</b>	insert cupholder	aluminium		DEL-623
<b>27.99.021</b>	insert Delta 600 Alphatron	aluminium		DEL-508
<b>27.99.022</b>	insert Sigma 600 Radio Holland	aluminium		DEL-630
<b>27.99.023</b>	insert Falcon 600 Radio Holland	aluminium		19096-086

## HELMSMAN'S SEAT NORSAP 1100

Professional seat specially for seagoing shipping with an extra heavy support with many adjustment options, includes as standard seat slide and large folding foot rest.

Modern, timeless and also a daring design, useful for many situations in shipping, but most certainly also outside of shipping.

Many built-in functions and adjustment options.

If necessary, cushions can be replaced easily.

**Column** : round Ø 100 mm

Seat width : 48.5 cm

Seat depth : 47.0 cm

Back height : 83 cm

Dimensions : wxlxh= approx. 68 x 65 x 88 cm

standard M = manually

adjustable E = electric

Seat slide M : 9 cm

Foot rest M : folds back

Rotation M : 360 degrees

Back M : can go to almost horizontal position

Arm rests M : folds back and upholstered

Column M : height adjustable with gas spring and shock absorber

Upholstery : black leather for heavy use, other colours or material on request

## NORSAP 1100 COMFORT, FLAT BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER	DESCRIPTION
<b>27.24.240</b>	leather	black	gas spring, adjustable: 39 / 49 cm	5025	NO foot rest
<b>27.24.250</b>	leather	black	gas spring, adjustable: 51 / 69 cm	5050	
<b>27.24.260</b>	leather	black	gas spring, adjustable: 63 / 92 cm	5075	



## NORSAP 1100 COMFORT, FIVE STAR BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER	DESCRIPTION
<b>27.24.440</b>	leather	black	gas spring, adjustable: 41 / 51 cm	5080	NO foot rest
<b>27.24.450</b>	leather	black	gas spring, adjustable: 53 / 71 cm	5083	
<b>27.24.460</b>	leather	black	gas spring, adjustable: 65 / 94 cm	5085	





## NORSAP 1100, SEPERATE SEAT

Separate NS 1100 seat, without a base.  
Is used in the fishing and other industries to be mounted on a wooden crate.  
The seat is supplied including a swivel plate, which allows the seat to rotate 360 degrees.  
We recommend always mounting this seat on a Norsap base or on a flat stable surface.

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.21.020	separate seat NS 1100, without base	leather	black	5090



## NORSAP 1100, OPTIONS

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.99.000	foot rail on footrest	aluminium		6030



## HELMSMAN'S SEAT NORSAP 1500

The top of this range of seagoing helmsman's seats.  
Robust and professional seat especially for seagoing shipping with an extra heavy duty base with many adjustment options, comes as standard with seat slide and large fold-up footrest.  
If necessary, easily interchangeable cushions.

**Column** : round Ø 150 mm

Seat width : 49 cm

Seat depth : 55-60 cm

Back height : 82 cm

Dimensions : wlxh= approx. 69 x 75 x 104 cm

Dims. folded up : wlxh= approx. 69 x 46 x 104 cm

standard M = manual

adjustable E = electrical

Seat angle M : 3 cm

Seat thickness M : 4 cm

Seat folding M : extra space

Seat slide M : 9 cm

Footrest M : folding

Rotating M : 360 degrees (with the exception of the standard version, it is not rotatable)

Back M : with gas spring

Folding back M : optional

Armrests M : folding and covered

Column M : gas spring or fixed height

Cable duct : possibility of guiding cables through the arm rest, chair and column

Upholstery : black leather for heavy use, other colours or material on request

## NORSAP 1500 STANDARD, FLAT BASE

This standard version is not height adjustable, but it can be shortened to approx. 550 mm, without footrest to approx. 430 mm.  
Seat cannot swivel!

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.27.280	leather	black	fixed height: 88 cm	6400



## NORSAP 1500 STANDARD, FIVE STAR BASE

This standard version is not height adjustable, but it can be shortened to approx. 550 mm, without footrest to approx. 410 mm.  
Seat cannot swivel!

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.27.480	leather	black	fixed height: 88 cm	6410





## NORSAP 1500 COMFORT, FLAT BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.30.260</b>	leather	black	gas spring, adjustable: 63 / 73 cm	6520
<b>27.30.270</b>	leather	black	gas spring, adjustable: 67 / 80 cm	6510
<b>27.30.280</b>	leather	black	gas spring, adjustable: 72 / 92 cm	6500



## NORSAP 1500 COMFORT, FIVE STAR BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.30.460</b>	leather	black	gas spring, adjustable: 65 / 75 cm	6525
<b>27.30.470</b>	leather	black	gas spring, adjustable: 69 / 82 cm	6530
<b>27.30.480</b>	leather	black	gas spring, adjustable: 75 / 94 cm	6535



## NORSAP 1500, SEPERATE SEAT

Separate NS 1500 seat, without a base.

Is used in the fishing and other industries to be mounted on a wooden crate.

If mounted in combination with a bottom adapter plate (art. no. 27.99.001) the seat can also be adjusted horizontally by 9 cm.

We recommend always mounting this seat on a Norsap base or on a flat stable surface together with a bottom adapter plate.

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.27.020</b>	separate seat NS 1500, without base	leather	black	R-0010

## HELMSMAN'S SEAT NORSAP 1500 BIG

Like NS 1500 helmsman's seat but 15 cm wider.  
If mounted in combination with a bottom adapter plate (art. no. 27.99.001) the seat can also be adjusted horizontally by 9 cm.  
We recommend always mounting this seat on a Norsap base or on a flat stable surface together with a bottom adapter plate.  
If necessary, easily interchangeable cushions.

Seat width : 64 cm  
Seat depth : 55-60 cm  
Back height : 82 cm  
Dimensions : wlxh= approx. 83 x 90 x 104 cm  
Dims. folded up : wlxh= approx. 83 x 46 x 104 cm

standard M = manual  
adjustable E = electrical

Seat angle M : 3 cm  
Seat folding M : extra space  
Seat slide M : 9 cm  
Back M : with gas spring  
Folding back M : **optional**  
Armrests M : folding and covered

Cable duct : possibility of guiding cables through the arm rest and chair  
Upholstery : black leather for heavy use, other colours or material on request



ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.33.020	separate seat NS 1500 Big, without base	leather	black	R-0036

## NORSAP 1500, OPTIONS

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.30.900	heightening armrest 5 cm (per pair)	aluminium		DEL-6503



ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.30.901	foot rail on footrest	aluminium		6340



27.27.973	electric heated footrest, 220 Volt	aluminium		
27.27.974	electric heated rug for footrest, 220 Volt			



27.30.903	folds back backrest, horizontal	aluminium		6421, BUILD IN
27.33.908	folds back backrest, horizontal BIG	aluminium		DEL-128H

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.30.905	seat cover set (4 pieces)	skai	black	6451
27.30.906	seat cover set (4 pieces)	fabric	black	6470



ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.30.911	arm rest left with opening for insert	leather	black	DEL-129V
27.30.912	arm rest right with opening for insert	leather	black	DEL-129H

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
27.99.020	insert cupholder	aluminium		DEL-623
27.99.021	insert Delta 600 Alphanon	aluminium		DEL-508
27.99.022	insert Sigma 600 Radio Holland	aluminium		DEL-630
27.99.023	insert Falcon 600 Radio Holland	aluminium		19096-086



## HELMSMAN'S SEAT NORSAP 1600

The NorSap1600 is a sturdy and comfortable chair, extremely suitable for demanding environments. Compact in size and easy to install. The armrests offer ample space for concealing cables and installing equipment. The user-friendly buttons for seat height and backrest adjustment are conveniently located in the armrest. A large, folding footrest is supplied as standard. If necessary, easily interchangeable cushions can be supplied.

<b>Column</b>	<b>: round : Ø 150 mm</b> <b>: oval 150 x 200 mm</b>
Seat width	: 45 cm
Seat depth	: 55-58 cm
Backrest height	: 85 cm
Dimensions	: W x L x H = approx. 70 x 75 x 108 cm
standard adjustable	M = manually E = electric
Seat length	M : 3 cm
Footrest	M : folding and adjustable in height
Swivel function	M : 360 degrees
Backrest	M : with gas spring
Folding back	M : optional (only suitable for Norsap 1600 with aluminium backrest)
Armrests	M : folding and covered
Column	M : gas spring
Cable duct	: possibility of guiding cables through the arm rest, chair and column
Upholstery	: black leather for heavy use, other colours or material on request

## NORSAP 1600 COMFORT S, ROUND, FLAT BASE

Equipped with **round column, upholstered backrest** and **small armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.36.270</b>	leather	black	gas spring, adjustable: 63 / 80 cm	8510
<b>27.36.280</b>	leather	black	gas spring, adjustable: 72 / 92 cm	8500



## NORSAP 1600 COMFORT S, UPHOLSTERED, ROUND, FIVE STAR BASE

Equipped with **round column, upholstered backrest** and **small armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.36.470</b>	leather	black	gas spring, adjustable: 65 / 82 cm	8535



## NORSAP 1600 COMFORT S, FOLDABLE ALUMINIUM BACK, ROUND, FLAT BASE

Equipped with **round column**, including **foldable aluminium backrest** and **small armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.36.670</b>	leather	black	gas spring, adjustable: 63 / 80 cm	19096-160



## NORSAP 1600 COMFORT S, ALUMINIUM, ROUND, FIVE STAR BASE

Equipped with **round column**, **aluminium backrest** and **small armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.36.370</b>	leather	black	gas spring, adjustable: 65 / 82 cm	8610+OFFICE ROUND COLUMN
<b>27.36.580</b>	leather	black	gas spring, adjustable: 75 / 94 cm	8600+OFFICE ROUND COLUMN



## NORSAP 1600 COMFORT S, OVAL, FLAT BASE

Equipped with **oval column**, **aluminium backrest** and **small armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.36.370</b>	leather	black	gas spring, adjustable: 63 / 80 cm	8610
<b>27.36.380</b>	leather	black	gas spring, adjustable: 72 / 92 cm	8600



## NORSAP 1600 COMFORT M, OVAL, FLAT BASE

Equipped with **oval column**, **aluminium backrest** and **medium armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.39.370</b>	leather	black	gas spring, adjustable: 63 / 80 cm	8710
<b>27.39.380</b>	leather	black	gas spring, adjustable: 72 / 92 cm	8700





## NORSAP 1600, SEPERATE SEAT

Separate NS 1600 seat, without a base.

Is used in the fishing and other industries to be mounted on a wooden crate.

The seat can only be mounted separately in combination with the swivel plate (art. no. 27.99.602), which allows the seat to rotate 360 degrees.

We recommend always mounting this seat on a Norsap base or on a flat stable surface in combination with the swivel plate.

Equipped with **upholstered backrest** and **small armrests**.

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.36.020</b>	separate seat NS 1600, without base	leather	black	8530
<b>27.99.602</b>	swivel plate	-	-	6491



## NORSAP 1600, OPTIONS

ARTIKELNO	DESCRIPTION	MATERIAL	COLOUR	NORSAP TYPENUMBER
<b>27.99.020</b>	insert cupholder	aluminium		DEL-623
<b>27.99.021</b>	insert Delta 600 Alpatron	aluminium		DEL-508
<b>27.99.022</b>	insert Sigma 600 Radio Holland	aluminium		DEL-630
<b>27.99.023</b>	insert Falcon 600 Radio Holland	aluminium		19096-086
<b>27.99.600</b>	folds back backrest, horizontal*	aluminium		6493

\*Only suitable for Norsap 1600 with aluminum backrest.

## HELMSMAN'S SEAT NORSAP 1700

NS 1700 helmsman's seat with 2 especially wide armrests for building in operating handles, switches and communication equipment. Professional seat especially for seagoing shipping with an heavy duty base, comes as standard with seat slide and large fold-up footrest. If necessary, easily interchangeable cushions.

**Column** : round Ø 150 mm  
 Seat width : 49 cm  
 Seat dept : 55-60 cm  
 Back height : 82 cm  
 Dimensions : wlxhx= approx. 90 x 75 x 104 cm  
 Dimensions folded up : wlxhx= approx. 90 x 46 x 104 cm

standard M = manual  
 adjustable E = electrical

Seat angle M : 3 cm  
 Seat thickness M : 4 cm  
 Folding seat M : extra space  
 Seat slide M : 9 cm  
 Footrest M : folding  
 Rotating M : 360 degree  
 Back M : with gas spring  
 Folding back M : optional  
 Armrests M : folding and covered  
 Column M : gas spring

Cable duct : possibility of guiding cables through the arm rest, chair and column  
 Upholstery : black leather for heavy use, other colours or material on request

## NORSAP 1700 COMFORT, FLAT BASE

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.45.260</b>	leather	black	gas spring, adjustable: 63 / 73 cm	6720
<b>27.45.270</b>	leather	black	gas spring, adjustable: 67 / 80 cm	6710
<b>27.45.280</b>	leather	black	gas spring, adjustable: 72 / 92 cm	6700



## HELMSMAN'S SEAT NORSAP 1800

The NorSap 1800 is a fully adjustable chair with various options and configurations.

The modular platform is specially designed for integrating customer-specific control elements to guarantee long-term operation and easy maintenance.

The armrests offer ample space for concealing cables and installing equipment.

The NorSap 1800 series has a gas spring controlled ergonomic system with six different stepless adjustment options, ensuring that all users have optimal working positions.

The NorSap 1800 meets the strictest ergonomic standards under the NORSOK regulations.

The chairs are designed in accordance with the ISO7250 standard and as such comfortably seat 90% of all users.

If necessary, easily interchangeable cushions can be supplied.

<b>Column</b>	<b>: oval 150 x 200 mm</b>
Seat width	: 45 cm
Seat depth	: 55-58 cm
Backrest height	: 85 cm
Dimensions	: wlxh= 81 x 75 x 108 cm

standard	M = manually
adjustable	E = electric

Seat tilt	M :
Seat length	M : 3 cm
Deck rail	M :
Footrest	M : folding and adjustable in height
Swivel function	M : 360 degrees (with the exception of the standard version, it is not rotatable)
Backrest	M : with gas spring
Armrests	M : folding and covered
Column	M : gas spring or fixed height

Cable duct	: possibility of guiding cables through the arm rest, chair and column
Upholstery	: black leather for heavy use, other colours or material on request



## NORSAP 1800 STANDARD M, OVAL, FLAT BASE

This standard version is not height adjustable, but it can be shortened.

Seat cannot swivel!

Equipped with **fixed oval column, aluminium backrest** and **medium armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.47.350	leather	black	fixed height: 53-88 cm	8840



## NORSAP 1800 COMFORT S, OVAL, FLAT BASE

Equipped with **oval column**, **aluminium backrest** and **small armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.48.370</b>	leather	black	gas spring, adjustable: 63 / 80 cm	8831
<b>27.48.380</b>	leather	black	gas spring, adjustable: 72 / 92 cm	8832



## NORSAP 1800 COMFORT M, OVAL, FLAT BASE

Equipped with **oval column**, **aluminium backrest** and **medium armrests**.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
<b>27.51.370</b>	leather	black	gas spring, adjustable: 63 / 80 cm	8810
<b>27.51.380</b>	leather	black	gas spring, adjustable: 72 / 92 cm	8800



# HELMSMAN'S SEAT NORSAP 4000

## HELMSMAN'S SEAT NORSAP 4000

The NorSap 4000 is a large modular platform offering endless options and combinations.

The new electric plug 'n play system ensures safe and user-friendly maintenance.

The design allows for full integration of client-specific control elements and equipment to ensure long-term operation.

The NorSap 4000 meets the strictest ergonomic requirements under the NORSOK regulations.

The chairs are designed in accordance with the ISO7250 standard and as such comfortably seat 90% of all users.

Equipped with a Quicksize system, which enables all seven electric motors to simultaneously adjust to three predefined positions.

This means that the chair can be put into the preferred position in no time and the user can fine tune each of the adjustment features individually.

A NorSap Personal Memory panel can also be optionally supplied, enabling the user to retrieve the appropriate position with the push of a button.

If necessary, easily interchangeable cushions can be supplied.

<b>Column</b>	<b>: 310 x 345 mm</b>
Seat width	: 45 cm
Seat depth	: 55-58 cm
Backrest height	: 85 cm
Dimensions	: W x L x H = ca. 81 x 75 x 108 cm

standard	M = manually
adjustable	E = electric

Seat tilt	E :
Seat length	E :
Deck rail	E :
Footrest	E : folding and adjustable in height
Swivel function	E :
Backrest	E : fully reclinable (90 degrees)
Armrests	M : folding and covered
Column	E : or fixed height

Cable duct : possibility of guiding cables through the arm rest, chair and column

Upholstery : black leather for heavy use, other colours or material on request



## NORSAP 4000 STANDARD M, XL COLUMN, FLAT BASE

Equipped with **fixed XL column**, **aluminium backrest** and **medium armrests**. The monitors shown are not included.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.60.970	leather	black	fixed height: 70 cm	8940



## NORSAP 4000 COMFORT L, XL COLUMN, FLAT BASE

Equipped with **electric XL column**, **aluminium backrest** and **medium armrests**. The monitors shown are not included.

ARTIKELNO	MATERIAL	COLOUR	SEAT HIGHT	NORSAP TYPENUMBER
27.63.960	leather	black	electric, adjustable: 60 / 87 cm	8950

## HELMSMAN'S SEAT NORSAP, OPTIONS

Aluminium adapterplaat tussen stoel en console. Compleet met halve stoelslede. Geschikt voor de NS 800, NS 1000 en NS 1500.



ARTIKELNO	DESCRIPTION	DIMENSIONS	NORSAP TYPENUMBER
27.99.001	Adapter plate bottom (column)		6465
27.99.002	Adapter plate top (chair)		6464
27.99.005	Lumbar support Norsap, built in from manufacturer		6480
27.99.007	Binoculars holder 6,800	250 x 110 x 127/147 mm	6800
27.99.008	Binoculars holder 6,807	230 x 90 x 115/174 mm	6807
27.99.010	Seat belt. 2 point		6461
27.99.011	Seat belt. 4 point		6460
27.99.012	Surface mounted floor mounting for five star base		R-0073
27.99.016	Embroidery of ship name (NS 800 + 1000 + 1100 + 1500 + 1600 (upholstered back) + 1700)		6467
27.99.017	Embroidery of simple logo* (NS 800 + 1000 + 1100 + 1500 + 1600 (upholstered back) + 1700)		6468
27.99.018	Set up cost new sticker on aluminium back* (NS 1600 + 1800 + 4000)		6454
27.99.019	Logo sticker on aluminium back* (NS 1600 + 1800 + 4000)		6453

\*Provide logo in .BMP or .ESP file format.

## NORSAP BASIC RAIL

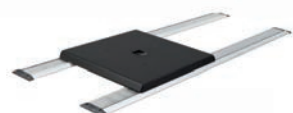
Very low and affordable rails with nice finish.

The Norsap Basic Rail needs a flat and rigid surface to prevent the wagon from blocking up because of bending of the rails.

For seat NS 800, NS 1000, NS 1100, NS 1500, NS 1600 (round column), NS 1700 and Norsap universal base.

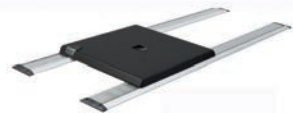
recess depth	: 14 mm (not surfaced mounted)
protruding height	: built in, 0/38 mm
	: surface mounted, 15/52 mm
width of rails	: 444 mm (excl. surface mounted trim)

## NORSAP BASIC RAIL FOR NS 800



ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.81.010</b>	100 cm	surface mounted	6676-1000
<b>27.81.015</b>	150 cm	surface mounted	6676-1500
<b>27.81.020</b>	200 cm	surface mounted	6676-2000
<b>27.81.025</b>	250 cm	surface mounted	6676-2500
<b>27.81.030</b>	300 cm	surface mounted	6676-3000
<b>27.81.210</b>	100 cm	built-in	6677-1000
<b>27.81.215</b>	150 cm	built-in	6677-1500
<b>27.81.220</b>	200 cm	built-in	6677-2000
<b>27.81.225</b>	250 cm	built-in	6677-2500
<b>27.81.230</b>	300 cm	built-in	6677-3000

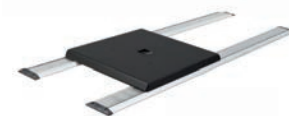
## NORSAP BASIC RAIL WITH FOOTBRAKE FOR NS 800 / UNIVERSAL BASE



ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.81.110</b>	100 cm	surface mounted + foot brake	6678-1000
<b>27.81.115</b>	150 cm	surface mounted + foot brake	6678-1500
<b>27.81.310</b>	100 cm	built-in + foot brake	6679-1000
<b>27.81.315</b>	150 cm	built-in + foot brake	6679-1500

## NORSAP BASIC RAIL FOR NS 1500 + 1600 (ROUND COLUMN) + 1700

ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.82.010</b>	100 cm	surface mounted	6652-1000
<b>27.82.015</b>	150 cm	surface mounted	6652-1500
<b>27.82.020</b>	200 cm	surface mounted	6652-2000
<b>27.82.025</b>	250 cm	surface mounted	6652-2500
<b>27.82.030</b>	300 cm	surface mounted	6652-3000
<b>27.82.210</b>	100 cm	built-in	6653-1000
<b>27.82.215</b>	150 cm	built-in	6653-1500
<b>27.82.220</b>	200 cm	built-in	6653-2000
<b>27.82.225</b>	250 cm	built-in	6653-2500
<b>27.82.230</b>	300 cm	built-in	6653-3000



## NORSAP BASIC RAIL FOR NS 1500 + 1600 (ROUND COLUMN) + 1700

ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.83.010</b>	100 cm	surface mounted	6650-1000
<b>27.83.015</b>	150 cm	surface mounted	6650-1500
<b>27.83.020</b>	200 cm	surface mounted	6650-2000
<b>27.83.025</b>	250 cm	surface mounted	6650-2500
<b>27.83.030</b>	300 cm	surface mounted	6650-3000
<b>27.83.210</b>	100 cm	built-in	6651-1000
<b>27.83.215</b>	150 cm	built-in	6651-1500
<b>27.83.220</b>	200 cm	built-in	6651-2000
<b>27.83.225</b>	250 cm	built-in	6651-2500
<b>27.83.230</b>	300 cm	built-in	6651-3000



## NORSAP STANDARD RAIL

Heavy duty rail system for seagoing ships.  
Contains no steel or iron and can therefore even be used on minesweepers.  
For seat NS 800, NS 1000, NS 1100, NS 1500, NS 1600, NS 1700 and NS 1800.

- Rustproof construction, aluminium and stainless steel
- Self-lubricating slides
- Built in or surface mounted system possible
- Easy to install
- Can be operated from the seat



## NORSAP STANDARD RAIL FOR NS 800 + 1000 + 1100

For seat NS 1500, NS 1600, NS 1700 and NS 1800.

recess depth : 50 mm (not surface-mounted)  
protruding height : built in, 0/35 mm  
: surface mounted, 50/85 mm  
width of rails : 425 mm, excl. built-in or surface mounted trim (495/507 mm)

ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.85.015</b>	150 cm	surface mounted	6250-1500UL
<b>27.85.020</b>	200 cm	surface mounted	6250-2000UL
<b>27.85.025</b>	250 cm	surface mounted	6250-2500UL
<b>27.85.030</b>	300 cm	surface mounted	6250-3000UL
<b>27.85.215</b>	150 cm	built in	6251-1500UL
<b>27.85.220</b>	200 cm	built in	6251-2000UL
<b>27.85.225</b>	250 cm	built in	6251-2500UL
<b>27.85.230</b>	300 cm	built in	6251-3000UL



## NORSAP STANDARD RAIL FOR NS 1500 + 1600 + 1700 + 1800

For seat NS 1500, NS 1600, NS 1700 and NS 1800.

recess depth : 50 mm (not surface mounted)  
protruding height : built in, 0/35 mm  
: surface mounted, 50/85 mm  
width of rails : 545 mm, excl. built-in or surface mounted trim (615/628 mm)

ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.86.015</b>	150 cm	surface mounted	6350-1500UL
<b>27.86.020</b>	200 cm	surface mounted	6350-2000UL
<b>27.86.025</b>	250 cm	surface mounted	6350-2500UL
<b>27.86.030</b>	300 cm	surface mounted	6350-3000UL
<b>27.86.215</b>	150 cm	built in	6351-1500UL
<b>27.86.220</b>	200 cm	built in	6351-2000UL
<b>27.86.225</b>	250 cm	built in	6351-2500UL
<b>27.86.230</b>	300 cm	built in	6351-3000UL
<b>27.88.015</b>	150 cm	surface mounted + cable guide	6354-1500UL
<b>27.88.020</b>	200 cm	surface mounted + cable guide	6354-2000UL
<b>27.88.025</b>	250 cm	surface mounted + cable guide	6354-2500UL
<b>27.88.030</b>	300 cm	surface mounted + cable guide	6354-3000UL
<b>27.88.215</b>	150 cm	built in + cable guide	6355-1500UL
<b>27.88.220</b>	200 cm	built in + cable guide	6355-2000UL
<b>27.88.225</b>	250 cm	built in + cable guide	6355-2500UL
<b>27.88.230</b>	300 cm	built in + cable guide	6355-3000UL

## NORSAP STANDARD RAIL FOR NS 800 + 1000 + 1100 RAIL, LOWERED CENTRAL SHEET

For seats NS 800, NS 1000 and NS 1100.  
With lowered central sheet for carpet, parquet etc.

recess depth : 50 mm (not surface mounted)  
 protruding height : built in, 0/35 mm  
 : surface mounted, 50/85 mm  
 width of rails : 425 mm, excl. excl. built-in or surface mounted trim (495/507 mm)

ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.90.015</b>	150 cm	surface mounted	19096-033
<b>27.90.020</b>	200 cm	surface mounted	19096-056
<b>27.90.215</b>	150 cm	built in	19096-031
<b>27.90.220</b>	200 cm	built in	19096-055



## NORSAP STANDARD RAIL FOR NS 1500 + 1600 + 1700 + 1800 RAIL, LOWERED CENTRAL SHEET

For seat NS 1500, NS 1600, NS 1700 and NS 1800.  
With lowered central sheet for carpet, parquet etc.

recess depth : 50 mm  
 protruding height : built in, 0/35 mm  
 : surface mounted, 50/85 mm  
 width of rails : 545 mm, excl. built-in or surface mounted trim (615/628 mm)

ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
<b>27.91.015</b>	150 cm	surface mounted	19096-034
<b>27.91.020</b>	200 cm	surface mounted	19096-056
<b>27.91.215</b>	150 cm	built in	19096-032
<b>27.91.220</b>	200 cm	built in	19096-036



# NORSAP ACTIVE AND IMPULSE RAIL



## NORSAP ACTIVE RAIL FOR NS 1500 + 1600 + 1700 + 1800 + 4000

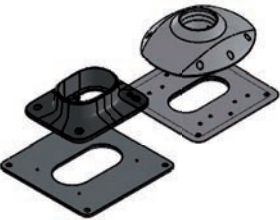
The Norsap Active rail is a strong and elegant rail system produced in high quality aluminium. A manual operated deck rail with integrated cable guiding, which holds an extremely large number of cables without building much in height or under floor in the built in version. Built in and surface mounted system possible. Adapter plate can be ordered separately.

recess depth : 50 mm (not surface-mounted)  
 protruding height : built in, 0/88 mm  
 : surface mounted, 54/138 mm  
 width of rails : 589 mm, excl. built-in or surface mounted trim (650/668mm)



ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
27.92.015	150 cm	surface mounted	6694-1500
27.92.020	200 cm	surface mounted	6694-2000
27.92.025	250 cm	surface mounted	6694-2500
27.92.030	300 cm	surface mounted	6694-3000
27.92.215	150 cm	built-in	6693-1500
27.92.220	200 cm	built-in	6693-2000
27.92.225	250 cm	built-in	6693-2500
27.92.230	300 cm	built-in	6693-3000

## NORSAP ADAPTER PLATE ACTIVE RAIL



ARTIKELNO	DESCRIPTION	NORSAP TYPENUMBER
27.92.900	Adapter plate for NS1500, NS1600 and NS1700 with round column	A4350
27.92.905	Adapter plate for NS1600 and NS1800 with oval column	P19073

## NORSAP IMPULSE RAIL FOR NS 1500 + 1600 + 1700 + 1800 + 4000

The Norsap Impulse rail is a strong and elegant rail system produced in high quality aluminium. An electrically operated deck rail increases the comfort and has integrated cable guiding, which holds an extremely large number of cables without building much in height or under floor in the built in version. Built in and surface mounted system possible. Adapter plate can be ordered separately.

recess depth : 50 mm (not surface-mounted)  
 protruding height : built in, 0/88 mm  
 : surface mounted, 54/138 mm  
 width of rails : 589 mm, excl. built-in or surface mounted trim (650/668mm)



ARTIKELNO	LENGTH	TYPE	NORSAP TYPENUMBER
27.92.415	150 cm	surface mounted	6695-1500
27.92.420	200 cm	surface mounted	6695-2000
27.92.425	250 cm	surface mounted	6695-2500
27.92.430	300 cm	surface mounted	6695-3000
27.92.615	150 cm	built-in	6696-1500
27.92.620	200 cm	built-in	6696-2000
27.92.625	250 cm	built-in	6696-2500
27.92.630	300 cm	built-in	6696-3000

## NORSAP ADAPTER PLATE IMPULSE RAIL



ARTIKELNO	DESCRIPTION	NORSAP TYPENUMBER
27.92.900	Adapter plate for NS1500, NS1600 and NS1700 with round column	A4350
27.92.905	Adapter plate for NS1600 and NS1800 with oval column	P19073



# Group 4

Measuring tools, hand tools and air tools

Cargo lashing equipment

Heating and ventilation

Funnel, measuring jug, bucket, drip tray

Sealants, adhesives, tapes and gaskets





## MAGNET

For retrieving tools, components and other iron objects that have fallen overboard.  
Fitted with an eye to facilitate tying on a line.

Also used for fixing a level alarm/or level control between the frames of a ship.  
If the eyebolt is unscrewed, it leaves an M6, M10 or M12 threaded hole into which anything can be screwed.

ARTIKELNO	HOISTING CAPACITY	DIAMETER	INTERNAL THREAD
40.10.105	22 kg	50 mm	M6
40.10.110	60 kg	80 mm	M10
40.10.115	90 kg	100 mm	M12



## FILTER REMOVAL TOOL 60/140

For the easy removal of gas oil and lubricating oil filters.  
For a diameter of 60 to 140 mm



ARTIKELNO	DESCRIPTION	LENGTH
40.10.214	Strap type	50 cm
40.10.216	Chain type	50 cm



## UNIVERSAL DRUM KEY

ARTIKELNO	DESCRIPTION	LENGTH	MATERIAL
40.10.240	Drum key Eco (drums and lids)	220 mm	plastic
40.10.241	Drum key Double (barrels and jerry cans)	270 mm	plastic
40.10.243	Drum key Profi (drums and drum sealing)	270 mm	galvanized steel



## CUTTING TOOL, HOT ROPE KNIFE

Electric cutting and sealing knife for all types of synthetic rope and/or fabric.  
Supplied with blade.

wattage : 60 watts  
voltage : 220 volts



ARTIKELNO	DESCRIPTION
40.11.001	Cutting tool. hot rope knife
40.11.005	Spare blade for cutting tool

**PLIERS FOR CUTTING ROPE OR HOSE**

Cuts rope up to around 40 mm.

ARTIKELNO	DESCRIPTION
40.11.006	Pliers for cutting rope or hose
40.11.007	Spare blade for cutting pliers

**FID**

Turned from ash and with pointed end.

ARTIKELNO	LENGTH INCH - MM	THICKNESS
40.11.010	10" / 250 mm	
40.11.012	12" / 300 mm	
40.11.014	14" / 350 mm	35 mm
40.11.016	16" / 400 mm	40 mm
40.11.020	20" / 500 mm	45 mm

**FID**

Made of stainless steel with wooden handle.  
Sometimes called a "Norwegian Splicing Needle".

ARTIKELNO	LENGTH INCH - MM	THICKNESS
40.11.145	6.5" / 174 mm	23 mm
40.11.150	11" / 280 mm	32 mm
40.11.155	14" / 365 mm	43 mm

**FLAT MARLIN SPIKE**

Made of steel, with T-grip and groove.

ARTIKELNO	LENGTH INCH - MM
40.11.310	10" / 250 mm





## SAIL NEEDLE

No. 10	length: 96 mm thickness: 3.3 mm
No. 12	length: 83 mm thickness: 2.6 mm
No. 14	length: 70 mm thickness: 2.0 mm
No. 15	length: 65 mm thickness: 1.8 mm
No. 16	length: 60 mm thickness: 1.6 mm

ARTIKELNO	DESCRIPTION
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<b>40.11.814</b>	Steel sail needle: No. 14. 70 mm
<b>40.11.890</b>	Set of steel sail needles: No. 10+12+14+15+16



## SAILMAKER'S PALM

ARTIKELNO	VERSION
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<b>40.11.910</b>	Right-handed
<b>40.11.912</b>	Left-handed



## PACKING EXTRACTOR

Flexible version.

ARTIKELNO	SIZE	FOR PACKING	DIAMETER	LENGTH
<b>40.12.506</b>	No. 1	6 - 8 mm	6 mm	205 mm
<b>40.12.510</b>	No. 2	10 - 13 mm	7 mm	280 mm
<b>40.12.514</b>	No. 3	14 - 17 mm	10 mm	365 mm
<b>40.12.520</b>	No. 4	20 mm and thicker	12 mm	425 mm

## GLYCERINE

For use in manometer and thermometer (without contacts).



ARTIKELNO	CAPACITY	PACKAGING
40.24.991	1 L	bottle

## PRESSURE GAUGE STICKER RED STRIPE (5 PIECES)

Sticker sheet of 5 pieces with red stripe for manometers and thermometers.



ARTIKELNO	DESCRIPTION	DIMENSIONS
40.25.000	Pressure gauge sticker red stripe (5 pieces)	2,5 x 20 mm

## BOURDON TUBE PRESSURE GAUGE, BRASS, CASE Ø 63 MM, FILLED, BOTTOM CONNECTION

Bourdon tube pressure gauges with brass measuring system are applied for measuring all kinds of **non**-aggressive gasses and/or liquids in cooling technology, pneumatics and hydraulics, etc.

Suitable for measuring ranges from 0.6 bar.

Accuracy class 1.6 according to DIN 16005.

### Technical specifications

Case	: Ø 63 mm, with bottom connection
Case material	: Stainless steel 304
Measuring system	: brass
Dial	: white with black lettering
Pointer	: black
Window	: plastic
Case fill	: glycerine
Dimensions	: as per DIN16063 or 16064



ARTIKELNO	CONNECTION	MEASURING RANGE
40.25.001	1/4" BSP bottom connection	0 - 4 bar
40.25.002	1/4" BSP bottom connection	0 - 6 bar
40.25.003	1/4" BSP bottom connection	0 - 10 bar
40.25.004	1/4" BSP bottom connection	0 - 16 bar
40.25.101	1/4" BSP bottom connection	-1 + 0 bar
40.25.102	1/4" BSP bottom connection	-1 + 0.6 bar
40.25.103	1/4" BSP bottom connection	-1 + 1.5 bar
40.25.104	1/4" BSP bottom connection	-1 + 9 bar



## BOURDON TUBE PRESSURE GAUGE BRASS, CASE Ø 63 MM, FILLED, BOTTOM CONNECTION WITH BACK FLANGE

Bourdon tube pressure gauges with brass measuring system are applied for measuring all kinds of **non**-aggressive gasses and/or liquids in cooling technology, pneumatics and hydraulics, etc.

Suitable for measuring ranges from 0.6 bar.

Accuracy class 1.6 according to DIN 16005.

### Technical specifications

Case	: Ø 63 mm, with bottom connection and back flange
Case material	: Stainless steel 304
Measuring system	: brass
Dial	: white with black lettering
Pointer	: black
Window	: plastic
Case fill	: glycerine
Dimensions	: as per DIN16063 or 16064

ARTIKELNO	CONNECTION	MEASURING RANGE
40.25.201	1/4" BSP bottom connection with back flange	0 - 6 bar
40.25.202	1/4" BSP bottom connection with back flange	0 - 10 bar
40.25.203	1/4" BSP bottom connection with back flange	0 - 16 bar
40.25.301	1/4" BSP bottom connection with back flange	-1 + 0 bar
40.25.302	1/4" BSP bottom connection with back flange	-1 + 0.6 bar



## BOURDON TUBE PRESSURE GAUGE STAINLESS STEEL, CASE Ø 63 MM, FILLED, BOTTOM CONNECTION

Bourdon tube pressure gauges with brass measuring system are applied for measuring all kinds of non-aggressive gasses and/or liquids in the pneumatics, hydraulics, shipping, chemical and food industries, etc.

Suitable for measuring ranges from 0.6 bar.

Accuracy class 1.6 according to DIN 16005.

### Technical specifications

Case	: Ø 63 mm, with bottom connection
Case material	: Stainless steel 304
Measuring system	: 316Ti stainless steel
Dial	: white with black lettering
Pointer	: black
Window	: safety glass/polycarbonate
Case fill	: glycerine
Dimensions	: as per DIN16064

ARTIKELNO	CONNECTION	MEASURING RANGE
40.26.001	1/4" BSP bottom connection	0 - 4 bar
40.26.002	1/4" BSP bottom connection	0 - 6 bar
40.26.003	1/4" BSP bottom connection	0 - 10 bar
40.26.004	1/4" BSP bottom connection	0 - 16 bar
40.26.101	1/4" BSP bottom connection	-1 + 0 bar
40.26.102	1/4" BSP bottom connection	-1 + 0.6 bar
40.26.103	1/4" BSP bottom connection	-1 + 1.5 bar
40.26.104	1/4" BSP bottom connection	-1 + 3 bar
40.26.105	1/4" BSP bottom connection	-1 + 5 bar
40.26.106	1/4" BSP bottom connection	-1 + 9 bar
40.26.107	1/4" BSP bottom connection	-1 + 15 bar

## BOURDON TUBE PRESSURE GAUGE STAINLESS STEEL, CASE Ø 63 MM, DRY, BOTTOM CONNECTION WITH BACK FLANGE

Bourdon tube pressure gauges with brass measuring system are applied for measuring all kinds of non-aggressive gasses and/or liquids in the pneumatics, hydraulics, shipping, chemical and food industries, etc.  
Suitable for measuring ranges from 0.6 bar.  
Accuracy class 1.6 according to DIN 16005.

### Technical specifications

Case : Ø 63 mm, with bottom connection and back flange  
Case material : Stainless steel 304  
Measuring system : 316Ti stainless steel  
Dial : white with black lettering  
Pointer : black  
Window : safety glass/polycarbonate  
Case fill : **dry**  
Dimensions : as per DIN16064



ARTIKELNO	CONNECTION	MEASURING RANGE
40.26.201	1/4" BSP bottom connection with back flange	0 - 4 bar
40.26.202	1/4" BSP bottom connection with back flange	0 - 6 bar
40.26.203	1/4" BSP bottom connection with back flange	0 - 10 bar
40.26.204	1/4" BSP bottom connection with back flange	0 - 16 bar
40.26.301	1/4" BSP bottom connection with back flange	-1 + 0 bar
40.26.302	1/4" BSP bottom connection with back flange	-1 + 0.6 bar
40.26.303	1/4" BSP bottom connection with back flange	-1 + 1.5 bar
40.26.304	1/4" BSP bottom connection with back flange	-1 + 3 bar
40.26.305	1/4" BSP bottom connection with back flange	-1 + 5 bar
40.26.306	1/4" BSP bottom connection with back flange	-1 + 9 bar
40.26.307	1/4" BSP bottom connection with back flange	-1 + 15 bar

## BOURDON TUBE PRESSURE GAUGE STAINLESS STEEL, CASE Ø 100 MM, FILLED, BOTTOM CONNECTION

Bourdon tube pressure gauges with stainless steel measuring system are applied for measuring all kinds of gasses and/or liquids in the pneumatics, hydraulics, shipping, chemical and food industries, etc.  
Suitable for measuring ranges from 0.6 bar.  
Accuracy class 1.0 according to DIN 16005.

### Technical specifications

Case : Ø 100 mm, with bottom connection  
Case material : Stainless steel 304  
Measuring system : 316Ti stainless steel  
Dial : white with black lettering  
Pointer : black  
Window : safety glass/polycarbonate  
Case fill : glycerine  
Dimensions : as per DIN16064



ARTIKELNO	CONNECTION	MEASURING RANGE
40.26.401	1/2" BSP bottom connection	0 - 4 bar
40.26.402	1/2" BSP bottom connection	0 - 6 bar
40.26.403	1/2" BSP bottom connection	0 - 10 bar
40.26.404	1/2" BSP bottom connection	0 - 16 bar
40.26.501	1/2" BSP bottom connection	-1 + 0 bar
40.26.502	1/2" BSP bottom connection	-1 + 0.6 bar
40.26.503	1/2" BSP bottom connection	-1 + 1.5 bar
40.26.504	1/2" BSP bottom connection	-1 + 3 bar
40.26.505	1/2" BSP bottom connection	-1 + 5 bar
40.26.506	1/2" BSP bottom connection	-1 + 9 bar
40.26.507	1/2" BSP bottom connection	-1 + 15 bar
40.26.508	1/2" BSP bottom connection	-1 + 25 bar
40.26.509	1/2" BSP bottom connection	-200 + 800 mbar

## PRESSURE GAUGES



### BOURDON TUBE PRESSURE GAUGE STAINLESS STEEL, CASE Ø 100 MM, FILLED, BOTTOM CONNECTION WITH BACK FLANGE

Bourdon tube pressure gauges with stainless steel measuring system are applied for measuring all kinds of gasses and/or liquids in the pneumatics, hydraulics, shipping, chemical and food industries, etc.

Suitable for measuring ranges from 0.6 bar.

Accuracy class 1.0 according to DIN 16005.

#### Technical specifications

Case	: Ø 100 mm, with bottom connection and back flange
Case material	: Stainless steel 304
Measuring system	: 316Ti stainless steel
Dial	: white with black lettering
Pointer	: black
Window	: safety glass/polycarbonate
Case fill	: glycerine
Dimensions	: as per DIN16064

ARTIKELNO	CONNECTION	MEASURING RANGE
40.26.601	1/2" BSP bottom connection with back flange	0 - 4 bar
40.26.602	1/2" BSP bottom connection with back flange	0 - 6 bar
40.26.603	1/2" BSP bottom connection with back flange	0 - 10 bar
40.26.604	1/2" BSP bottom connection with back flange	0 - 16 bar
40.26.701	1/2" BSP bottom connection with back flange	-1 + 0 bar
40.26.702	1/2" BSP bottom connection with back flange	-1 + 0.6 bar
40.26.703	1/2" BSP bottom connection with back flange	-1 + 1.5 bar
40.26.704	1/2" BSP bottom connection with back flange	-1 + 3 bar
40.26.705	1/2" BSP bottom connection with back flange	-1 + 5 bar
40.26.706	1/2" BSP bottom connection with back flange	-1 + 9 bar
40.26.707	1/2" BSP bottom connection with back flange	-1 + 15 bar



### BOURDON TUBE PRESSURE GAUGE STAINLESS STEEL, CASE Ø 160 MM, FILLED, BOTTOM CONNECTION

Bourdon tube pressure gauges with stainless steel measuring system are applied for measuring all kinds of gasses and/or liquids in the pneumatics, hydraulics, shipping, chemical and food industries, etc.

Suitable for measuring ranges from 0.6 bar.

Accuracy class 1.0 according to DIN 16005.

#### Technical specifications

Case	: Ø 160 mm, with bottom connection
Case material	: Stainless steel 304
Measuring system	: 316Ti stainless steel
Dial	: white with black lettering
Pointer	: black
Window	: safety glass/polycarbonate
Case fill	: glycerine
Dimensions	: as per DIN16064

ARTIKELNO	CONNECTION	MEASURING RANGE
40.27.001	1/2" BSP bottom connection	0 - 4 bar
40.27.002	1/2" BSP bottom connection	0 - 6 bar
40.27.003	1/2" BSP bottom connection	0 - 10 bar
40.27.004	1/2" BSP bottom connection	0 - 16 bar
40.27.101	1/2" BSP bottom connection	-1 + 0 bar
40.27.102	1/2" BSP bottom connection	-400 + 600 mbar
40.27.103	1/2" BSP bottom connection	-200 + 800 mbar
40.27.104	1/2" BSP bottom connection	-1 + 0.6 bar
40.27.105	1/2" BSP bottom connection	-1 + 1.5 bar
40.27.106	1/2" BSP bottom connection	-1 + 3 bar
40.27.107	1/2" BSP bottom connection	-1 + 5 bar
40.27.108	1/2" BSP bottom connection	-1 + 9 bar
40.27.109	1/2" BSP bottom connection	-1 + 15 bar
40.27.110	1/2" BSP bottom connection	-1 + 24 bar



## BOURDON TUBE PRESSURE GAUGE STAINLESS STEEL, CASE Ø 160 MM, FILLED, BOTTOM CONNECTION WITH BACK FLANGE

Bourdon tube pressure gauges with stainless steel measuring system are applied for measuring all kinds of gasses and/or liquids in the pneumatics, hydraulics, shipping, chemical and food industries, etc.

Suitable for measuring ranges from 0.6 bar.

Accuracy class 1.0 according to DIN 16005.

### Technical specifications

Case	: Ø 160 mm, with bottom connection and back flange
Case material	: Stainless steel 304
Measuring system	: 316Ti stainless steel
Dial	: white with black lettering
Pointer	: black
Window	: safety glass/polycarbonate
Case fill	: glycerine
Dimensions	: as per DIN16064



ARTIKELNO	CONNECTION	MEASURING RANGE
40.27.201	1/2" BSP bottom connection with back flange	0 - 4 bar
40.27.202	1/2" BSP bottom connection with back flange	0 - 6 bar
40.27.203	1/2" BSP bottom connection with back flange	0 - 10 bar
40.27.204	1/2" BSP bottom connection with back flange	0 - 16 bar
40.27.301	1/2" BSP bottom connection with back flange	-1 + 0 bar
40.27.302	1/2" BSP bottom connection with back flange	-400 + 600 mbar
40.27.303	1/2" BSP bottom connection with back flange	-200 + 800 mbar
40.27.304	1/2" BSP bottom connection with back flange	-1 + 0.6 bar
40.27.305	1/2" BSP bottom connection with back flange	-1 + 1.5 bar
40.27.306	1/2" BSP bottom connection with back flange	-1 + 3 bar
40.27.307	1/2" BSP bottom connection with back flange	-1 + 5 bar
40.27.308	1/2" BSP bottom connection with back flange	-1 + 9 bar
40.27.309	1/2" BSP bottom connection with back flange	-1 + 15 bar
40.27.310	1/2" BSP bottom connection with back flange	-1 + 24 bar



## ALUMINIUM RULE

The one and two metre versions have brass hinges; the three metre model has stainless steel hinges.



ARTIKELNO	LENGTH	VERSION	DIVISIONS	COLOUR	WIDTH
<b>40.31.321</b>	1 m	6 sections	double sided, millimetres	bare metal with black imprint	14 mm
<b>40.31.322</b>	2 m	10 sections	double sided, millimetres	bare metal with black imprint	14 mm
<b>40.31.323</b>	3 m	18 sections (heavy duty)	double sided, millimetres	black with light imprint	14 mm



## WOODEN RULE

Simple but robust rule with brass hinges.



ARTIKELNO	LENGTH	VERSION	DIVISIONS	COLOUR	WIDTH
<b>40.31.351</b>	1 m	6 sections	double sided, millimetres	yellow with black imprint	16 mm
<b>40.31.352</b>	2 m	10 sections	double sided, millimetres	yellow with black imprint	16 mm
<b>40.31.353</b>	3 m	15 sections	double sided, millimetres	yellow with black imprint	16 mm
<b>40.31.363</b>	3 m	15 sections	double sided, millimetres	white with black imprint	16 mm



## CALIBRATION RULER

Very robust design, made of wood with strong hinges.

Complies with EEC class III regulations.

The paint layer is easily damaged by moisture and salt or brackish water.

After use, rinse thoroughly, dry and store in a dry place.

ARTIKELNO	LENGTH	VERSION	DIVISIONS	COLOUR	WIDTH
<b>40.31.383</b>	3 m	6 sections	1 side centimeters, 1 side millimetres	white with black/red imprint	30 mm
<b>40.31.384</b>	4 m	8 sections	1 side centimeters, 1 side millimetres	white with black/red imprint	30 mm
<b>40.31.385</b>	5 m	10 sections	double sided, millimetres	white with black imprint	30 mm

## TELESCOPIC CALIBRATION RULER

Very robust design, made of aluminium.  
Complies with EEC class III regulations.  
Length closed: 125 cm.

ARTIKELNO	LENGTH	VERSION	DIVISIONS	COLOUR	WIDTH
40.31.424	4 m	4 sections	1 side centimeters, 1 side millimetres	white with black/red imprint	50 mm
40.31.425	5 m	5 sections	1 side centimeters, 1 side millimetres	white with black/red imprint	50 mm
40.31.427	7 m	7 sections	1 side centimeters, 1 side millimetres	white with black/red imprint	50 mm



## OIL TANK GAUGING TAPE

With stainless steel tape and continuous scale division with brass weight.  
Aluminium holder with handle of impact-resistant plastic and nickel plated steel winding handle.  
Complies with EEC calibration regulations for class II (no more than 0.2 mm deviation per 10 metres) approval number: 5.11 3202.10 88.047.

colour : stainless steel with matt etched characters  
division : double-sided, millimetres and inches  
tape width : 14 mm

ARTIKELNO	LENGTH	MATERIAL	DESCRIPTION
40.31.651	5 m	stainless steel tape	
40.31.652	10 m	stainless steel tape	
40.31.653	15 m	stainless steel tape	
40.31.654	20 m	stainless steel tape	
40.31.656	30 m	stainless steel tape	
40.31.661	10 m	stainless steel tape	stainless steel weight (500 gram)
40.31.662	10 m	stainless steel tape	calibrated with certificate
40.31.752	10 m	Fibreglass tape (yellow)	NOT resistant to petrol/oil
40.31.753	10 m	Fibreglass tape (yellow)	NOT resistant to petrol/oil, calibrated with certificate
40.31.762	10 m	Steel tape with Polysan coating (yellow)	sparkless (with earth wire)
40.31.763	10 m	stainless steel tape	sparkless (with earth wire), brass weight, calibrated with certificate
40.31.764	10 m	stainless steel tape	sparkless (with earth wire), stainless steel weight, calibrated with certificate





## TANK DIPSTICK

Made of square-section aluminium or stainless steel tubing, 25 x 25 x 2.3 mm.  
Fitted with ring at the top and optionally available with welded shut lower section.  
The scale divisions and figures are engraved.

divisions : a short mark at every centimetre  
: a longer mark with height indication at every decimetre

ARTIKELNO	DESCRIPTION	MATERIAL
40.31.800	Tank dipstick	Aluminium
40.31.801	Welded shut lower section	Aluminium
40.31.805	Tank dipstick	stainless steel 316
40.31.806	Welded shut lower section	stainless steel 316



## LOAD THERMOMETER, EMPTY HOUSING

Made of brass or stainless steel with product container.  
Fitted with suspension eye and ring.

For suspension chain, see article: 02.00.012

ARTIKELNO	MATERIAL	LENGTH	THICKNESS
40.31.820	Brass	300 mm	20/35 mm
40.31.821	stainless steel	300 mm	20/35 mm



## LOAD THERMOMETER, SPARE

Without protective tube.

ARTIKELNO	MEASURING RANGE	DESCRIPTION
40.31.825	-30 °C to +50 °C	
40.31.826	-30 °C to +50 °C	calibrated, with certificate, max. insertion deptM : 80 mm
40.31.827	-30 °C to +100 °C	
40.31.828	-30 °C to +100 °C	calibrated, with certificate, max. insertion deptM : 80 mm

## WATER FINDER SPECIAL

Water Finder Special is a paste that has been specially developed for measuring water under fuel and other light mineral oils in storage tanks.

- Quick and simple detection of water
- Can be read immediately due to a clear color change from light pink to bright red
- Very economical in use
- Does not run off the dipstick
- Also suitable for the detection of water/methanol mixtures

### Instructions:

Apply the paste to the bottom section of the dipstick and lower it to the bottom of the tank. Immediately after it is withdrawn the water level can be read from the sharply defined red colour.



ARTIKELNO	PACKAGING	CAPACITY
40.31.835	tube	70 g

## GASOLINE FINDER

Gas oil and petrol finding paste for determining the level in tanks containing petrol and other light mineral oils which are normally difficult to read because of rapid evaporation.

- Quick and simple determination of the level in fuel tanks
- Can be read immediately due to a clear color change from yellow to bright red
- Very economical in use
- Does not run off the dipstick

### Instructions:

A small amount of the paste should be smeared on the dipstick or measuring tape. Where the measuring surface has been in contact with petrol or suchlike, the layer of paste will have turned red. This enables the level to be read clearly and accurately.



ARTIKELNO	CAPACITY	PACKAGING
40.31.840	tube	60 g



## INDUSTRIAL CHALK

Or marking line chalk.  
Square-section sticks. 100 x 25 x 25 mm.

ARTIKELNO	COLOUR	NUMBER PER BOX
40.33.225	white	96



## MARKING CHALK

Permanent pastel crayons.

ARTIKELNO	COLOUR	NUMBER PER BOX
40.33.431	yellow	12
40.33.432	white	12
40.33.433	black	12
40.33.434	red	12
40.33.435	blue	12



## BARRIER RIBBON

Ideal for marking out areas where there is temporarily no access, for example for painting, demolition work, repairs, open ships' holds, storage lockers etc.

ARTIKELNO	COLOUR	MATERIAL	WIDTH	NUMBER PER BOX
40.33.910	red/white, printed on both sides	polyethylene	80 mm	500 m



## BARRIER CHAIN

Ideal for marking out areas where there is temporarily no access, for example for painting, demolition work, repairs, open ships' holds, storage lockers etc.

ARTIKELNO	COLOUR	MATERIAL	LINKS (LXW)	NUMBER PER BOX
40.33.950	red/white (alternately 6 red and 6 white links)	PVC	50 x 20 mm	25 m

## STENCIL PAINT, AEROSOL

Extremely wear-resistant paint, stays white.  
Good resistance to water.  
Also suitable for bitumen base.



ARTIKELNO	CAPACITY	PACKAGING
40.35.012	500 ml	Aerosol

## STENCIL, NUMBER 0 TO 9

Made of metal.

ARTIKELNO	HEIGHT
40.35.305	50 mm
40.35.306	60 mm
40.35.307	70 mm
40.35.308	80 mm
40.35.310	100 mm
40.35.312	120 mm
40.35.315	150 mm
40.35.320	200 mm
40.35.325	250 mm
40.35.330	300 mm



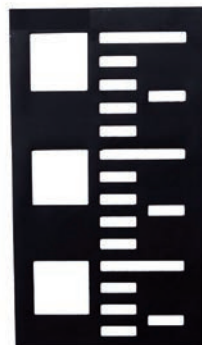
## STENCIL, LETTER A TO Z

Capital letters only (block letters).  
Made of metal.

ARTIKELNO	HEIGHT
40.35.705	50 mm
40.35.706	60 mm
40.35.707	70 mm
40.35.708	80 mm
40.35.710	100 mm
40.35.712	120 mm
40.35.715	150 mm
40.35.720	200 mm
40.35.725	250 mm
40.35.730	300 mm



## CALIBRATION STENCIL



ARTIKELNO	TYPE	MATERIAL	DIMENSIONS
40.35.905	expanded	plastic	58 x 41 cm
40.35.920	expanded	magnetic	60 x 34 cm
40.35.922	blocks only	magnetic	100 x 16 cm

## CONTAINER TEMPLATE



ARTIKELNO	TYPE	MATERIAL	DIMENSIONS
40.35.930	stripe	magnetic	45 x 15 cm
40.35.931	cross	magnetic	45 x 45 cm

## MAGNETIC PLATE

Magnetic plate in different sizes.  
Handy for making your own magnetic plate by applying a sticker.

ARTIKELNO	TYPE	MATERIAL	DIMENSIONS
40.35.940	round	magnetic	Ø 10 cm
40.35.945	rectangular	magnetic	16 x 3.5 cm
40.35.946	rectangular	magnetic	17 x 4.0 cm





## NAME BOARD

All characters engraved and painted in with gold-coloured paint, then finished with a two-component polyurethane varnish.

Only first class teak is used.

Different designs, dimensions, characters, more characters and according to your own design on request.

Board height : 70 mm more than the letter height  
 Letter height : measured centre to centre  
 Font : Arial (other fonts available at additional cost)



ARTIKELNO	DESCRIPTION
<b>40.39.500</b>	Large name board, traditional
<b>40.39.550</b>	Large name board, straight



### BENCH HAMMER

Complete with ash handle.

ARTIKELNO	WEIGHT
40.40.405	100 gr
40.40.410	200 gr
40.40.415	300 gr
40.40.420	400 gr
40.40.425	500 gr
40.40.440	800 gr
40.40.450	1,000 gr
40.40.460	1,500 gr
40.40.465	2,000 gr



### CLUB HAMMER

Sometimes called a lump hammer.  
Complete with ash handle.

ARTIKELNO	WEIGHT	NUMBER PER BOX
40.40.750	1,000 gr	6
40.40.760	1,500 gr	6



### SLEDGEHAMMER

Complete with 90 cm ash handle.

ARTIKELNO	WEIGHT
40.40.970	3 kg
40.40.975	4 kg
40.40.980	5 kg
40.40.985	6 kg



### CHIPPING HAMMER

With steel handle.

ARTIKELNO	WEIGHT
40.41.120	400 gr

### SCALING HAMMER

Sometimes called a boiler scale hammer.  
Complete with ash handle.

ARTIKELNO	WEIGHT	NUMBER PER BOX
40.41.140	500 gr	6



### AXE

ARTIKELNO	TYPE	WEIGHT	LENGTH OF HANDLE	VERSION
40.41.606	hand axe	600 gr	365 mm	short handle
40.41.930	fireman's axe	1,000 gr	500 mm	short handle + spike (DIN 14924)
40.41.950	ES-TRIN fire axe	2,500 gr	900 mm	long handle + spike (DIN 14900)



### COLD CHISEL

Chrome vanadium steel.

ARTIKELNO	LENGTH INCH - MM	THICKNESS X WIDTH	NUMBER PER BOX
40.42.106	6" - 150 mm	12 x 19 mm	6
40.42.108	8" - 200 mm	12 x 19 mm	6
40.42.110	10" - 250 mm	13 x 25 mm	6
40.42.112	12" - 300 mm	13 x 25 mm	6



### CROWBAR

Chrome vanadium steel.  
With flat end.

ARTIKELNO	LENGTH	TYPE
40.43.345	45 cm	crowbar
40.43.360	60 cm	crowbar
40.43.510	100 cm	crowbar
40.43.512	125 cm	crowbar
40.43.515	150 cm	crowbar





### TRIANGULAR SCRAPER

Hardened steel blade and fitted with a steel shaft and varnished wooden handle.

ARTIKELNO	BLADE SIZE
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<b>40.46.106</b>	60 mm
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<b>40.46.108</b>	80 mm
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### PEAR-SHAPED SCRAPER

Hardened steel blade and fitted with a steel shaft and varnished wooden handle.

ARTIKELNO	BLADE SIZE
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<b>40.46.208</b>	80 mm
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### RUST SCRAPER

Without handle, made of hardened steel.

#### RUST SCRAPER HANDLE

Article : 56.23.045 to 56.23.130

ARTIKELNO	VERSION	LENGTH	WIDTH	THICKNESS
<b>40.46.850</b>	small	170 mm	80 mm	5 mm
<b>40.46.855</b>	large	200 mm	100 mm	10 mm



### PAINT SCRAPER

Cheaper than a paring chisel but still good quality steel.  
Fitted with a strong wooden handle.

ARTIKELNO	VERSION	LENGTH	WIDTH
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<b>40.46.875</b>	short	300 mm	65 mm
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<b>40.46.880</b>	long	700 mm	65 mm
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### "SHARP" SCRAPER

Convenient to use and keenly priced.  
For scraping or chipping rust or load residues from ceilings, bulkheads, sides, surfaces, gangplanks etc.  
Made of hardened spring steel, self-sharpening in use.

ARTIKELNO	WIDTH	HEIGHT	MOUNTING
40.46.900	200 mm	125 mm	Ø30 mm



### WOOD CHISEL

Made of chrome vanadium steel with strong plastic handle.  
Excellent value for money.

ARTIKELNO	WIDTH (MM)	WIDTH (INCH)
40.47.706	6 mm	1/4"
40.47.708	8 mm	5/16"
40.47.710	10 mm	3/8"
40.47.712	12 mm	1/2"
40.47.716	16 mm	5/8"
40.47.720	20 mm	3/4"
40.47.725	25 mm	1"
40.47.732	30 mm	1 1/4"
40.47.740	40 mm	1 1/2"



### HACKSAW FRAME, JUNIOR

Nickel-plated wire version, complete with saw blade and plastic finger protection.

ARTIKELNO	BLADE SIZE	FRAME THICKNESS
40.52.110	150 mm (6")	Ø5 mm



### HACKSAW FRAME

Fixed steel version, lacquered and with beech handle.  
Fitted with wing nut for tensioning the saw blade.

ARTIKELNO	BLADE SIZE	FRAME THICKNESS
40.52.320	300 mm (12")	18 x 8 mm



## HACKSAW BLADE JUNIOR



ARTIKELNO	BLADE SIZE	MATERIAL	TEETH PER INCH	NUMBER PER BLISTER
40.52.400	150 x 6 mm	steel	32	10

## HACKSAW BLADE STANDARD



ARTIKELNO	BLADE SIZE	MATERIAL	TEETH PER INCH	NUMBER PER BOX
40.52.550	300 x 13 x 0.63 mm	HS steel	24	50

## STANLEY KNIFE

Original Stanley.



ARTIKELNO	TYPE	COLOUR	DESCRIPTION
40.53.246	199	grey	simple, classic model
40.53.330	10-499	grey/yellow	fold-out magazine
40.53.340	10-189	red	safety knife with spring
40.53.413	1992		dispenser with 10 spare blades

## PUTTY KNIFE

Excellent quality, expertly ground steel.  
Varnished wooden handle.



ARTIKELNO	WIDTH (MM)	WIDTH (INCH)	NUMBER PER BOX
40.53.702	25 mm	1"	12
40.53.703	40 mm	1.1/2"	12
40.53.705	50 mm	2"	12
40.53.706	63 mm	2.1/2"	12
40.53.707	76 mm	3"	12
40.53.710	102 mm	4"	12
40.53.712	125 mm	5"	12

### FLAT FLAP WHEEL, CONICAL 6°

Industrial quality flat flap wheel for many purposes.  
High material removal rate and significantly longer service life due to the unique flaps/positioning.

application : stainless steel and steel  
type : SMT 626  
quality : SUPRA Zirconium oxide  
hardness : approx. 8.6 to 9.4 (diamond is 10)  
disc : fibreglass

ARTIKELNO	GRIT SIZE	DIAMETER	DIMENSIONS CONNECTING SQUARE	MAX. WORK SPEED	MAX. RPM	NUMBER PER BOX
40.84.204	40	125 mm	22.23 mm	80 m/s	12,2	10
40.84.206	60	125 mm	22.23 mm	80 m/s	12,2	10
40.84.208	80	125 mm	22.23 mm	80 m/s	12,2	10



### GRINDING DISC

Industrial quality grinding disc.  
With optimised formula for the grinding of steel and stainless steel.  
Excellent aggressiveness and service life.

application : stainless steel and steel  
type : A 24 R Supra  
quality : Supra  
model : curved, dish

ARTIKELNO	DIAMETER	THICKNESS	DIMENSIONS CONNECTING SQUARE	MAX. WORK SPEED	MAX. RPM	NUMBER PER BOX
40.85.312	125 mm	6 mm	22.23 mm	80 m/s	12,2	10



### SLITTING DISC, STAINLESS STEEL, SUPRA

Industrial quality slitting disc for many purposes.  
Minimum burr formation.  
Excellent aggressiveness and service life.

application : stainless steel and steel  
type : A 46 R Supra  
quality : Supra

ARTIKELNO	DIAMETER	THICKNESS	DIMENSIONS CONNECTING SQUARE	MAX. WORK SPEED	MAX. RPM	NUMBER PER BOX
40.85.712	125 mm	1.6 mm	22.23 mm	80 m/s	12,2	25



### SLITTING DISC, STAINLESS STEEL, SPECIAL

Industrial quality slitting disc for many purposes.  
Iron, sulphur and chlorine-free.  
Minimum burr formation.  
Low thermal load.  
Excellent aggressiveness and service life.

application : stainless steel, non ferrous metals and steel  
type : T 60 AZ Special  
quality : Special

ARTIKELNO	DIAMETER	THICKNESS	DIMENSIONS CONNECTING SQUARE	MAX. WORK SPEED	MAX. RPM	NUMBER PER BOX
40.85.912	125 mm	1.0 mm	22.23 mm	80 m/s	12,2	25





## WIRE BRUSH

wire type : round oil-hardened wire  
 wire size : length 30 mm, diameter 0.35 mm  
 set in : bare wood with handle

ARTIKELNO	SIZE	DIMENSIONS	NUMBER PER BOX
40.86.721	1 row	260 x 22 mm	10
40.86.722	2 rows	270 x 22 mm	10
40.86.723	3 rows	280 x 30 mm	10
40.86.724	4 rows	290 x 34 mm	10
40.86.725	5 rows	295 x 40 mm	10
40.86.726	6 rows	300 x 50 mm	10



## WIRE BRUSH, BRASS

wire type : round brass wire  
 wire size : length 30 mm, diameter 0.35 mm  
 set in : bare wood with handle

ARTIKELNO	SIZE	DIMENSIONS	NUMBER PER BOX
40.86.733	3 rows	280 x 30 mm	10
40.86.734	4 rows	290 x 34 mm	10



## LONG-HANDLED WIRE BRUSH

wire type : round oil-hardened wire  
 wire size : length 35 mm, diameter 0.35 mm  
 set in : bare wood, 220 x 60 mm

ARTIKELNO	DESCRIPTION
40.86.743	Long-handled wire brush



## WIRE BROOM

wire type : flat, oil-hardened wire  
 wire size : length 70 mm, width 1.8 mm, thickness 0.45 mm  
 set in : bare wood, 300 x 70 mm

ARTIKELNO	DESCRIPTION
40.86.747	Wire broom



### FLAT WOOD BIT (FOR WOODEN FENDERS)

Replacement for an auger, an old-fashioned hand drill.  
Can be used in any drill.



ARTIKELNO	LENGTH	DIAMETER
40.88.222	400 mm	22 mm
40.88.224	400 mm	24 mm

### ROTARY CLEANER (WHIRL AWAY)

Tool for removing, for example, rust, paint layers, scale, etc. from steel, concrete or other smooth substrates.  
Fitted with 15 hardened steel toothed wheels.  
Can be used in any drill.  
Fitted with rubber vibration damper.



diameter : 90 mm  
length : 50 mm  
connection : M10 threaded shaft  
wheels : 15 (5 x 3) wheels, each with 18 teeth, 2.5 mm thick

ARTIKELNO	DESCRIPTION
40.98.150	Rotary cleaner (whirl away)

### NEEDLE SCALING HAMMER "VON ARX"

Powerful and well-made pneumatic hammer.  
Very good value for money.  
Spare parts available.

model : gun  
working pressur : 6 - 7 bar  
connection : 3/8" internal thread

**Reducing valve and quick coupling for air:**  
See articles : 87.70.106 to 87.70.665



ARTIKELNO	TYPE	AIR CONSUMPTION AT 6 BAR	NEEDLE TYPE	NUMBER OF NEEDLES	WEIGHT
40.98.625	NP 23K	100	3 mm	19	2.2 kg
40.98.635	NP 34K	125	3 mm	28	3.0 kg
40.98.825	NP 23	100	3 mm	19	2.6 kg
40.98.835	NP 34	125	3 mm	28	3.2 kg
40.98.845	45B	156	4 mm	49	4.8 kg



## NEEDLE SCALING HAMMER, NEEDLES

1st class steel; there is no better.  
 Made from thoroughly hardened carbon steel.  
 Topped with a flat or rounded head.  
 Suitable for all makes of pneumatic hammer: Von Arx, Jason, Rodac, Trelawny.

ARTIKELNO	STUMP	MODEL	MATERIAL	TYPE	TYPE OF NEEDLE HOLDER
40.98.903	3 mm	flat, blunt	carbon steel		steel
40.98.904	4 mm	flat, blunt	carbon steel		steel
40.98.913	3 mm	flat, pointed	copper beryllium	spark-arm, certified	steel
40.98.942	2 mm	rounded, pointed	carbon steel		plastic, Von Arx
40.98.943	3 mm	rounded, pointed	carbon steel		plastic, Von Arx
40.98.944	4 mm	rounded, pointed	carbon steel		plastic, Von Arx
40.98.953	3 mm	rounded, blunt	copper beryllium	spark-arm, certified	plastic, Von Arx



## PNEUMATIC BLOW GUN

Useful for quick cleaning of all sorts of things.  
 Should be used with goggles or safety glasses.

ARTIKELNO	LENGTH	INTERNAL THREAD
40.99.098	20 mm	1/4" internal thread
40.99.100	200 mm	1/4" internal thread



## TIRE PRESSURE GAUGE WITH EXTENSION

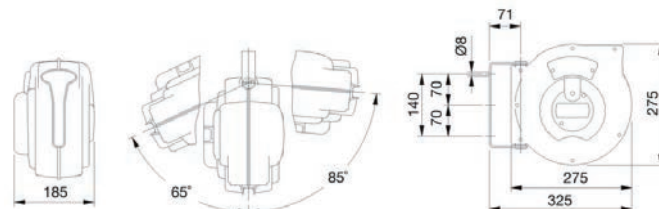
ARTIKELNO	DESCRIPTION
40.99.200	Tire pressure gauge with extension



## WALL REEL MAVEL MASTER PLUS AIR 9M

Spring loaded wall mounted reel with flexible hose.  
 The reel has a slim design and is suitable for air and water.  
 Made of impact-resistant plastic and equipped with a flexible hose for effortless unwinding and winding.  
 The reel is set to ratchet mechanism as standard, but can be set in such a way that the hose is always automatically tensioned.

Hose length : 9 meters  
 Hose diameter : 8 mm  
 Maximum pressure : 10 bar  
 Temperature range : -5 / +40 ° C  
 Connection in : 1/4 "F  
 Connection out : 1/4 "M  
 Dimensions : 325 x 185 x 275 mm  
 Weight : 3.4 kg



ARTIKELNO	DESCRIPTION
40.99.300	Wall reel Mavel Master Plus Air 9m

### CUP BRUSHES PRO, KNOTTED WIRE

Knotted cup brush, industrial quality, for use on angle grinders.

- Osborn best-seller
- Impressive cleaning effect
- Solution of choice for cleaning surfaces
- Long life
- TÜV-Süd certified (safety tested, production monitored)

Applications: rust removal, paint stripping, removing slag, silicate residuals and blue discolouring.

ARTIKELNO	DIAMETER	INTERNAL THREAD	STEEL WIRE
<b>41.05.065</b>	65 mm	M14	0.5 mm
<b>41.05.080</b>	80 mm	M14	0.5 mm
<b>41.05.100</b>	100 mm	M14	0.5 mm



### CUP BRUSHES ECO, KNOTTED WIRE

Knotted cup brush, craftsman quality, for use on angle grinders.

- Osborn bestseller in the DIY sector
- Good cleaning performance
- Best price/performance ratio
- Easy cleaning of larger areas

Applications: paint/rust removal, removal of slag.

ARTIKELNO	DIAMETER	INTERNAL THREAD	STEEL WIRE
<b>41.10.065</b>	65 mm	M14	0.5 mm
<b>41.10.080</b>	80 mm	M14	0.5 mm
<b>41.10.100</b>	100 mm	M14	0.5 mm



### BEVEL BRUSHES PRO, KNOTTED WIRE

Knotted bevel brush, industrial quality, for use on angle grinders.

- Aggressive cleaning performance
- Long service life
- Combines the best properties of a cup brush with those of a wheel brush
- Workpieces with large areas and difficult to access places can be treated perfectly
- TÜV-Süd certified (safety tested, production monitored)

Applications: deburring, removal of rust, paint, slag, silicates and blue discolouration on complex workpieces.

ARTIKELNO	DIAMETER	INTERNAL THREAD	STEEL WIRE
<b>41.15.100</b>	100 mm	M14	0.5 mm
<b>41.15.115</b>	115 mm	M14	0.5 mm





## BEVEL BRUSHES ECO, KNOTTED WIRE

Knotted bevel brush, craftsman quality, for use on angle grinders.

- Good cleaning performance and service life
- Best price/performance ratio
- Processing of large surfaces and hard to reach areas

Applications: rust removal, paint stripping, deburring.

ARTIKELNO	DIAMETER	INTERNAL THREAD	STEEL WIRE
41.20.100	100 mm	M14	0.5 mm



## WHEEL BRUSHES PRO, KNOTTED WIRE

Knotted wheel brush, industrial quality, for general use on all common angle grinders.

- Aggressive and speedy cleaning; all wire tips are in use at the same time
- Long service life
- TÜV-Süd certified (safety tested, production monitored)

Applications: for roughing, deburring and simple rust removal work.

ARTIKELNO	DIAMETER	DIAMETER HOLE	STEEL WIRE
41.25.115	115 mm	22.2 mm	0.5 mm
41.25.125	125 mm	22.2 mm	0.5 mm
41.25.225	125 mm	M14	0.5 mm



## WHEEL BRUSHES ECO, KNOTTED WIRE

Knotted wheel brush, craftsman quality, for general use on all common angle grinders.

- Speedy cleaning
- Satisfactory removal rate
- Suitable for many D.I.Y projects

Applications: for simple deburring and cleaning work.

ARTIKELNO	DIAMETER	DIAMETER HOLE	STEEL WIRE
41.30.115	115 mm	22.2 mm	0.5 mm
41.30.125	125 mm	22.2 mm	0.5 mm



## CAP, PLASTIC

For outboard steps, cable locker, rescue pole and boathook.

ARTIKELNO	DIAMETER	DESCRIPTION
42.01.325	25 mm	
42.01.330	30 mm	for our outboard steps
42.01.335	35 mm	
42.01.340	40 mm	for our cable locker, rescue pole and boathook
42.01.345	45 mm	

## PINE EYE

For bare steel hatch clamp.

ARTIKELNO	DIMENSIONS	DIAMETER HOLE
<b>43.01.346</b>	60 x 40 x 8 mm	15 mm



## HATCH CLAMP

ARTIKELNO	TYPE	DIMENSIONS	VERSION
<b>43.03.105</b>	Blommaert	FRK 105 mm	short
<b>43.03.135</b>	Blommaert	FRK 135 mm	Derkina, curved
<b>43.03.170</b>	Blommaert	FRK 170 mm	long
<b>43.03.408</b>	Baeck Marine	BM 85/100 mm	short
<b>43.03.415</b>	Baeck Marine	BM 150/165 mm	long



## LOCKING BRACKET

Locking bracket for bulkhead hatch sealing caps.

Angle : 105 degrees

ARTIKELNO	DESCRIPTION	MATERIAL
<b>43.05.105</b>	Locking bracket	aluminium
<b>43.05.106</b>	Welded bracket for locking bracket	steel



## WELDED HINGE

For fixing the sealing cap to bulkhead hatches allowing movement.

Overall length : 80 mm

ARTIKELNO	DESCRIPTION
<b>43.05.305</b>	hinged part, steel + stainless steel pin (80 mm)
<b>43.05.310</b>	hinged part, aluminium
<b>43.05.315</b>	hinged part, Ertalon bush



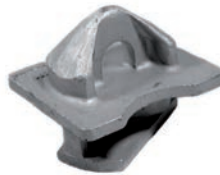
## LOCKING PIN

With sprung ring.

ARTIKELNO	DIAMETER PIN	LENGTH PIN	DIAMETER INTERNAL RING
<b>43.09.206</b>	6 mm	50 mm	40 mm
<b>43.09.208</b>	8 mm	50 mm	44 mm
<b>43.09.211</b>	11 mm	55 mm	44 mm



CONTAINER STACKER



ARTIKELNO	DESCRIPTION	TYPE
43.10.501	Single	SI-1
43.10.550	Terminal	SI-5D
43.10.570	Twistlock	T-1

## DISC PADLOCK + ANTI-DRILL PROTECTION, KEYED DIFFERENTLY/ALIKE, STAINLESS STEEL

These disc padlocks are available in 2 types; keyed differently and keyed alike.  
 Also called container padlock, the round shape makes it very strong and difficult to force.  
 Stainless steel case with brass 5 pin cylinder and hardened steel bracket.  
 Special shielding of the keyhole, which makes drilling difficult.  
 Equipped with condensation hole and two high quality keys made of nickel-plated brass.

ARTIKELNO	CASE WIDTH	CASE HEIGHT	CASE THICKNESS	SHACKLE DIAMETER	SHACKLE HEIGHT	SHACKLE WIDTH	TYPE	NUMBER PER BOX
<b>43.84.470</b>	70 mm	28 mm		10 mm	17 mm	20 mm	keyed differently	12
<b>43.84.471</b>	70 mm	25 mm		10 mm	18 mm	22 mm	keyed alike	12
<b>43.84.490</b>	90 mm	33 mm		12 mm	15 mm	25 mm	keyed differently	6
<b>43.84.491</b>	90 mm	33 mm		12 mm	15 mm	25 mm	keyed alike	6



## PADLOCK, KEYED DIFFERENTLY

These padlocks are keyed differently, in other words; each lock has its own key.  
 Brass case with brass cylinder and chrome plated, hardened steel shackle with double locking.  
 Heavy construction with two high quality keys made of nickel-plated brass, which come in a wide range of profiles.  
 Equipped with condensation hole and rubber shackle ring against moisture (from 40 mm).

ARTIKELNO	CASE WIDTH	CASE HEIGHT	CASE THICKNESS	SHACKLE DIAMETER	SHACKLE HEIGHT	SHACKLE WIDTH	TYPE	NUMBER PER BOX
<b>43.84.615</b>	16 mm	18 mm	8.5 mm	3 mm	11 mm	8 mm	keyed differently	12
<b>43.84.620</b>	20 mm	20 mm	10.0 mm	3 mm	11 mm	11 mm	keyed differently	12
<b>43.84.625</b>	25 mm	26 mm	11.5 mm	4 mm	15 mm	13 mm	keyed differently	12
<b>43.84.630</b>	30 mm	29 mm	13.0 mm	5 mm	18 mm	17 mm	keyed differently	12
<b>43.84.640</b>	40 mm	34 mm	14.5 mm	6 mm	24 mm	22 mm	keyed differently	12
<b>43.84.650</b>	50 mm	40 mm	17.0 mm	8 mm	29 mm	28 mm	keyed differently	6
<b>43.84.660</b>	60 mm	41 mm	19.0 mm	10 mm	33 mm	32 mm	keyed differently	6



## PADLOCK WITH EXTRA LONG SHACKLE, KEYED DIFFERENTLY

These padlocks are keyed differently, in other words; each lock has its own key.  
 Brass case with brass cylinder and chrome plated, hardened steel extra long shackle with double locking.  
 Heavy construction with two high quality keys made of nickel-plated brass, which come in a wide range of profiles.  
 Equipped with condensation hole and rubber shackle ring against moisture (from 40 mm).

ARTIKELNO	CASE WIDTH	CASE HEIGHT	CASE THICKNESS	SHACKLE DIAMETER	SHACKLE HEIGHT	SHACKLE WIDTH	TYPE	NUMBER PER BOX
<b>43.84.840</b>	40 mm	34 mm	14.5 mm	6 mm	100 mm	22 mm	keyed differently	12
<b>43.84.850</b>	50 mm	40 mm	17.0 mm	8 mm	100 mm	28 mm	keyed differently	12





## PADLOCK, KEYED ALIKE

These padlocks are keyed alike. In other words; all locks have the same key.  
 Brass case with brass cylinder and chrome plated, hardened steel shackle with double locking.  
 Heavy construction with two high quality keys made of nickel plated brass.  
 Equipped with condensation hole and rubber shackle ring against moisture (from 40 mm).

ARTIKELNO	CASE WIDTH	CASE HEIGHT	CASE THICKNESS	SHACKLE DIAMETER	SHACKLE HEIGHT	SHACKLE WIDTH	TYPE	NUMBER PER BOX
<b>43.84.930</b>	30 mm	29 mm	13.0 mm	5 mm	18 mm	17 mm	keyed alike	12
<b>43.84.940</b>	40 mm	34 mm	14.5 mm	6 mm	24 mm	22 mm	keyed alike	12
<b>43.84.950</b>	50 mm	40 mm	17.0 mm	8 mm	29 mm	28 mm	keyed alike	6
<b>43.84.960</b>	60 mm	41 mm	19.0 mm	10 mm	33 mm	32 mm	keyed alike	6

## EMERGENCY KEY BOX

With breaking glass pane, key hook and lock.  
 Made of galvanized steel.



ARTIKELNO	DESCRIPTION	DIMENSIONS
<b>43.86.020</b>	Emergency key box	158 x 102 x 42 mm
<b>43.86.021</b>	Spare breaking glass pane	97 x 77 mm



## WIND-POWERED VENTILATOR

The energy is provided by the speed of the vehicle or the wind.  
High quality construction and low profile, rain-proof.  
Turns easily because ball bearings are used.

material : plastic  
internal diameter : 97 mm  
outside diameter : 242.5 mm  
height : 123.85 mm  
flange size : 97 x 139 mm



ARTIKELNO	COLOUR
<b>45.86.521</b>	grey (RAL 7035)
<b>45.86.531</b>	white (RAL 9010)

## MUSHROOM VENTILATOR

Manufactured from high-sheen polished stainless steel 304.  
Watertight sealable from within and without.  
Equipped with stainless steel mosquito screen, complete with plastic sealing ring.  
The mushroom valve fully opened allows more air through as the through flow from the tube.

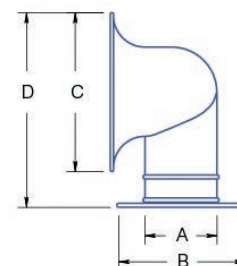


ARTIKELNO	HOLE SIZE	OUTSIDE DIAMETER	HEIGHT
<b>45.87.311</b>	84 mm	115 mm	28 mm
<b>45.87.315</b>	122 mm	150 mm	30 mm
<b>45.87.317</b>	152 mm	175 mm	42 mm

## COWL VENT

Polished copper, complete with separate flange.

ARTIKELNO	DIAMETER TUBE (A)	DIAMETER FLANGE (B)	DIAMETER VENT (C)	HEIGHT (D)
<b>45.91.207</b>	70 mm	125 mm	155 mm	190 mm
<b>45.91.208</b>	80 mm	130 mm	185 mm	225 mm
<b>45.91.210</b>	100 mm	165 mm	185 mm	225 mm
<b>45.91.212</b>	125 mm	185 mm	235 mm	290 mm
<b>45.91.214</b>	140 mm	205 mm	245 mm	340 mm





## STOVE SEALER

Fire-proof sealant for hearths, stoves, ovens, central heating boilers, flues, smoke-proof grouting, fixing fire-proof cord. Resistant to temperatures up to around 1250 °C.

ARTIKELNO	PACKAGING	CAPACITY
46.00.310	pot	0.75 kg



## SOOT REMOVER

Soot remover for oil stoves.

ARTIKELNO	PACKAGING	NUMBER PER PACKAGE
46.00.550	box	6 sachets



## STOVE LIGHTERS (QUICK)

Lighters for oil stoves. New version, matches no longer needed.

ARTIKELNO	PACKAGING	NUMBER PER PACKAGE
46.00.755	box	50



## FIRE LIGHTING FLUID

Handy!  
For lighting oil stoves.  
No matches needed so no more dirty hands.  
Does not blow out.

ARTIKELNO	PACKAGING	CAPACITY
46.00.785	bottle	200 ml

## PREHEAT COIL

For better combustion and hence fuel savings.  
Safer, the stove ignites again following a down draught.  
For use with all oil stoves with a fire tube.  
Made of a metal alloy that is resistant to very high temperatures.

ARTIKELNO	MODEL	STOVE OUTPUT CALORIES	DIMENSIONS
46.00.852	2	up to 5,000	140 x 85 mm
46.00.853	3	up to 7,000	175 x 80 mm
46.00.854	4	10 to 15,000	205 x 110 mm



## RAIN CAP FOR STOVE PIPE

Sometimes also called a Chinese hat.  
Simple protection against rain.  
Made of galvanized steel.

ARTIKELNO	DIAMETER
46.01.092	92 - 98 mm
46.01.105	105 - 111 mm
46.01.115	115 - 120 mm
46.01.125	125 - 131 mm
46.01.135	135 - 139 mm
46.01.148	148 - 154 mm
46.01.157	157 - 160 mm
46.01.175	170 - 180 mm
46.01.190	190 - 200 mm
46.01.220	220 mm
46.01.250	250 mm
46.01.300	300 mm
46.01.350	350 mm





## CHIMNEY CAP FOR OIL STOVES, STAINLESS STEEL 316

Dutch manufacture, made of 316 stainless steel.  
After manufacture, each cap is grit blasted for a perfect appearance.

ARTIKELNO	DIAMETER
46.04.070	70 mm
46.04.080	80 mm
46.04.090	90 mm
46.04.100	100 mm
46.04.110	110 mm
46.04.120	120 mm
46.04.130	130 mm
46.04.140	140 mm
46.04.150	150 mm
46.04.160	160 mm
46.04.170	170 mm
46.04.180	180 mm
46.04.190	190 mm
46.04.200	200 mm
46.04.210	210 mm
46.04.220	220 mm
46.04.230	230 mm
46.04.240	240 mm
46.04.250	250 mm



## ASPIROMATIC ROTATING CHIMNEY CAP AND AIR EXTRACTOR

Rotating gas and smoke extractor, powered by the wind.  
Blowback is impossible.  
Can also be used for air extraction.  
Made of stainless steel and aluminium.  
The average flow rate has been measured at an average wind speed of 15 km per hour.

ARTIKELNO	MODEL	FOR PIPE DIAMETER	AVERAGE CAPACITY
46.08.160	160	80 - 160 mm	125 m <sup>3</sup>
46.08.200	200	112 - 200 mm	225 m <sup>3</sup>
46.08.240	240	150 - 240 mm	315 m <sup>3</sup>
46.08.241	240*	200 x 200 mm	315 m <sup>3</sup>



## ASPIROMATIC, COMPONENTS

ARTIKELNO	DESCRIPTION
46.09.160	pivot for model 160 (complete with bearings)
46.09.200	pivot for model 200 (complete with bearings)
46.09.240	pivot for model 240 (complete with bearings)
46.09.400	set of three clamps
46.09.410	Black plastic ball nut

## VENTURA SPINNER ROTATING CHIMNEY CAP AND AIR EXTRACTOR

The Ventura Spinner is a draft-promoting rotating chimney cap. The cap is easy to assemble and is also silent due to the high-quality bearings. The Ventura Spinner is very suitable for wood and oil fired stoves, but also for permanent ventilation of humid areas.

- Tested up to a temperature of 200 °C
- Suitable for fireplaces, wood and oil fired stoves
- Made of cast aluminum and stainless steel

ARTIKELNO	MODEL	FOR PIPE DIAMETER	AVERAGE CAPACITY
<b>46.10.200</b>	Spinner Junior	80 - 200 mm	225 m <sup>3</sup>
<b>46.10.250</b>	Spinner Plus	80 - 250 mm	315 m <sup>3</sup>

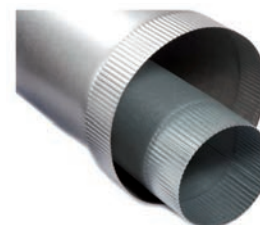


## STOVE PIPE

Made of Sendzimir galvanized sheet steel with rolled longitudinal seam and one crimped end.

Thickness : 0.6 mm  
Length : 1 metres

ARTIKELNO	DIAMETER
<b>46.21.083</b>	83 mm
<b>46.21.092</b>	92 mm
<b>46.21.100</b>	100 mm
<b>46.21.105</b>	105 mm
<b>46.21.111</b>	111 mm
<b>46.21.121</b>	121 mm
<b>46.21.125</b>	125 mm
<b>46.21.131</b>	131 mm
<b>46.21.139</b>	139 mm
<b>46.21.150</b>	150 mm
<b>46.21.160</b>	160 mm
<b>46.21.170</b>	170 mm
<b>46.21.180</b>	180 mm
<b>46.21.200</b>	200 mm
<b>46.21.220</b>	220 mm
<b>46.21.250</b>	250 mm
<b>46.21.300</b>	300 mm
<b>46.21.350</b>	350 mm





## RAIN CAP

For closing off exhausts to prevent rainwater from entering the engine.  
 The rain cap is balanced in such a way that it opens as soon as the engine is started and closes again when the engine stops.  
 The rain cap is made of high quality aluminium.  
 Under no circumstances will a rain cap stick or rust.  
 Once installed, the rain cap requires no maintenance.

The dimensions shown are **external dimensions of the exhaust pipe** (not internal dimensions).

ARTIKELNO	EXTERNAL DIMENSIONS EXHAUST PIPE (INTERNAL DIMENSIONS RAIN CAP)	TYPE	WEIGHT
46.81.029	29 mm	66XS	190 gr
46.81.032	32 mm	66X	180 gr
46.81.035	35 mm	66	150 gr
46.81.038	38 mm	6	180 gr
46.81.041	41 mm	5XS	220 gr
46.81.048	48 mm	5	210 gr
46.81.051	51 mm	55	240 gr
46.81.054	54 mm	1	220 gr
46.81.060	60 mm	2	280 gr
46.81.064	64 mm	7	320 gr
46.81.070	70 mm	3	380 gr
46.81.076	76 mm	8	400 gr
46.81.083	83 mm	10	460 gr
46.81.089	89 mm	11	480 gr
46.81.102	102 mm	12	580 gr
46.81.108	108 mm	125	600 gr
46.81.114	114 mm	14	650 gr
46.81.127	127 mm	16	860 gr
46.81.133	133 mm	18	760 gr
46.81.141	141 mm	20	860 gr
46.81.152	152 mm	21	1,070 gr
46.81.168	168 mm	22	1,490 gr
46.81.178	178 mm	25	1,760 gr
46.81.210	210 mm	27	3,010 gr
46.81.219	219 mm	28	3,130 gr
46.81.254	254 mm	30	3,700 gr
46.81.273	273 mm	31	4,580 gr
46.81.305	305 mm	32	7,890 gr
46.81.324	324 mm	33	7,500 gr
46.81.343	343 mm	33X	8,800 gr
46.81.356	356 mm	34	6,860 gr
46.81.406	406 mm	35	8,390 gr

## SILENT CAP, STAINLESS STEEL

Protect your engine with the only really silent rain cap, entirely made of stainless steel.

- Completely quiet.
- Also at low engine loadings.
- Fully balanced.
- Durable, maintenance-free construction.
- Simple installation.
- Sensibly priced.

An engine can be rather badly damaged in our rainy climate.  
You can protect your engine by installing a rain cap on your exhaust system.  
The first quiet rain cap in the world, the Silent Cap.

The Silent Cap, made entirely of stainless steel, completely protects your engine (and exhaust system) against rain, hail or snow and is whisper quiet in operation!

The perfectly balanced Silent Cap can be installed on your exhaust in a few minutes, is maintenance-free and, not insignificantly, sensibly priced.

We always have the most common sizes in stock.

The dimensions shown are **external dimensions of the exhaust pipe** (not internal dimensions).

ARTIKELNO	EXTERNAL DIMENSIONS EXHAUST PIPE (INTERNAL DIMENSIONS OF SILENT CAP)
46.82.048	48 mm
46.82.060	60 mm
46.82.076	76 mm
46.82.089	89 mm
46.82.114	114 mm
46.82.139	139 mm
46.82.170	168 mm
46.82.219	219 mm
46.82.273	273 mm
46.82.324	323 mm
46.82.356	355 mm
46.82.406	406 mm
46.82.457	457 mm
46.82.508	508 mm



## BLOCKED FUEL FILTERS

A common problem with diesel engines is the blocking of the fuel filters, often in combination with accelerated wear of the injectors and shorter service life of the fuel pump. In most cases this cannot be explained.

In many cases the cause turns out to lie in the petrol of diesel oil used.

This may be contaminated with microorganisms such as moulds, yeasts and bacteria.

Contamination may be caused by:

- A. The more advanced cracking techniques in the petrochemical industry.
- B. The addition of modern additives. These are needed for current engines to work properly. They also contain nutrients for microorganisms
- C. The presence of water in petrol or diesel oil.

The main cause of microorganisms is the presence of water in petrol or diesel oil. A few ppms (parts per million) can already be sufficient for bacterial growth. An important source of water is condensation in the fuel tanks or an engine with gas oil cooled injectors.

Water is necessary for the growth of microorganisms.

Their development is impossible without water.

Even though the microorganism may well be statically present in (water-free?)

fuel, it cannot develop without water.

Modern diesel engines are often fitted with a water separator, but even that only partly solves the problem.

If the water in the petrol or diesel oil is contaminated with microorganisms, the growth of aerobic bacteria will start.

These can only develop in the presence of oxygen.

Aerobic bacteria can form slimy lumps and flocs in the fuel.

These lead to blocking of the fuel filters.

If there is no more oxygen in the fuel, or if the oxygen is screened off by, for example, sludge, so-called anaerobic bacteria, or SRBs (Sulphate Reducing Bacteria) are formed.

The excretion product of this group of microorganisms is a very aggressive acid that literally dissolves metal.

This can have disastrous effects on, for example, the injectors and/or fuel pumps, while the tanks can also be severely corroded with all the consequences that that can bring.

### HOW CAN THIS DAMAGE BE PREVENTED?

- A. Use the correct amount of Acticide CMG for each bunkering.
- B. If possible, removing all the water using a drain, the growth of micro-organisms is not possible without water.
- C. Cleaning the whole gas oil system with chemicals and repeating this annually.

## ACTICIDE CMG, CHEMICALS FOR CLEANING GAS OIL

**Acticide CMG** is a biocide for fuels, approved worldwide, even for aircraft.

**Acticide CMG** has a long-lasting effect, but it is sensible to use the correct amount of Acticide CMG for each bunkering.

### USE:

Preventative	: 50 cc per m <sup>3</sup>
For light contamination	: 150 cc per m <sup>3</sup>
For moderate contamination	: 250 cc per m <sup>3</sup>
For severe contamination	: 350 cc per m <sup>3</sup>



ARTIKELNO	CAPACITY	PACKAGING
46.91.000	0.5 L	dosage bottle (box of 15)
46.91.001	1 L	dosage bottle (box of 12)
46.91.005	5 L	jerry can
46.91.020	20 L	jerry can



## FAN HEATER SEAL

Heater for extra heating.  
European product, good quality.  
Standard suitable for 50 and 60 Hz.



ARTIKELNO	DESCRIPTION	THERMAL CAPACITY	FAN	NOISE	VOLTAGE	AMPERAGE	WEIGHT	DIMENSIONS (LXWXH)
47.42.325	SEAL LR 20	1-2 kW	120 m <sup>3</sup> /hour	45 dB(A)	230 V	8.7 A	2.0 kg	185 x 175 x 200 mm
47.42.433	SEAL RP 33	1.65-3,3 kW	400 m <sup>3</sup> /hour	50 dB(A)	230 V	14.3 A	5.6 kg	250 x 250 x 430 mm
47.42.450	SEAL RP 50	2.5-5 kW	400 m <sup>3</sup> /hour	50 dB(A)	400 V	7.2 A	6.0 kg	250 x 250 x 430 mm
47.42.490	SEAL RP 90	4.5-9 kW	800 m <sup>3</sup> /hour	52 dB(A)	400 V	13.0 A	13.5 kg	330 x 380 x 510 mm
47.42.515	SEAL RP 150	5-10-15 kW	1300 m <sup>3</sup> /hour	54 dB(A)	400 V	21.7 A	15.5 kg	350 x 440 x 550 mm



## GAS BURNER, HANDGRIP

Industrial burner for drying bottom boards or heating frozen winches, soldering etc.

ARTIKELNO	DESCRIPTION	TYPE
47.68.310	handgrip (incl. hose adaptor)	1-201 with screw valve (open/closed)
47.68.315	handgrip (incl. hose adaptor)	1-212 with trigger valve, pilot flame and 600 mm nozzle
47.68.320	handgrip (incl. hose adaptor)	1-206 with trigger valve and pilot flame



## GAS BURNER, BURNER

ARTIKELNO	DESCRIPTION	TYPE	FLAME DIAMETER	WORKING PRESSURE	CONSUMPTION PER HOUR IN BAR
47.68.330	burner	1-112, 1/4"	40 mm	1-6 bar	1,500 gram
47.68.335	wide burner	1-135, 1/4"	140 mm	1-6 bar	4,500 gram



## GAS BURNER, ACCESSORIES

ARTIKELNO	DESCRIPTION	TYPE
47.68.390	hand shield for protection against heat	1-701
47.68.399	flow limiter	Shell x 8 mm sleeve



## IJSSEL TOILET

Simple but robust toilet.

### Dimensions toilet pot:

Height	: 250 mm
Top diameter	: 420 mm
Bottom diameter	: 60 mm internal
	: 145 mm outside
Rear connection	: 42 mm outside
Bolt holes	: 115 mm, heart to heart
	: 12 mm diameter
Material valve unit	: bronze



ARTIKELNO	DESCRIPTION
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<b>47.92.500</b>	IJssel toilet complete with pot, gasket, valve unit and shrink sleeve (seat with lid excluded)
<b>47.92.511</b>	Toilet seat with lid, white (fitting set included)

## IJSSEL TOILET, LOOSE PARTS

ARTIKELNO	DESCRIPTION
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<b>47.92.515</b>	Fitting set for toilet seat with lid, white
<b>47.92.520</b>	Toilet pot iijssel toilet
<b>47.92.528</b>	Toilet pot gasket (between pot and valve unit)
<b>47.92.529</b>	Shrink sleeve (for connection to water inlet)
<b>47.92.530</b>	Valve unit complete
<b>47.92.531</b>	Valve unit, spare handle
<b>47.92.532</b>	Valve unit, spare grip for handle
<b>47.92.533</b>	Valve unit, spare counterweight for handle
<b>47.92.534</b>	Valve unit, spare funnel
<b>47.92.535</b>	Valve unit, spare shaft (including 2 O-rings and nut)
<b>47.92.536</b>	Valve unit, spare valve seat with seal (2x plastic disc + 1x rubber gasket)
<b>47.92.537</b>	Valve unit, spare valve bracket with square hole and nut
<b>47.92.538</b>	Valve unit, spare cover (cover plate on the outside)
<b>47.92.539</b>	Valve unit, spare plastic disc 50 mm
<b>47.92.540</b>	Valve unit, rubber disc 97 mm



## OIL CAN "IDEAAL"

Popular and well-selling model.

colour : red  
 nozzle : flexible : 150 mm  
 materials : reservoir : seamless sheet steel  
 : pump : brass

ARTIKELNO	CAPACITY
<b>48.04.550</b>	0.5 L
<b>48.04.575</b>	0.75 L
<b>48.04.599</b>	1.00 L



## OIL CAN, REPLACEMENT NOZZLE

ARTIKELNO	TYPE	LENGTH
<b>48.04.700</b>	flexible	140 mm
<b>48.04.740</b>	flexible	400 mm



## "IDEAAL" SUMP PUMP

Complete with straight pipe.

ARTIKELNO	CAPACITY	MATERIAL CYLINDER	MATERIAL CAP
<b>48.08.105</b>	0.5 L	alloy steel	galvanized steel
<b>48.08.110</b>	0.8 L	alloy steel	galvanized steel
<b>48.08.505</b>	0.5 L	brass	brass
<b>48.08.510</b>	1.0 L	brass	brass

## CRANKCASE DRAIN PUMP

A sea water resistant hand pump for emptying the engine crankcase, the reverse clutch etc.

colour	: brass
pump type	: self-priming piston pump
impeller type	: piston
rotation	: vertical movement
shaft seal	: N.A.
material	: brass and neoprene
liquids	: spent engine oil and engine oil
capacity	: 0.1 litres per stroke
discharge	: 20 cm long 10 mm hose
inlet	: 55 cm long 8 mm hose
length	: 220 mm
weight	: 0.2 kg

ARTIKELNO	DESCRIPTION
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<b>96.10.510</b>	Crankcase drain pump
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## CRANKCASE VACUUM PUMP

For removing sump oil.  
Handy tool, works quickly and without mess.  
No battery acid!

ARTIKELNO	CAPACITY	MODEL	HEIGHT	DIAMETER	ACCESSORIES
<b>48.08.706</b>	6 L	ball model (water sports / hobby)	60 cm	26 cm	2 hoses of approx. 100 cm
<b>48.08.714</b>	14 L	cylinder model (professional)	65 cm	22 cm	3 hoses of approx. 100 cm





## GLORIA HOLD SPRAY

High pressure spray with complete set of tools and very solid galvanized steel tank.  
For pressurizing deck lines on tankers, spraying ships' holds and buns with spindle oil.

### FITTED WITH:

Oval filling funnel, clear manometer, generous steel handgrip with locking mechanism, vent valve, foot ring with back support, two carrying straps, handy spray gun holder.

colour	: yellow with black
tank	: 5 or 10 litres capacity. Steel with external epoxy coating and internal polyethylene coating of about 2 mm
valve	: safety valve set to exactly 6 bar
spray gun*	: brass 50 cm spray gun, brass trigger control valve and removable filter tube and fitted with 140 cm hose

ARTIKELNO	CAPACITY	MODEL
48.09.095	5 L	405T
48.09.100	10 L	410T

## GLORIA HOLD SPRAY, BRASS EXTENSION LANCE

ARTIKELNO	LENGTH	DESCRIPTION
48.09.905	50 cm*	
48.09.910	70 cm	
48.09.915	100 cm	
48.09.935	50 to 100 cm	telescopic model
48.09.940	100 to 200 cm	telescopic model



## GLORIA HOLD SPRAY, MISCELLANEOUS COMPONENTS

\* All the components ending with a \* combine to form a complete spraying lance.

ARTIKELNO	DESCRIPTION	SERIAL NUMBER
48.09.950	fan spray nozzle	716.440
48.09.951	spray nozzle with 1 mm hole	634.870*
48.09.952	swirl element	606.271*
48.09.953	sealing washer	617.070*
48.09.954	spray nozzle with 2 mm hole	606.180
48.09.955	spray nozzle with 3 mm hole	606.160
48.09.961	bent lance	701.310*
48.09.962	trigger control valve	708.310*
48.09.963	tank connector for hose	726.187
48.09.965	O-ring for trigger control valve spindle	606.571
48.09.966	flat sealing washer for trigger control valve	602.070
48.09.967	spare filter for trigger control valve	613.320*
48.09.969	complete pump	727.972
48.09.970	O-ring for piston	625.971
48.09.971	valve plug with bush for pump	701.980
48.09.972	O-ring for top of pump	627.070
48.09.975	compressor connection for tank (old model)	718.030
48.09.976	vent valve	709.090
48.09.980	filling funnel. 172RT. 10 litres	604.250
48.09.981	shoulder strap button	603.060
48.09.982	foot ring 172RT, 10 litres	538.725
48.09.985	tank connection +hose +connection for trigger control valve	511.728.045*
48.09.986	brass angled connector under tank	538.682
48.09.987	O-ring for angled connector under tank	130.090
48.09.988	nut for angled connector under tank	538.683
48.09.968	seperate handle trigger control valve	511.760

## GREASE LUBRICATOR AUTOMATIC, PERMA FLEX

System is supplied complete and is immediately ready for use.  
Simple setup and activation via rotary switch  
The delivery period is infinitely adjustable from **1 to 12 months** and can be changed later as often as required until the grease is finished.  
Equipped with transparent housing to check consumption or level.

capacity	: 125 ml
pressure	: maximum 5 bar
type of grease	: perma Multipurpose grease SF01, EP, NLGI 2, -30°C /+130°C
application range	: from -20°C to +60°C
usage	: the lubrication cartridge can be installed in any position (note: do not expose to direct heat)
certificate	: II 1G Ex ia IIC T6, II 1D Ex IaD 20T 85 °C, I M1 Ex ia I
protection class	: IP68 (dust and waterproof)
connection	: 1/4" external thread
dimensions	: 117 x Ø 58 mm

ARTIKELNO	CAPACITY	RELEASE TIME	LENGTH
48.12.125	125 ml	1 to 12 months	117 mm



## GREASE LUBRICATOR, AUTOMATIC, SPRING LOADED

Operates mechanically by means of a spring.  
Can be filled manually hydraulic grease nipple using a grease gun.  
Transparent, thick-walled and unbreakable plastic reservoir.  
2 positions: open or closed.  
Equipped with safety valve, can be installed in any position.  
Environmentally friendly and cheap.  
Lubricating grease of your choice.

material	: brass with plastic cup and galvanized spring
capacity	: approx. 55 ml
connection	: 1/4" external thread

ARTIKELNO	DESCRIPTION
48.13.500	Grease lubricator, automatic, spring loaded



## GREASE LUBRICATOR AUTOMATIC, SIMALUBE

Activation with a 3mm Allen key starts a chemical reaction.  
The delivery period is infinitely adjustable from **1 to 12 months** and can be changed later as often as required until the grease is finished.  
Fitted with three sight glasses for checking consumption or level.

capacity	: around 125 or 250 ml
pressure	: maximum 5 bar
type of grease	: Universal EP grease, NLGI 2, -30°C /+120°C
application range	: from -20°C to +55°C
usage	: the lubrication cartridge can be installed in any position, even under water (note: do not expose to direct heat)
certificate	: II 1G Ex ia IIC T6, II 1D Ex IaD 20T 80 °C, I M1 Ex ia I
protection class	: IP68 (dust and waterproof)
connection	: 1/4" external thread
dimensions	: hxd= 100/186 x Ø 52 mm

ARTIKELNO	CAPACITY	RELEASE TIME	LENGTH
48.13.712	125 ml	1 to 12 months	100 mm
48.13.725	250 ml	1 to 12 months	186 mm

ARTIKELNO	DESCRIPTION
48.13.780	hydraulic filling nipple for self-filling
48.13.795	activation cartridge for 125 ml





## GREASE LUBRICATOR, ADAPTER NIPPLE

ARTIKELNO	INTERNAL THREAD	OUTSIDE THREAD	DESCRIPTION
48.13.751	1/4"	3/8"	
48.13.752	1/4"	1/8"	
48.13.753	1/4"	1"	M6
48.13.754	1/4"	1"	M8
48.13.755	1/4"	1 1/2"	M10
48.13.756	1/4"	1"	M10
48.13.757	1/4"	1/4"	35 mm
48.13.758	1/4"	1/4"	50 mm

## GREASE GUN "IDEAAL"

Fitted with 1/8" internal thread, can be filled with:

- A: bulk grease by hand
- B: bulk grease using a filling apparatus
- C: grease cartridges 400 grams

Content : cartridge 400 gram, or 0.5 litres grease



ARTIKELNO	MODEL	CONTROLS	CAPACITANCE	WORKING PRESSURE IN BAR	ACCESSORIES
48.14.450	hand, scissor model	2 hands		500 bar	curved pipe (approx. 20 cm), hydraulic mouthpiece, 4 jaws
48.14.460	hand, pistol grip	1 hand		500 bar	straight pipe (approx. 20 cm), hydraulic mouthpiece, 4 jaws
48.14.505	air (max. 5 bar)	1 hand	400 grams per minute (transmission 1:40)	200 bar	rubber hose (approx. 40 cm), hydraulic mouthpiece, 4 jaws
48.14.605	electric (with 2 Li-ion Batteries 14.4 V)	1 hand		400 bar	rubber hose (approx. 50 cm), hydraulic mouthpiece, 4 jaws



## GREASE GUN, FILLING APPARATUS

For FILLING lever grease guns, one-hand grease guns and pneumatic grease guns.  
 Because the lid can be slid upwards without undoing any bolts, it is possible to check how much grease is still in the tub at any time.  
 The lid prevents the ingress of dirt and dust.  
 The filling connection is mounted at an angle so that grease guns with angled filling nipples can also be filled with ease.  
 The connection is fitted with a valve to prevent grease from leaking.  
 Complete with extra M10 filling nipple.

Totally UNSUITABLE for directly greasing lubricating points such as propeller shafts etc.  
 A pressure of at least 200/400 bar is needed for this.

working pressure : around 8 bar  
 capacity : around 30 cc per stroke  
 for tub : weight : of 20 kg  
 : diameter : approx. 270 - 310 mm  
 Pressol : 17820

ARTIKELNO	DESCRIPTION
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48.15.120	Filling apparatus for grease gun
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## GREASE GUN FOR MOUNTING ON TUB

Ideal for lubricating fixed lubrication points such as propeller shafts, ships' rudders etc.  
 Fitted with 120 cm high pressure hose and hydraulic nozzle, lid to prevent the ingress of dirt and dust, star fixing and vacuum disc.

working pressure : 200 bar  
 capacity : around 3.8 cc per stroke  
 for tub : weight : of 20 kg  
 : diameter : approx. 270 - 310 mm  
 Pressol : 17694

ARTIKELNO	DESCRIPTION
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48.15.220	Grease gun for mounting on tub
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## GREASE GUN, PNEUMATICALLY OPERATED

Ideal for lubricating fixed lubrication points, like propeller shafts, ship rudders, etc.  
 Quantity of grease can be adjusted by lowering or raising the air pressure.

connection : 1/4" internal thread.  
 working pressure : maximum 400 bar  
 feed : minimum 3 bar  
 : maximum 8 bar  
 for tub : weight : of 20 kg  
 : diameter : approx. 270 - 310 mm  
 Pressol : 18 740 051

ARTIKELNO	DESCRIPTION
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48.15.235	pneumatic grease gun for mounting on tub
48.15.241	Z threaded nipple, 1/8" external thread, 1/4" internal thread
48.15.245	grease gun 1/8" internal thread
48.15.260	high pressure hose, length 15 metres, 2 x 1/4" external thread





## GREASER WITH SPINDLE

Solid greaser consisting of bronze cap, steel body, rising spindle with rubber piston.  
Available with and without foot plate.

ARTIKELNO	CAPACITY	INTERNAL THREAD	CYLINDER HXD	PISTON	FOOTPLATE
<b>48.15.310</b>	0.5 L	3/8"	200 x 60 mm	52 mm	no
<b>48.15.311</b>	0.5 L	3/8"	200 x 60 mm	52 mm	yes
<b>48.15.320</b>	1.0 L	3/8"	265 x 90 mm	82 mm	no
<b>48.15.321</b>	1.0 L	3/8"	265 x 90 mm	82 mm	yes



## GREASER WITH SPINDLE, AVAILABLE PARTS

ARTIKELNO	DESCRIPTION	CAPACITY
<b>98.48.1541</b>	separate piston 52 mm	0.5 L
<b>98.48.1542</b>	separate piston 81 mm	1.0 L
<b>98.48.1531</b>	separate upper lid with spindle	0.5 L
<b>98.48.1532</b>	separate upper lid with spindle	1.0 L



## GREASER, EXTENSION PIECE

ARTIKELNO	DESCRIPTION	LENGTH	DIAMETER	OUTSIDE THREAD
<b>48.16.011</b>	bent dispensing tube	150 mm	10.0 mm	1/8"
<b>48.16.151</b>	rubber hose	300 mm	10.8 mm	1/8"
<b>48.16.161</b>	rubber hose	500 mm	10.8 mm	1/8"



## CHEST WITH 33 DRAWERS

Metal chest with 33 drawers for storing small articles such as lubricating nipples, bolts, washers and components.

Painted steel chest.

External dimensions of chest : hwxwd = 420 x 300 x 140 mm

Transparent drawers of hard plastic.

30 drawers with dimensions : wxdxh = 50 x 135 x 35 mm

2 drawers with dimensions : wxdxh = 130 x 135 x 55 mm

1 drawer with dimensions : wxdxh = 270 x 135 x 55 mm

**IDEAL FOR STORING LUBRICATING NIPPLES.**

**ON REQUEST CAN BE SUPPLIED WITH CONTENTS, complete with stickers with our article numbers on the undersides of the drawers.**

**THIS PREVENTS INTERCHANGE AND SIMPLIFIES REORDERING.**



ARTIKELNO	DESCRIPTION
40.05.836	Chest with 33 drawers
40.05.840	Cutting tool, hot rope knife

## GREASER, NOZZLE OR EXTENSION

ARTIKELNO	DESCRIPTION	INTERNAL THREAD
48.16.271	hydraulic. four jaws	1/8"
48.16.331	flush type nipple. 16 mm	1/8"
48.16.451	pointed nozzle	1/8"
48.16.551	ball type nipple	1/8"
48.16.651	bayonet type nipple	1/8"
48.16.751	double pointed nipple	1/8"



## HYDRAULIC LUBRICATING NIPPLE

ARTIKELNO	OUTSIDE THREAD	TYPE
48.18.101	1/8"	straight
48.18.102	1/4"	straight
48.18.105	M5 x 0.8	straight
48.18.106	M6 x 1.0	straight
48.18.108	M8 x 1.25	straight
48.18.111	1/8"	45 degrees
48.18.112	1/4"	45 degrees
48.18.118	M8 x 1.25	45 degrees
48.18.121	1/8"	right-angled
48.18.122	1/4"	right-angled
48.18.128	M8 x 1.25	right-angled





## FLUSH TYPE NIPPLE, 16 MM (TOP AND HEXAGON)

ARTIKELNO	OUTSIDE THREAD	TYPE
48.18.201	1/8"	straight
48.18.202	1/4"	straight
48.18.206	M6 x 1.0	straight
48.18.208	M8 x 1.25	straight
48.18.210	M10 x 1.0	straight
48.18.301	1/8"	straight (brass)
48.18.302	1/4"	straight (brass)



## POINTED OR HOLLOW NIPPLE

ARTIKELNO	OUTSIDE THREAD	TYPE
48.18.601	1/8"	straight
48.18.602	1/4"	straight
48.18.608	M8 x 1.25	straight
48.18.612	1/4"	45 degrees



## BALL TYPE NIPPLE

ARTIKELNO	OUTSIDE THREAD	TYPE
48.18.701	1/8"	straight
48.18.702	1/4"	straight
48.18.711	1/8"	45 degrees
48.18.712	1/4"	45 degrees
48.18.721	1/8"	right-angled



## BAYONET TYPE NIPPLE

ARTIKELNO	OUTSIDE THREAD	TYPE
48.18.801	1/8"	straight
48.18.802	1/4"	straight



## FUNNEL

With straight spout.

ARTIKELNO	DIAMETER	CAPACITY	DESCRIPTION
<b>48.31.005</b>	50, 75, 95, 115 mm	-	set of four funnels
<b>48.31.415</b>	150 mm	0.5 L	+ removable sieve
<b>48.31.420</b>	200 mm	1.2 L	+ removable sieve
<b>48.31.424</b>	250 mm	2.0 L	+ removable sieve
<b>48.31.525</b>	250 mm	6.0 L	galvanized steel + removable sieve
<b>48.31.430</b>	-	-	spare sieve for funnel



## FUNNEL WITH OFFSET SPOUT

Oil and acid resistant.

Complete with removable, fine-meshed copper filter screen, splash-proof rim and strong handle.

Fitted with cast-in seam for cutting off the bottom vertical part of the spout so that the funnel then only has an angled spout.

ARTIKELNO	DIAMETER	CAPACITY	DESCRIPTION
<b>48.31.616</b>	160 mm	1.3 L	+ removable sieve



## FUNNEL WITH FLEXIBLE SPOUT

With 30 cm removable flexible spout and filter screen.

Includes splash-proof rim and strong handle.

ARTIKELNO	DIAMETER	CAPACITY	DESCRIPTION
<b>48.31.719</b>	190 x 150 mm	2.0 L	+ sieve
<b>48.31.723</b>	230 x 180 mm	3.5 L	+ sieve



## FUNNEL WITH BALL JOINT FOR ADJUSTING THE SPOUT

Oil and acid resistant.

Complete with removable, fine-meshed copper filter screen, splash-proof rim and strong handle.

ARTIKELNO	DIAMETER	CAPACITY	DESCRIPTION
<b>48.31.820</b>	200 mm	2.0 L	+ removable sieve



## HEAVY DUTY FUNNEL

With straight spot, high splash-proof rim and handle.

Made of oil and acid resistant polyethylene.

Fitted with removable fine-meshed copper filter screen.

ARTIKELNO	DIAMETER	CAPACITY	DESCRIPTION
<b>48.33.025</b>	260 mm	6.0 L	+ removable sieve
<b>48.33.034</b>	350 mm	14.0 L	+ removable sieve
<b>48.33.050</b>	-	-	spare sieve for heavy duty funnel





## MEASURING JUG, FILLING JUG OR POURING JUG (NEW MODEL)

Made of high quality polyethylene, oil and petrol resistant.  
Including spout.

ARTIKELNO	DESCRIPTION	CAPACITY	COLOUR
48.41.010	measuring jug, filling jug or pouring jug	1 L	natural/transparent
48.41.020	measuring jug, filling jug or pouring jug	2 L	natural/transparent
48.41.030	measuring jug, filling jug or pouring jug	3 L	natural/transparent
48.41.050	measuring jug, filling jug or pouring jug	5 L	natural/transparent
48.41.091	spare spout	1, 2 and 3 L / funnel 190 mm	natural/transparent
48.41.093	spare spout	5 L / funnel 230 mm	natural/transparent



## BATTERY FILLER

Zeca battery filler made of polyethylene with automatic hard plastic spout.

ARTIKELNO	DESCRIPTION	CAPACITY	COLOUR
48.49.002	battery filler	2 L	yellow with red spout
48.49.109	spare spout	-	red



## GAS OIL CAN

Made of heavy polythene.  
Large filler opening with screw cap sieve.  
Fitted with two large handles.

ARTIKELNO	CAPACITY	COLOUR
48.51.010	10 L	black with red caps

## JERRY CAN WITH POURING SPOUT

Oil and petrol resistant, complete with pouring spout that can be screwed into the can using the cap.  
Non-stacking.



ARTIKELNO	CAPACITY	COLOUR
48.61.005	5 L	red
48.61.010	10 L	red
48.61.020	20 L	red

## JERRY CAN

%

Produced from best quality polyethylene and complete with well-sealing cap.  
Suitable under conditions for: drinking water, coolant, oils etc.  
Petrol but under 20 degrees Celsius, certainly not in the sun.  
The above is an advice and not binding, the filler always remains responsible.  
The jerry cans are stackable.

### SCALE:

per pallet extra F



ARTIKELNO	CAPACITY	COLOUR	DIAMETER CAP	NUMBER ON PALLET
48.63.005	5 L	natural / transparent	51 mm	150
48.63.010	10 L	natural / transparent	51 mm	80
48.63.020	20 L	natural / transparent	61 mm	42
48.63.120	20 L	black	61 mm	42

## JERRY CAN, SPARE CAP

ARTIKELNO	DESCRIPTION	DIAMETER CAP
98.48.63.010	spare cap for 5, 10 litre jerry can and sample bottle	51 mm
98.48.63.020	spare cap for 20 litre jerry can	61 mm



## JERRY CAN, TAP CAP

Handy, replaces the standard cap.

ARTIKELNO	DESCRIPTION	CAPACITY	DIAMETER CAP
48.63.395	for jerry can	5 / 10 L	51 mm
48.63.396	for jerry can	20 L	61 mm



## JERRY CAN, STEEL

Original steel jerry can as used in the First World War by the German army and later taken over by other powers.  
The name comes from Gerry, which was what the Americans called the Germans: In the course of time, G-can became jerry can.

ARTIKELNO	CAPACITY	DIMENSIONS	COLOUR
48.63.505	5 L	23 x 11.5 x 30 cm	army green
48.63.510	10 L	35 x 16 x 29 cm	army green
48.63.520	20 L	35 x 16 x 48 cm	army green



ARTIKELNO	DESCRIPTION
48.63.590	flexible pouring spout for steel jerry can
48.63.592	spare rubber gasket for cap
48.63.593	separate rubber seal for flexible pouring spout





## SEALS, NUMBERED

%

Strip of 10.

### SCALE:

Per box of 250 pieces extra F

ARTIKELNO	COLOUR	MATERIAL
48.66.323	red	plastic
48.66.325	white	plastic



## SAMPLE BOTTLE WITH LARGE OPENING

%

Sample bottles may be used for petrol (UN1203 / 1 liter max.) and diesel (UN1202 / 5 liter max.).

With these maximum quantities, this falls under the LQ (limited Quantity) and therefore the packaging does not have to be UN approved.

### SCALE:

Per box extra F

ARTIKELNO	CAPACITY	DIMENSIONS	COLOUR	OPENING	TYPE CAP
48.66.450	0.5 L	115 x 95 mm	natural/transparent	Ø 43 mm	sealable
48.66.460	1.0 L	185 x 95 mm	natural/transparent	Ø 43 mm	sealable



## STORAGE BOX

Plastic storage box with removable lid.  
For storing a range of items.  
Ideal for ADN articles such as personal safety equipment.

ARTIKELNO	CAPACITY	DIMENSIONS	COLOUR
40.03.210	50 L	59 x 39 x 30 cm	blue



## BARREL WITH SCREW LID, PLASTIC

Particularly suitable for watertight storage of items.  
Ideal for storing clean and dirty **oil absorbents**.

ARTIKELNO	CAPACITY	DIMENSIONS	COLOUR	OPENING	WEIGHT
48.66.903	32 L	33 x 39 cm	black	Ø 30 cm	1.9 kg
48.66.906	60 L	61 x 40 cm	black	Ø 30 cm	2.9 kg
48.66.912	120 L	80 x 50 cm	black	Ø 41 cm	5.5 kg
48.66.921	210 L	97 x 58 cm	black	Ø 42 cm	8.0 kg



## CHEST WITH HINGED LID, PLASTIC

Particularly suitable for watertight storage of items.  
Ideal for storing clean and dirty **oil absorbents**.

ARTIKELNO	CAPACITY	DIMENSIONS	COLOUR
48.66.955	170 L	104 x 67 x 50/69 cm	yellow
48.66.960	330 L	126 x 70 x 60/76 cm	yellow





## LEAK PLUG, SCUPPER PLUG (ANTI OVERFLOW)

Also suitable for temporarily closing off piping.

Used on tankers to collect spills in the side decks by quickly closing off the scuppers in the bulwarks to enable the spilled oil to be collected there.

Plug with adjustable thickness, made of rubber and electrolytically galvanized steel.

Large wing nut for adjusting the diameter, also option to allow flow through by means of removable screw cap.

### NBR Rubber

**Maximum temperature -30°C +120°C**

#### Resistant to:

- Mineral oil products up to 50% aromatics
- Aromatic and chlorinated hydrocarbons and solvents
- Oil and grease resistant foodstuffs

#### Not resistant to:

- Low resistance to aging and the sun

### EPDM Rubber

**Maximum temperature -30°C +120°C**

#### Resistant to:

- Hot water
- Steam
- Ozone and weather resistant
- Particularly suitable for aggressive chemicals

#### Not resistant to:

- Oil and grease trace

ARTIKELNO	SIZE (MM)	SIZE (INCHES)	RANGE MIN - MAX	FLOW OPENING	MATERIAL
<b>48.68.010</b>	25 mm	1"	22 - 27 mm	none	NBR rubber
<b>48.68.015</b>	40 mm	1.1/2"	36 - 48 mm	15 mm	NBR rubber
<b>48.68.020</b>	50 mm	2"	49 - 60 mm	15 mm	NBR rubber
<b>48.68.025</b>	63 mm	2.5"	61 - 75 mm	15 mm	NBR rubber
<b>48.68.030</b>	75 mm	3"	73 - 85 mm	15 mm	NBR rubber
<b>48.68.035</b>	90 mm	3.1/2"	84 - 95 mm	15 mm	NBR rubber
<b>48.68.040</b>	100 mm	4"	94 - 110 mm	15 mm	NBR rubber
<b>48.68.045</b>	114 mm	4.1/2"	110 - 120 mm	15 mm	NBR rubber
<b>48.68.050</b>	125 mm	5"	121 - 138 mm	15 mm	NBR rubber
<b>48.68.055</b>	140 mm	5.1/2"	139 - 148 mm	15 mm	NBR rubber
<b>48.68.060</b>	150 mm	6"	146 - 163 mm	15 mm	NBR rubber
<b>48.68.070</b>	175 mm	7"	170 - 195 mm	25 mm	NBR rubber
<b>48.68.080</b>	200 mm	8"	191 - 211 mm	25 mm	NBR rubber
<b>48.68.090</b>	225 mm	9"	213 - 237 mm	25 mm	NBR rubber
<b>48.68.100</b>	250 mm	10"	244 - 265 mm	25 mm	NBR rubber
<b>48.68.110</b>	275 mm	11"	275 - 305 mm	25 mm	NBR rubber
<b>48.68.120</b>	300 mm	12"	296 - 314 mm	25 mm	NBR rubber
<b>48.68.130</b>	325 mm	13"	315 - 350 mm	25 mm	EPDM rubber
<b>48.68.140</b>	350 mm	14"	340 - 375 mm	25 mm	EPDM rubber
<b>48.68.150</b>	375 mm	15"	365 - 400 mm	25 mm	EPDM rubber
<b>48.68.160</b>	400 mm	16"	390 - 425 mm	25 mm	EPDM rubber

**DRIP TRAY, CLEANING TRAY FOR FILTERS**

Made of heavy black plastic.  
For cleaning filters, filter housings and components with gas oil.

ARTIKELNO	CAPACITY	DIAMETER	HEIGHT
<b>48.70.007</b>	7 L	31 cm	10 cm

**DRIP TRAY**

Made of heavy black plastic.  
Place under hose couplings to collect minor spills.  
Ideal for all oil and chemical tankers.

ARTIKELNO	DIAMETER	HEIGHT	WEIGHT
<b>48.70.065</b>	58 cm	33 cm	1.8 kg

**DRIP TRAY 120L STAINLESS STEEL 304, ADJUSTABLE**

Wheelbarrow model.  
Adjustable in height (180 mm).  
2" welding sock for, among other things, ball valve, cam lock, etc. connection.  
Complete with ground wire and lid.

Material : container : Stainless steel 304  
: grid : perforated sheet

ARTIKELNO	DESCRIPTION
<b>48.70.120</b>	Drip tray 120L stainless steel 304, adjustable

## BUCKET

Complete with carrying handle.



ARTIKELNO	CAPACITY	COLOUR	DIAMETER	MATERIAL
<b>48.71.311</b>	12 L	black	280 mm	polyethylene (heavy model)
<b>48.71.420</b>	20 L	black	330 mm	polyethylene
<b>48.71.712</b>	10 L	zinc coloured	290 mm	galvanized steel
<b>48.71.715</b>	11 L	zinc coloured	290 mm	galvanized steel (heavy model)

## PAIL



ARTIKELNO	MODEL	MATERIAL	COLOUR	CAPACITY	DIAMETER
<b>48.73.007</b>	Belgian	polyethylene	black	7 L	235 mm
<b>48.73.317</b>	rubber	with canvas	black	7 L	250 mm

## BAILER

Made of polyethylene.



ARTIKELNO	MODEL	CAPACITY	COLOUR
<b>48.75.505</b>	enclosed	1.2 L	dark green
<b>48.75.507</b>	half open	0.8 L	orange

## RAPID SETTING CEMENT 1, CEBAR POWDER

In handy plastic tub with lid.  
 Low shrinkage and excellent adhesion.  
 Workable for: 1 minute.  
 Load bearing after 3 minutes.

ARTIKELNO	PACKAGING	CAPACITY
49.02.506	tub	6 kg



## DEHUMIDIFIER (BISON)

A device that reduces high relative humidity, so that problems with damp are solved.  
 Radically deals with condensation, damp, mould and musty smells in all areas with little or no ventilation such as: anchor locker and lazarette, larder, wheelhouse, homes that are temporarily or permanently uninhabited, guest (bed)rooms, storage areas, sheds, garages, stores, warehouses, holiday homes and summerhouses, caravans, yachts etc.

### Properties:

- Tackles condensation, damp, mould and musty smells.
- Reduces and maintains the relative humidity at the normal value of 40 - 60%.
- Prevents rotting and rusting.
- Non-hazardous, non-toxic, odourless, silent.
- Clean in use, costs no energy, can be used anywhere and is portable.

ARTIKELNO	SIZE	DESCRIPTION
49.03.210	small	1 pot of 450 grams, for areas up to around 15 m <sup>2</sup>
49.03.220	large	1 pot of 1,000 grams, for areas up to around 40 m <sup>2</sup>



## DEHUMIDIFIER (BISON), REFILL

ARTIKELNO	PACKAGING	CAPACITY
49.03.310	bag	450 gr
49.03.315	bag	1,000 gr
49.03.330	jerry can	2,500 gr





## ASSORTED INSULATION TAPE, 5 COLOURS, 10M

PVC insulation tape for universal use.  
Suitable for electrical insulation as well as for many other applications.  
Flame retardant.

Thickness : 0.15 mm  
Adhesive strength : 4.9 N / 25 mm  
Temperature resistance : 80 °C  
Breakdown voltage : 6.5 kV

roll length : 10 metres  
width : 19 mm  
colours : black : 4 rolls  
: red : 2 rolls  
: yellow : 2 rolls  
: blue : 1 roll  
: white : 1 roll

ARTIKELNO	DESCRIPTION
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49.15.110	Assorted insulation tape, 5 colours, 10m
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## ASSORTED INSULATION TAPE, 6 COLOURS, 20M

Suitable for electrical insulation as well as for reinforcement, protection and repair.  
Flame retardant.  
VDE approved(excl. XB1910).  
Easy tear

Thickness : 0.15 mm  
Adhesive strength : 4.5 N / 25 mm  
Temperature resistance : 90 °C  
Breakdown voltage : 7.0 kV

roll length : 20 metres  
width : 19 mm  
colours : black : 5 rolls  
: yellow/green : 1 roll  
: red : 1 roll  
: white : 1 roll  
: grey : 1 roll

ARTIKELNO	DESCRIPTION
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49.15.120	Assorted insulation tape, 6 colours, 20m
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## INSULATING TAPE

Coroplast 302.

One-sided adhesive PVC tape complying with DIN 40631 K10 and with KEMA certification on the black coloured tape.

For properly and safely insulating and wrapping electrical cables in home and business by the tradesman and home handyman. Can also be used for repairing rubber gloves, water hoses, plastic rainwear, boots etc.

Industrial quality.

Excellent stretching capability.

Breakdown voltage, 9000 volt.

Difficult to ignite, self-extinguishing and aging resistant.

Very resistant to dilute alkalis and acids.

After application, the material properties remain unchanged even when subjected to varying temperatures.

colour	: black and white in stock, other colours can be ordered
material	: soft PVC film
temperature	: -10 to +90 °C
stretch at breaking point	: 110 %
adhesive strength	: 0.16 kg per 10 mm
thickness	: 0.15 mm
roll length	: 25 metres

ARTIKELNO	WIDTH	COLOUR	ROLLS PER BOX
<b>49.16.147</b>	19 mm	black	16
<b>49.16.150</b>	25 mm	black	12
<b>49.16.159</b>	50 mm	black	6
<b>49.16.280</b>	19 mm	white	16
<b>49.16.283</b>	25 mm	white	12
<b>49.16.292</b>	50 mm	white	6



## SELF-VULCANIZING TAPE

Sealing and filling tape.

Anti-corrosion tape for steel fittings, threaded connections, power and antenna cables, light fittings etc.

Self-vulcanizing to form an airtight and waterproof "mass" when wound in a spiral under light tension and with a small overlap.

colour	: black
material	: butyl rubber
temperature	: up to 50 °C
thickness	: 0.8 mm
roll length	: 10 metres

ARTIKELNO	WIDTH
<b>49.18.719</b>	19 mm



## STOVEPIPE TAPE

Aluminium adhesive tape for sealing seams in air-conditioning ducts and flues.

colour	: aluminium
material	: aluminium
temperature	: -40 to +90 °C
thickness	: 0.06 mm
width	: 50 mm
roll length	: 45 metres

ARTIKELNO	DESCRIPTION
<b>49.19.450</b>	Stovepipe tape





## ALUMINIUM/BITUMEN/TAR ADHESIVE TAPE

For sealing leaks on roofs, hatches and in other areas.

colour	: lead-coloured
material	: laminate of PE and aluminium with adhesive layer of bitumen and rubbers
temperature	: -20 to +80 °C
thickness	: 1.0 mm
width	: 75 mm
roll length	: 10 metres

ARTIKELNO	DESCRIPTION
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<b>49.19.762</b>	Aluminium/bitumen/tar adhesive tape
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## GREASE TAPE (DENSOBAND)

Grease tape is a cold workable grease bandage for protecting metal against corrosion.

colour	: brown
material	: cotton support impregnated on both sides by a grease mass of technical Vaseline
temperature	: -30 to +40 °C
thickness	: 1.2 mm
roll length	: 10 metres

ARTIKELNO	WIDTH
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<b>49.20.050</b>	50 mm
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<b>49.20.100</b>	100 mm
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## ENGINEERING ADHESIVE TAPE, COTTON ADHESIVE TAPE

colour	: broken white
material	: cotton fabric
stretch at breaking point	: 12 %
adhesive strength	: 1.3 kg per 25 mm
thickness	: 0.30 mm
roll length	: 50 metres

ARTIKELNO	WIDTH
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<b>49.20.748</b>	19 mm
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<b>49.20.751</b>	25 mm
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<b>49.20.755</b>	38 mm
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<b>49.20.760</b>	50 mm
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## UNIVERSAL REPAIR TAPE – RESQ TAPE



ResQ tape is a universal repair tape made of pure silicone.  
 It is very versatile for insulation and sealant purposes in highly changeable conditions.  
 Because ResQ-tape only adheres to itself, you can also use it on wet and dirty surfaces (so you do not have to dry or clean them first), and you can even apply it underwater.  
 It can even be used to seal a leaking pressurised pipe.  
 It leaves no glue residue.  
 UV-resistant and permanently flexible.  
 Resists fuels, oil, acids, solvents and salt.

Insulating capacity : 12,000 Volts per layer  
 Temperature resistance : -90 to +260 °C  
 Pressure resistance : up to 12 Bar  
 Packaging : packs of 24  
 Roll length : 3.65 metres

### SCALE:

24 items AH

ARTIKELNO	WIDTH	COLOUR
49.21.250	25 mm	blue
49.21.252	25 mm	black
49.21.254	25 mm	red
49.21.256	25 mm	white
49.21.500	50 mm	blue
49.21.502	50 mm	black
49.21.504	50 mm	red
49.21.506	50 mm	white

## PROFIBAND – DUCT TAPE

Tape for odd jobs or hobbies.  
 Self-adhesive, waterproof, weather resistant textile tape for rapidly repairing broken pipes, tubes, torn tents or tarpaulins.  
 Because of its great flexibility and resistance to water, very suitable for sealing seams and joints, for example when installing central heating and for water supplies and drains.  
 Also suitable for bundling wood, pipes etc.



colour : silver coloured  
 material : weather resistant textile tape  
 stretch at breaking point : 5.5 %  
 adhesive strength : 1.8 kg per 25 mm  
 thickness : 0.35 mm  
 width : 50 mm

ARTIKELNO	LENGTH
49.25.150	10 m
49.25.160	25 m



## VELCRO ZIP FIX, SELF ADHESIVE

Self-adhesive, very strong Velcro.  
Suitable for attaching light and heavy objects, e.g. : car mats, audio equipment, tools, etc.  
Good adhesion to metal, glass, wood, ceramics and plastics.  
Suitable for outdoor use.

Temperature resistance : 100 °C  
Adhesive : Hot melt rubber  
Carrier : Polyamide  
Thickness : 2.1 mm

ARTIKELNO	TYPE	WIDTH	LENGTH	COLOUR
49.25.420	hook	20 mm	5 m	black
49.25.421	loop	20 mm	5 m	black



## ANTISLIP TAPE

Ideal for anti-slip protection on smooth surfaces.  
For both industrial applications and home use.  
High adhesion.  
Resistant to oil and water.  
For both indoor and outdoor use.

colour : black or black / yellow  
roll length : 18 meter  
adhesive : acrylic  
carrier : PVC  
maximum temperature : -20 tot +50°C, shortly 80 °C  
tensile strength : 59 N / 25 mm  
adhesive strength : 15,7 N / 25 mm  
thickness : 0.8 mm

ARTIKELNO	WIDTH	COLOUR
49.26.025	25 mm	black
49.26.050	50 mm	black
49.26.125	25 mm	black / yellow
49.26.150	50 mm	black / yellow



## MARKING TAPE

Self-adhesive safety markingtape.  
With extra coating for durable result.  
Resistant to oil and water.  
For both indoor and outdoor use.

colour : yellow / black or white / red  
roll length : 33 meter  
adhesive : rubber  
carrier : PVC  
maximum temperature : -20 tot +80°C  
tensile strength : 80 N / 25 mm  
adhesive strength : 3 N / 25 mm  
thickness : 0.19 mm

ARTIKELNO	WIDTH	COLOUR
49.27.050	50 mm	yellow / black
49.27.055	50 mm	white / red

## BISON KIT

A universal contact adhesive based on synthetic rubber resins and solvents for gluing sheets of plastic cladding (Formica, Perstorp, Duropal, Resopal etc.), board, mineral acoustic ceiling tiles (Minatex and suchlike), veneer, rubber and plastic edge trim, rubber and plastic edges, foam rubber, leather, synthetic leather, PVC cloth, linoleum, felt, cork etc. to wood, chipboard, concrete, stone, metals etc.

### Properties:

Enormous, immediate adhesive strength which, in the course of time, further increases through vulcanisation.  
Simple to apply without using presses or clamps.  
Very versatile in application.  
Very resistant to aging, oil, damp, salts, weak acids.



ARTIKELNO	PACKAGING	CAPACITY	NUMBER PER BOX
49.55.515	tube	100 ml	15

## BISON TIX

Non-stringing, does not run and spreads like butter.  
Thixotropic contact adhesive based on neoprene rubber, synthetic resins and solvents.  
Because of its buttery characteristics, the adhesive does not soak into porous materials such as chipboard.  
It is therefore not necessary to spread two layers.  
See Bison Kit for applications.

### Properties:

Non-stringing, very easy to spread.  
Does not run from vertical surfaces.  
Does not soak into porous materials pre-spreading is therefore unnecessary.  
For smaller areas has a limited "sliding window".  
Very resistant to aging, oil, damp, salts, weak acids.  
Does not sag.



ARTIKELNO	PACKAGING	CAPACITY	NUMBER PER BOX
49.55.715	tube	100 ml	15

## BISON STRUCTURAL ADHESIVE, WOOD GLUE

Water resistant wood glue complying with DIN 68602 B4.  
A high quality, liquid single component polyurethane glue that hardens under the influence of moisture in the air and/or material.  
Suitable for weather and (sea)water resistant gluing of almost all types of wood, to each other and to Formica, metal, stone, concrete, some plastics etc.  
Especially for the gluing and repairing of structures and joints for which stringent requirements have been specified.

### Properties:

Single component, hardens under the influence of moisture in the air and material.  
Gives a very strong glued joint.  
Temperature resistance from -20 °C to +125 °C.  
Excellent resistance to all weather influences and the effects of (sea)water.  
Some crack-filling capability.  
Resistant to aging, cleaning materials, dilute acids and salts.  
Ideal for fixing the handle to a long-handled scrubbing brush or broom!



ARTIKELNO	PACKAGING	CAPACITY
49.57.305	squeeze bottle	75 ml



## SEALANT GUN

Tough steel version.

ARTIKELNO	DESCRIPTION	COLOUR
49.60.940	Sealant gun	blue lacquer



## SEALANT GUN, ENGLISH MODEL

Sometimes also called a "skeleton gun".  
Professional version.  
Strong construction, works easily and without problems.

ARTIKELNO	DESCRIPTION	COLOUR
49.60.943	Sealant gun, English model	orange epoxy coating



## BISON SEALANT

Paintable elastic sealant  
Especially for sealing static joints and seams, both inside and out, where only limited elasticity is required.  
Seals joints, seams and cracks in door and window frames, windowsills, stairs, plinths, corrugated roofs, chimneys, conduits and roof gutters.

Bison Sealant is **not** suitable for permanently elastic seals.  
**Not** for seals on cars and **not** applicable in constantly wet areas such as underwater joints, aquaria, foundations, swimming pools.  
**Use Bison Silicone Sealant in these areas.**

### Properties:

Can be thinned with water.  
Temperature resistant from -30 to + 80 °C.  
Good frost and moisture resistance.  
Resistant to all weather influences, UV light, aggressive industrial air, household waxes and cleaners, brief exposure to dilute acids, bases and salts.  
Easy to paint over.

ARTIKELNO	COLOUR	CAPACITY	NUMBER PER BOX
49.64.225	white	310 ml	12

## BISON SILICONE SEALANT

A high quality, very easy to apply, elastic sealant based on silicone rubbers.  
For example on board ships and yachts, in cars, caravans, homes, the building industry and especially for sanitary fittings.

### Properties:

Adheres to many materials, in some cases requiring pre-treatment.

Remains elastic after vulcanization.

Completely waterproof (seawater resistant).

Does not age, does not shrink and does not crack.

Resistant to weather influences, UV light, carbon dioxide, ozone, dilute acids, bases and salts, household waxes and cleaners and aggressive industrial air.

Is thixotropic so remains in place in vertical, horizontal and overhead joints.

Especially for sanitary applications and therefore contains a fungicide.

May not be used for aquaria.



ARTIKELNO	COLOUR	CAPACITY	NUMBER PER BOX
49.65.325	transparent	310 ml	12
49.65.330	white	310 ml	12
49.65.340	grey	310 ml	12

## BISON INSULATING AND FILLING FOAM, PUR FOAM

A sprayable, lightweight, rapid hardening foam in an aerosol can based on polyurethane with a large capacity for expansion.

Expands after application to a maximum of twice the applied volume; a 500 ml aerosol can gives around 25 litres of foam.

Hardens under the influence of the moisture in the air.

Adheres to many materials: metals, wood, stone, concrete and many plastics.

### Properties:

Large capacity for expansion, single component.

Flame extinguishing, resistant to rotting.

Clean and handy to use.

Suitable for many applications.

Easy to work, long shelf life.



ARTIKELNO	PACKAGING	CAPACITY
49.67.505	aerosol can	500 ml



## JOINT COMPOUND HYLOMAR

Non-setting universal jointing compound.  
Resistant to fuels and lubricants.  
Use on gaskets and metal surfaces.

ARTIKELNO	PACKAGING	CAPACITY
49.70.201	tube	100 gr

## BOX OF ASSORTED WASHERS

Selection of boxes with a wide range.



ARTIKELNO	TYPE OF WASHER	MATERIAL	UNITS	NUMBER
49.73.110	O-ring	nitrile rubber	Metric	404
49.73.120	O-ring	nitrile rubber	Inches	382
49.73.140	flat ring	fibre	Metric	120
49.73.180	flat ring	red copper	Metric	244



## FLANGE GASKET, CARDBOARD

Thickness : 3 mm  
Packaging : packs of 50

ARTIKELNO	FLANGE SIZE	GASKET SIZE
49.73.801	1"	70 x 34 mm
49.73.824	1.1/2"	91 x 49 mm
49.73.802	2"	107 x 61 mm
49.73.825	2.1/2"	127 x 70 mm
49.73.803	3"	142 x 90 mm
49.73.804	4"	162 x 115 mm
49.73.805	5"	192 x 141 mm
49.73.806	6"	218 x 161 mm
49.73.807	7"	248 x 195 mm
49.73.808	8"	273 x 217 mm
49.73.810	10"	326 x 273 mm
49.73.812	12"	375 x 325 mm
49.73.814	14"	445 x 368 mm

### FLANGE GASKET, ASBESTOS-FREE

Glass fibre and cellulose bound with nitrile rubber.  
Maximum 180 °C and maximum 30 bar.

Thickness : 2 mm  
Packaging : packs of 50



ARTIKELNO	FLANGE SIZE	GASKET SIZE
49.74.001	1"	70 x 34 mm
49.74.002	2"	107 x 61 mm
49.74.025	2.1/2"	127 x 70 mm
49.74.003	3"	142 x 90 mm
49.74.004	4"	162 x 115 mm
49.74.005	5"	192 x 141 mm
49.74.006	6"	218 x 161 mm
49.74.007	7"	248 x 195 mm
49.74.008	8"	273 x 217 mm
49.74.010	10"	326 x 273 mm
49.74.012	12"	375 x 325 mm

### HEMP PACKING FOR PIPING

Knot of around 200 grams.



ARTIKELNO	DESCRIPTION
49.75.005	Hemp packing for piping

### TEFLON TAPE

With "GIVEG" certificate.

ARTIKELNO	WIDTH	THICKNESS	ROLL LENGTH	NUMBER PER PACKAGE
49.75.010	12 mm	0.1 mm	12 m	10



### PACKING EXTRACTOR

Flexible version.

ARTIKELNO	SIZE	FOR PACKING	DIAMETER	LENGTH
40.12.506	No. 1	6 - 8 mm	6 mm	205 mm
40.12.510	No. 2	10 - 13 mm	7 mm	280 mm
40.12.514	No. 3	14 - 17 mm	10 mm	365 mm
40.12.520	No. 4	and thicker, 20 mm	12 mm	425 mm





## GREASED HEMP PACKING

Made of square-section braided greased hemp.

Temperature : max. 120 °C  
 Pressure : max. 80 bar  
 Application : hydraulic applications such as valves, pumps, propeller shafts etc.  
 Suitable for : water, seawater/brine and non-aggressive media

ARTIKELNO	THICKNESS (MM)	LENGTH PER ROLL
49.77.103	3.0 mm	2 m
49.77.104	4.0 mm	2 m
49.77.105	5.0 mm	2 m
49.77.106	6.5 mm	2 m
49.77.108	8.0 mm	2 m
49.77.110	9.5 mm	2 m
49.77.111	11.0 mm	2 m
49.77.113	12.5 mm	2 m
49.77.114	14.0 mm	2 m
49.77.116	16.0 mm	2 m
49.77.119	19.0 mm	2 m
49.77.122	22.0 mm	2 m
49.77.125	25.0 mm	2 m



## GREASED COTTON PACKING

Very good quality, of first class square-section braided greased cotton.

Temperature : max. 120 °C  
 Pressure : rotating : max. 10 bar  
               : stationary : max. 60 bar  
 Application : hydraulic applications such as valves, pumps, propeller shafts etc.  
 Suitable for : water, seawater/brine and non-aggressive media

ARTIKELNO	THICKNESS (MM)	THICKNESS (INCHES)	WEIGHT PER ROLL APPROX.	LENGTH PER ROLL
49.77.204	4 mm	1/8"	1 kg	41 m
49.77.205	5 mm	3/16"	1 kg	26 m
49.77.2055	5 mm	3/16"	5 kg	130 m
49.77.206	6 mm	1/4"	1 kg	18 m
49.77.2065	6 mm	1/4"	5 kg	90 m
49.77.208	8 mm	5/16"	2 kg	20 m
49.77.2085	8 mm	5/16"	5 kg	50 m
49.77.210	10 mm	3/8"	5 kg	33 m
49.77.212	12 mm	1/2"	5 kg	23 m
49.77.214	14 mm	9/16"	5 kg	16 m
49.77.216	16 mm	5/8"	8 kg	23 m
49.77.219	19 mm	3/4"	8 kg	16 m
49.77.222	22 mm	7/8"	8 kg	12 m
49.77.225	25 mm	1"	8 kg	8.5 m
49.77.228	28 mm	1.1/8"	8 kg	7 m
49.77.232	32 mm	1.1/4"	8 kg	5 m
49.77.238	38 mm	1.1/2"	8 kg	4 m
49.77.245	45 mm	1.3/4"	10 kg	8 m
49.77.250	50 mm	2"	10 kg	6 m



## GRAPHITE PACKING

Safe, contains no asbestos.

Square-section, braided glass fibre yarns, impregnated with mineral oil and graphite.

Temperature : max. 480 °C

Application : connection rods, centrifugal and plunger pumps, valves, stuffing boxes etc.

Suitable for : superheated steam, air, gasses, oil, most acids and many chemicals

Supplied as : 2 metres in box



ARTIKELNO	THICKNESS (MM)	THICKNESS (INCHES)
49.79.303	3.0 mm	2/16"
49.79.304	4.0 mm	1/8"
49.79.305	5.0 mm	3/16"
49.79.306	6.5 mm	1/4"
49.79.308	8.0 mm	5/16"
49.79.310	9.5 mm	3/8"
49.79.311	11.0 mm	7/16"
49.79.312	12.5 mm	1/2"
49.79.314	14.5 mm	9/16"
49.79.316	16.0 mm	5/8"
49.79.319	19.0 mm	3/4"
49.79.322	22.0 mm	7/8"
49.79.325	25.0 mm	1"



## MOSS RUBBER

Also known as sponge rubber.  
Seawater resistant.

Rubber : EPDM rubber with hardness, shore 15°, -40 °C to +70 °C  
Tolerance : 20 to 30% variation in dimensions is normal  
Roll length : 10 metres

ARTIKELNO	DIMENSIONS
49.81.006	10 x 6 mm
49.81.008	10 x 8 mm
49.81.010	10 x 10 mm
49.81.510	15 x 10 mm
49.81.515	15 x 15 mm
49.82.005	20 x 5 mm
49.82.010	20 x 10 mm
49.82.015	20 x 15 mm
49.82.020	20 x 20 mm
49.82.510	25 x 10 mm
49.82.515	25 x 15 mm
49.82.520	25 x 20 mm
49.82.525	25 x 25 mm
49.83.010	30 x 10 mm
49.83.015	30 x 15 mm
49.83.020	30 x 20 mm
49.83.025	30 x 25 mm
49.83.030	30 x 30 mm
49.83.510	35 x 10 mm
49.83.515	35 x 15 mm
49.83.520	35 x 20 mm
49.83.525	35 x 25 mm
49.83.530	35 x 30 mm
49.83.535	35 x 35 mm
49.84.010	40 x 10 mm
49.84.015	40 x 15 mm
49.84.020	40 x 20 mm
49.84.025	40 x 25 mm
49.84.030	40 x 30 mm
49.84.035	40 x 35 mm
49.84.040	40 x 40 mm
49.84.510	45 x 10 mm
49.84.515	45 x 15 mm
49.84.525	45 x 25 mm
49.84.530	45 x 30 mm
49.84.540	45 x 40 mm
49.85.010	50 x 10 mm
49.85.020	50 x 20 mm
49.85.025	50 x 25 mm
49.85.030	50 x 30 mm
49.85.040	50 x 40 mm
49.86.005	60 x 5 mm

## GLASS FIBRE CORD

Woven glass sheath filled with glass fibre.  
Safe, contains no asbestos.

Working temperature : 550 °C  
Application : insulating exhausts, stovepipes etc.  
Supplied as : rolls of 30 metres



ARTIKELNO	THICKNESS (MM)	THICKNESS (INCHES)
49.94.208	8.0 mm	5/16"
49.94.210	10.0 mm	3/8"
49.94.213	12.5 mm	1/2"
49.94.216	16.0 mm	5/8"
49.94.220	20.0 mm	3/4"
49.94.225	25.0 mm	1"
49.94.230	30.0 mm	1 1/4"

## GLASS TAPE

Woven glass fibre tape.  
Safe, contains no asbestos.

Thickness : 3 mm  
Working temperature : 500 °C  
Application : insulating exhausts, stovepipes etc.  
Supplied as : rolls of 50 metres



ARTIKELNO	WIDTH (MM)	WIDTH (INCH)
49.94.325	25 mm	1"
49.94.340	40 mm	1 1/2"
49.94.350	50 mm	2"
49.94.375	75 mm	3"
49.94.399	100 mm	4"
49.94.400	150 mm	6"



# Group 5

Lubrication, oil and tar products  
Paint articles  
Maintenance and cleaning products  
Fenders, ladders and gangways  
Truss buckets and stainless steel deck fittings



# STARTING MATERIALS



## STARTING WICK

For cold or difficult to start diesel engines.

ARTIKELNO	DIMENSIONS	PACKAGING	NUMBER PER PACKAGE
50.01.514	4 mm	metal tin	100
50.01.515	5 mm	metal tin	100
50.01.516	6 mm	metal tin	100
50.01.517	7 mm	metal tin	100
50.01.518	8 mm	metal tin	100



## STARTPILOOT STARTING SPRAY

Startpilot has a first class reputation worldwide and has been ensuring that petrol and diesel engines start immediately for more than 50 years. The only starting liquid that includes a lubricant. Works not with ether, but with hydrogen.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.02.530	300 ml	aerosol can	12



## BRAKE CLEANER

For all sorts of cleaning jobs.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.04.205	500 ml	aerosol can	12



## PENETRATING OIL

With graphite.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.04.603	400 ml	aerosol can	12

## WD-40 MULTI-SPRAY

WD-40 is irresistibly drawn to the metal surface. A natural characteristic. It pushes everything out of the way, moisture, grease, dirt, dust. WD-40 mercilessly penetrates into the furthest corners, into every groove and onto every edge, no matter how microscopically small. And that's all it does, WD-40 leaves the metal completely alone.

It is not aggressive, but does provide long term protection. It doesn't stick and doesn't contaminate.

WD-40 is all in one, the true multi-spray.

Used all over the world, available even in the smallest hamlets.

The amazing thing is that it is more effective than the existing individual agents: anti rust treatments, starting liquids, penetrating oil, preservative, metal cleaners, silicone sprays, degreasers and so on.

- WD-40 as a MOISTURE DISPLACER; finds its own way to the metal surface.
- WD-40 as a PROTECTIVE LAYER; long lasting prevention of rust and corrosion.
- WD-40 as a DEGREASER; defeats even the most persistent dirt.
- WD-40 as a LUBRICANT; silicone-free, good adhesion, clean and can be painted over.
- WD-40 as a PENETRATING OIL; works perfectly by capillary action. Loosens screws and rust.

WD-40 can therefore be used for all sorts of applications on ships, in engineering businesses, garages, maintenance companies, etc. On tools and machinery, on the car, in the home, for the caravan, bike and boat.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.07.505	200 ml	aerosol can	12
50.07.513	300 ml	aerosol can (SMART STRAW)	12
50.07.517	450 ml	aerosol can (SMART STRAW)	24
50.07.521	5 L	jerry can + trigger	4



## PTFE SPRAY (TEFLON)

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.07.554	300 ml	aerosol can	12



## SILICONE SPRAY

Dirt and moisture displacing anti-adhesive and lubricating spray for instruments, machines, conveyor belts, roller bearings, gears, chains, windows, doors and locks.

Prevents door rubbers from freezing fast.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.08.103	300 ml	aerosol can	12





## CONTACT SPRAY

Universal cleaning spray for electrical contacts.  
Dissolves dirt and oxides, improves the conductivity and rectifies faults.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.08.202	200 ml	aerosol can with tube	12



## ZINC SPRAY, ZINC PAINT

Handy aid for thoroughly protecting small and large surfaces.

ARTIKELNO	CAPACITY	PACKAGING	TYPE	NUMBER PER BOX
50.08.404	400 ml	aerosol can	GRIFFON Galvatec zinc spray	12
50.08.602	250 ml	tin	ISOPON Z/182/S	10
50.08.610	1,000 ml	tin	ISOPON Z/182/M	6



## VASELINE, VASELINE SPRAY

Preventive maintenance product for protecting metals against corrosion, such as battery terminals.  
Also for protecting the skin and hands when carrying out dirty work.  
White, acid-free quality.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.10.202	200 gr	small pot	12
50.10.205	500 gr	small pot	24
50.10.210	1,000 gr	pot	12
50.10.220	18 kg	pail	1
50.10.300	400 ml	aerosol can	12



## COPPER GREASE, COPPER ASSEMBLY PASTE COPPER SPRAY

Also known as copper compound, Copaslip.  
The best product for preventing corrosion of battery terminals.  
Mainly used for treating connections that need to be undone again after a long period of time.  
That is not a problem with COPPER ASSEMBLY PASTE, despite moisture, high temperatures or extremely difficult situations.

Temperature : -40 °C to + 1,350 °C

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.10.403	1,000 gr	pot	12
50.10.409	400 ml	aerosol can	12



## GREASE CARTRIDGE, MULTI PURPOSE EP2

Ideal grease for sliding and ball bearings with EP2 (Extreme Pressure, thickness 2) properties.

color : white

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
<b>50.12.010</b>	400 gr	cartridge	24



## GREASE CARTRIDGE, MOLYBDENUM EP2

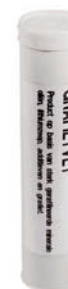
Specially for lubricating under particularly difficult operating conditions due to its low coefficient of friction, exceptional adhesive qualities and EP2 (Extreme Pressure, thickness 2) properties.

Lithium-based grease with molybdenum disulphide (MoS-2) additives.

Sometimes called graphite grease.

colour : charcoal

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
<b>50.12.015</b>	400 gr	cartridge	24



## PROPELLER SHAFT GREASE USG EP2,5

Universal Shipping Grease is a grease mainly developed for lubricating propeller shafts, water pumps and stuffing boxes.

It has been developed for these applications but is also very useful on board for lubricating sliding and ball bearings thereby making full use of its multipurpose character.

The properties of this grease are:

- Very good anti corrosion properties
- Ample EP (Extreme Pressure) properties
- Good anti oxidant properties
- Excellent resistance to salt and fresh water
- Good adhesive properties
- Easy for automatic greasers to pump
- High mechanical stability
- Does not attack rubber

### Technical specification:

N.L.G.I.	: 2/3
penetration at 25 °C	: 250 - 265 (60 strokes ) (ASTM D 217)
dropping point (ASTM D 566)	: 185 °C - 195 °C
soap base	: Li 12 Hydroxy stearate
working temperature	: -20 °C to +135 °C
colour	: dark green
consistency	: like butter



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
<b>50.12.300</b>	400 gr	cartridge	24
<b>50.12.301</b>	1 kg	tub	12
<b>50.12.305</b>	5 kg	pail	4
<b>50.12.307</b>	10 kg	pail	1
<b>50.12.310</b>	18 kg	pail	1



## FISH OIL

Environmentally friendly, colourless and clear oil.  
100% natural train/fish oil, so no mineral oils.  
For lubricating anchor chains and possibly other applications.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
<b>50.40.525</b>	25 L	jerry can	1



## SPINDLE OIL / HOLD SPRAY OIL

High quality plain mineral oil for, among other things, treating ships' holds.  
Doesn't dry, remains greasy.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
<b>50.42.110</b>	10 L	jerry can	1
<b>50.42.120</b>	25 L	jerry can	1

## ANTI-RUST OIL

Low viscosity, corrosion-resisting liquid.

After evaporation of the solvent, a waxy semi-dry protective layer is created.

When used outside, protects for approx. 3 to 6 months but when used inside gives much longer protection of approx. 3 years.

Properties:

- Rust and moisture resistant
- Not aggressive towards rubber and paint
- Ideal for long-term protection in a damp environment

Consumption : approx. 1 litre per 20m<sup>2</sup> when sprayed

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.42.205	5 L	tub	4
50.42.210	10 L	pail	1
50.42.220	20 L	pail	1



## ANTI-RUST GREASE / MIRAL HULL GREASE

Composed of mineral base materials, anti-rust additive and thinner.

Excellent adhesion and water resistance. Effective and long-lasting protection against rust.

A universally applicable preservative for shipping and industry.

Composed of the most optimal mineral basic ingredients and solvents so that it prevents corrosion of metal surfaces.

Miral Hull Grease/Anti-rust grease displaces water, is not sensitive to salt and alkaline solutions, penetrates cracks and metal connections and prevents electrostatic corrosion. Has excellent anti-corrosive and water resistant qualities.

APPLICATION : In shipping, to lubricate surfaces and frames in the hull, under bottom boards and behind panelling.

PROCESS : Apply with spatula or, after slightly warming up, with brush.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.42.305	5 kg	pail	4
50.42.310	10 kg	pail	1
50.42.320	18 kg	pail	1



## COAL TAR ECO / TARVARNISH

Alternative coal tar, environmentally-friendly composition.

Greatly improved version.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.52.105	5 L	tub	4
50.52.110	10 L	pail	1
50.52.120	20 L	pail	1



## BROWN TAR

Original import from the Swedish town of Umea, distilled from pine.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
50.72.505	5 kg	pail	4





## POLYESTER FILLER ISOPON P-38

The tradesman's choice for many years now.  
Easy to sand to produce a mirror finish.  
Complete with hardener, spatula and instructions

ARTIKELNO	CAPACITY	WEIGHT	PACKAGING	TYPE	NUMBER PER BOX
51.23.254	250 ml	400 gr	small tin	P38/S	12
51.23.260	600 ml	1.00 kg	tin	P38/1	6
51.23.312	1.20 L	2.00 kg	tin	P38/2	8
51.23.322	2.25 L	3.75 kg	tin	P38/4	4



## HARDENER ISOPON P38 / P-40

Hardener for ISOPON P-38 / P-40.

ARTIKELNO	CAPACITY	WEIGHT	PACKAGING	TYPE	NUMBER PER BOX
51.23.400	20 gr	20 gr	sachet	H3840/S	20



## FIBRE GLASS-POLYESTER FILLER ISOPON P-40

Similar to P38, but extra strong because the polyester resin is filled with glass fibres.  
Complete with hardener, spatula and instructions.

ARTIKELNO	CAPACITY	WEIGHT	PACKAGING	TYPE	NUMBER PER BOX
51.24.025	250 ml	400 gr	tin	P40/S	12
51.24.060	600 ml	1.00 kg	tin	P40/1	6
51.24.100	1.00 L	1.70 kg	tin	P40/2	8
51.24.185	1.85 L	3.10 kg	tin	P40/4	4

## POLYESTERHARS ISOPON

For repairs and self-build with polyester.

Each set includes: resin, hardener, glass mat and instructions.

## POLYESTER RESIN ISOPON, SMALL SET

For repairs and self-build with polyester.

Contents:

- 1 tub containing 250 ml resin
- 1 sachet of hardener, 20 gram
- 0.27 m<sup>2</sup> glass mat, 1 x 110 x25 cm
- 1 mixing beaker
- 1 spatula
- 1 small brush
- 1 set of instructions on the box



ARTIKELNO	DESCRIPTION	TYPE	NUMBER PER BOX
51.34.510	small set	GL/SM/D	6

## POLYESTERHARS ISOPON, BIG SET

For repairs and self-build with polyester.

Contents:

- 1 tub containing 500 ml resin
- 1 sachet of hardener, 20 gram
- 0.54 m<sup>2</sup> glass mat, 2 x 110 x 25 cm
- 2 spatulas
- 1 mixing beaker
- 1 small brush
- 2 disposable gloves
- 1 set of instructions on the box



ARTIKELNO	DESCRIPTION	TYPE	NUMBER PER BOX
51.34.520	large set	GL/LA/D	4

## POLYESTER RESIN ISOPON, ACCESSORIES

ARTIKELNO	DESCRIPTION	CAPACITY	TYPE	NUMBER PER BOX
51.34.810	glass mat fine	1.00 m <sup>2</sup> (100 x 100 cm)	GFT	20
51.34.820	glass mat coarse	0.55 m <sup>2</sup> (0.74 x 0.74 cm)	GFM	20
51.34.830	polyester resin	0.25 L	RE/SM	10
51.34.850	polyester resin	1 L	RE/XL	5
51.34.890	hardener	sachet 20 gram	HAR/BLM	20





## AQUAKIT

Aquakit repairs virtually everything! All types of metal, ceramics, wood, glass, cement and hard plastic. Aquakit has excellent adhesive strength, even on wet surfaces, **even under water**. Aquakit sets as hard as steel within 15 minutes. Aquakit is oil resistant. Aquakit is easy to work and does not stick to the hands. Aquakit can be drilled, sawed, polished and painted.

### POSSIBLE APPLICATIONS:

- Repairing leaks, without dismantling, in water pipes, boilers, radiators, etc.
- Various repairs under water, such as swimming pools, aquariums, yachts, boats and ships.
- Joining tubes of different diameters.
- Repairs to the bodywork of cars, caravans and boats.
- Sealing a joint or branch.
- Repairing a screw thread.
- Can be used instead of insulating tape or cable lugs.

### APPLICATION AND CURING:

processing time after kneading : 3 minutes at 20 °C  
 curing time standard : 15 minutes at 20 °C  
 curing time under water : 20 minutes at 20 °C

### MATERIAL PROPERTIES AFTER CURING:

specific gravity : 1.9 gr/cm<sup>3</sup>  
 hardness : 85 Shore  
 compressive strength : 900 kg/cm<sup>2</sup>  
 tensile strength : 62 kg/cm<sup>2</sup>  
 maximum usage temp. : 121 °C, briefly at 149 °C  
 electrical resistance : 3000 megohm  
 shrinkage : <1%

### INSTRUCTIONS FOR USE:

1. Degrease the surface, then clean and roughen it with abrasive paper or wire brush.
2. Break off the required quantity.
3. Thoroughly knead until a homogenous, evenly coloured mass is formed (+/- 1 minute).
4. Apply immediately and press firmly into place.
5. After use, hands should be washed thoroughly with soap and water.

Complete with detailed instructions for use in four languages.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.36.005	57 gr	blister	30

## ACETONE

This product is suitable for dissolving and removing all kinds of synthetic products and dried coatings. For instance glue, paint, grease and ink.  
You can also use it as an aid for working with polyester.  
Do not use acetone on plastic, coated surfaces, rayon or chlorofibres.  
Acetone is highly flammable and evaporates rapidly.

Acetone is on the government's list of precursors as a substance used in explosives and drugs. Individual sales of it are therefore passed on to the competent authorities.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.48.801	1 L	bottle	6

## AMMONIA <5%

Ammonia <5% is suitable for cleaning ovens, windows, cabinets and mirrors as well as removing wood stain, glue and ink. It is also suitable for degreasing paintwork.  
Never mix ammonia with bleach or chlorine products.  
You must also take care with coloured fabrics because as well as being a degreaser, ammonia also works as a bleach.<b>

### Use/dosage

For cleaning your oven, pour 1/5 ammonia into 5/5 warm water.  
When working with ammonia, it is important to keep the area well ventilated due to the harmful chemical vapour.  
This product is only intended for professional use.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.48.901	1 L	bottle	12

## AMMONIA 15%

Besides being used for regular cleaning purposes, extra powerful ammonia 15% can be used as a wood lye. In diluted form, ammonia 15% can be used for cleaning ovens, windows, cabinets and mirrors as well as removing wood stain, glue and ink.  
It is also suitable for degreasing paintwork.  
Never mix ammonia 15% with bleach or chlorine products.  
You must also take care with coloured fabrics because as well as being a degreaser, ammonia also works as a bleach.

### Use/dosage

Expose the wooden parts to be treated with lye to the ammonia 15% vapour in a well-sealed room.  
When working with ammonia, it is important to keep the area well ventilated due to the harmful chemical vapour.  
This product is only intended for professional use.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.48.905	5 L	jerry can	4



## B-CLEAN PAINT/ALL-PURPOSE CLEANER

A non-foaming all-purpose cleaner that has been specially developed for the professional painter. B-Clean Verf / Allesreiniger (paint/all-purpose cleaner) is a phosphate-free and biodegradable degreaser. It is the perfect replacement for ammonia. It removes grease and makes paintwork substrates antistatic. Saves time because with normal dirt levels, there is no need to rinse. As an all-purpose cleaner, it removes almost all kinds of dirt from virtually any surface. You can also use the product for cleaning floors, windows, doors, kitchens, carpets, garden furniture etc.

### Use/dosage

Dilute B-Clean Verf / Allesreiniger all-purpose cleaner in accordance with the table below:

- \* 1:10 heavily soiled surfaces, floors, ovens and engines
- \* 1:50 kitchens, garden furniture and machinery
- \* 1:100 paintwork substrates, carpet, nicotine stains

\*In the case of heavily soiled surfaces it may be necessary to rinse with water

This product is only intended for professional use.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.001	1 L	bottle	12
51.49.005	5 L	jerry can	4



## METHYLATED SPIRIT 85%

Methylated spirit is suitable for cleaning windows, mirrors, tiles and suchlike. You can also use methylated spirit as a fuel for fondue sets and hotplates. Methylated spirit is also good at removing aphids.

### Use/dosage

For cleaning mirrors etc., apply methylated spirit to a cloth and wipe surface clean. Polish with a soft cloth. This product is only intended for professional use.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.101	1 L	bottle	12
51.49.105	5 L	jerry can	4



## DEMINERALISED WATER

Demineralised water (Demi-water) is chemically pure water with a conductivity of <math><5\mu\text{S}</math>.

### Use/dosage

For use in steam irons, air humidifiers, car radiators, batteries etc.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.205	5 L	jerry can	4
51.49.225	25 L	jerry can	1



## BRUSH CLEANER

Brush cleaner is suitable for alkyd paints and is free from harmful aromatics. You can also use brush cleaner for cleaning brushes and paint rollers that have been used for alkyl paints.

### Use/dosage

You can clean your brush in a jar of brush cleaner, moving it around so that all the paint comes into contact with the brush cleaner. Then wash the brush with soap/detergent and store in water.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.301	1 L	bottle	12

## LAMP OIL

Clear lamp oil is the fuel for all kinds of oil lamps with and without a sootless burner. Clear lamp oil is also suitable for cruet stands, decorative oil lamps and garden torches.

### Use/dosage

When burning it is advisable to cut away the carbonised part of the wick to reduce the amount of smoke. For dosage, refer to the instructions for your lamp.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.401	1 L	bottle	12

## LINSEED OIL, BOILED

Boiled linseed oil is a vegetable-based, clear, light yellow drying oil. Boiled linseed oil is suitable for treating wooden objects such as ladders, fences, doors, roof beams etc. You can also use boiled linseed oil for metals, concrete floors and tiles.

### Use/dosage

For treating concrete floors etc, one litre is sufficient for around 10 - 15m<sup>2</sup>. It is preferable to dilute the linseed oil with 25 - 50% paint thinner or turpentine and apply as a thin coat. Then rub it in with a dry, lint-free cloth.

Caution! Risk of heating when absorbed by porous materials such as cloths, rags and clothing creating a fire hazard. After use, pour water over cloths. This product is only intended for professional use.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.501	1 L	bottle	6
51.49.505	5 L	jerry can	4



## LINSEED OIL, NOT BOILED (RAW)

Raw linseed oil is suitable for impregnating wood and storing used brushes.  
Raw linseed oil is a natural product and therefore less harmful to the environment.

### Use/dosage

You can dilute raw linseed oil with 25 - 50% paint thinner or turpentine.  
Raw linseed never dries out completely and dries more slowly than boiled linseed oil (add 1 - 5% siccatif for quicker drying).

Caution! Risk of heating when absorbed by porous materials such as cloths, rags and clothing creating a fire hazard.  
After use, pour water over cloths.  
This product is only intended for professional use.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.601	1 L	bottle	6
51.49.605	5 L	jerry can	4



## LIQUID DRAIN UNBLOCKER

Liquid drain unblocker is suitable for unblocking discharge pipes from baths, showers and washbasins and removing hair and soap residue.  
The major benefit of this product is that there is no heat development when dosing the blocked drain so there is no violent splashing and plastic pipes will not melt.

### Use/dosage

Make sure that as much water as possible is removed from the blocked drain.  
Then, slowly pour the unblocker (one cup for washbasins and two cups for showers and baths) slowly and directly into the drain and allow it to act on the blockage for around 30 minutes.  
Finally rinse thoroughly with water and repeat if necessary.  
This product is only intended for professional use.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.701	1 L	bottle	6



## DEAROMATISED PETROLEUM

Petroleum can be used as a degreaser and lighter fluid.  
Petroleum can also be used as a fuel for oil lamps.

### Use/dosage

Observe the dosage indicated on the instructions for your device.  
This product is only intended for professional use.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.801	1 L	bottle	12
51.49.805	5 L	jerry can	4



## CLEANING VINEGAR

This professional grade cleaning vinegar is suitable for cleaning rugs, carpets, coffee machines, shower heads, taps, freshening fabric colours, removing flies and mosquitoes from smooth surfaces.  
Cleaning vinegar can also be used to clean soiled tiles and doorsteps.  
This product is more concentrated than the usual consumer products which means the cleaning action is more effective.

### Use/dosage

For cleaning your coffee machine, dilute 100 ml of cleaning vinegar with 1 litre of water.  
This product is only intended for professional use.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.49.901	1 L	bottle	6
51.49.925	25 L	jerry can	1

## STICKER REMOVER

Sticker remover is suitable for removing stickers, sticker adhesive, tape adhesive, adhesive tape, snow spray etc. You can use sticker remover on paintwork, glass, stone, linoleum, carpet and fabrics. Use with care on delicate high gloss paint, carpet, fabrics and plastics. Sticker remover may affect the colour, so try it out carefully first.

### Use/dosage

You can apply sticker remover with a brush. Allow it to soak in for a short time before finally removing the sticker. If any adhesive residue is left behind, apply the sticker remover again and wipe it off with a cloth after a few minutes. With vinyl stickers, lift a corner and allow the sticker remover to flow beneath it and soak in before finally removing the sticker. This product is only intended for professional use.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.50.002	250 ML	bottle	12

## TURPENTINE

Turpentine is suitable as a thinner for alkyl paints, synthetic varnishes and oil paints. You can also use turpentine for cleaning brushes and paint rollers. It can also be used to remove paint splashes from linoleum and parquet flooring. Turpentine is not suitable as a thinner for latex paint or acrylic paint.

### Use/dosage

Turpentine is a ready-to-use product and can be used immediately. You can use a cloth to apply the turpentine to the entire area to be cleaned. This product is only intended for professional use.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.50.301	1 L	bottle	12
51.50.305	5 L	jerry can	4

## THINNER

Thinner is suitable for thinning spray paints. You can also use thinner for cleaning brushes and spray gun nozzles.

### Use/dosage

Thinner is a ready-to-use product and can be used immediately. You can use a cloth to apply the thinner and clean the entire area. This product is only intended for professional use.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.50.501	1 L	bottle	12
51.50.505	5 L	jerry can	4

## WHITE SPIRIT

White spirit is suitable as a thinner for synthetic paints and spray paints. In addition, you can use it to clean your brushes and remove grease stains from textiles etc.

### Use/dosage

White spirit is a ready-to-use product and can be used immediately. Apply a small amount of white spirit to a cloth and then clean away the grease stains. Follow the manufacturer's instructions for thinning paints and varnishes. This product is only intended for professional use.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.50.601	1 L	bottle	12
51.50.605	5 L	jerry can	4



## HYDROCHLORIC ACID SOLUTION <10%

You can use hydrochloric acid <10% to remove cement and lime residue.  
You can also use the hydrochloric acid solution as a drain unblocker in cases where an alkaline unblocker does not work.

### Use/dosage

Dilute hydrochloric acid with water 1:10 to 1:20.  
Finally rinse with water.  
Beware of mixing with alkaline drain unblockers as this can result in a violent reaction.  
This product is only intended for professional use.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.50.701	1 L	bottle	6



## BOSCHE HARTTROCKENÖL-L

Colourless, gloss weather resistant varnish.  
For preserving surfaces that are NOT walked on such as the raised edges of the hold, storage locker etc. Also suitable for adding to paints and varnishes for quicker drying and curing.  
Also gives a better gloss.  
Does not crack or craze.  
Green/blue label.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.68.802	2.5 L	tub	6
51.68.805	5.0 L	tub	1
51.68.810	10.0 L	tub	1



## BOSCHE HARTTROCKENÖL RAPID

Quick drying.  
Colourless, gloss weather resistant varnish.  
For preserving surfaces that are walked on such as side decks, cabin roof etc.  
Very suitable for adding to paints and varnishes for quicker drying and curing.  
Also gives a better gloss.  
Yellow label.

### Use/dosage

Smooth iron : approx. 10 m<sup>2</sup> per litre  
Checker plate : approx. 7/8 m<sup>2</sup> per litre  
Minimally dry 1 day between 2 layers, maximally 2,5 days.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
51.68.905	5.0 L	tub	1
51.68.910	10.0 L	tub	1

## SANDING BLOCK

Rectangular.



ARTIKELNO	DIMENSIONS
<b>51.80.005</b>	105 x 60 x 25 mm

## WATERPROOF ABRASIVE PAPER, PROFESSIONAL

Industrial quality.  
Sharp grit, long lasting.



ARTIKELNO	GRIT SIZE	DIMENSIONS	TYPE OF GRIT	TYPE	COLOUR	NUMBER PER PACKAGE
<b>51.80.060</b>	60	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.080</b>	80	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.100</b>	100	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.120</b>	120	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.180</b>	180	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.220</b>	220	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.240</b>	240	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.280</b>	280	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.320</b>	320	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.360</b>	360	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.400</b>	400	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.500</b>	500	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.600</b>	600	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.800</b>	800	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.810</b>	1,000	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.820</b>	1,200	28 x 23 cm	silicon carbide (SiC)	PS11	black	50
<b>51.80.850</b>	1,500	28 x 23 cm	silicon carbide (SiC)	PS11	black	50

## DRY WATERPROOF ABRASIVE PAPER

Industrial quality.



ARTIKELNO	GRIT SIZE	DIMENSIONS	TYPE OF GRIT	TYPE	COLOUR	NUMBER PER PACKAGE
<b>51.81.100</b>	100	28 x 23 cm	aluminium oxide	A219	grey	50
<b>51.81.120</b>	120	28 x 23 cm	aluminium oxide	A219	grey	50
<b>51.81.150</b>	150	28 x 23 cm	aluminium oxide	A219	grey	50
<b>51.81.180</b>	180	28 x 23 cm	aluminium oxide	A219	grey	50
<b>51.81.220</b>	220	28 x 23 cm	aluminium oxide	A219	grey	50
<b>51.81.240</b>	240	28 x 23 cm	aluminium oxide	A219	grey	50
<b>51.81.280</b>	280	28 x 23 cm	aluminium oxide	A219	grey	50
<b>51.81.320</b>	320	28 x 23 cm	aluminium oxide	A219	grey	50



## ABRASIVE TAPE, PAPER, ROLL OF 4.5 METRES

Remains super sharp for longer due to dust rejecting treatment which means that the abrasive layer does not clog so quickly. Suitable for use on varnish, paint, filler and wood.

hardness : around 8.6 to 9.4 (diamond is 10)

ARTIKELNO	GRIT SIZE	WIDTH	TYPE OF GRIT	TYPE	COLOUR	LENGTH PER ROLL
51.82.040	40	115 mm	aluminium oxide	PS30	yellow	4.5 m
51.82.060	60	115 mm	aluminium oxide	PS30	yellow	4.5 m
51.82.080	80	115 mm	aluminium oxide	PS30	yellow	4.5 m
51.82.100	100	115 mm	aluminium oxide	PS30	yellow	4.5 m
51.82.120	120	115 mm	aluminium oxide	PS30	yellow	4.5 m
51.82.150	150	115 mm	aluminium oxide	PS30	yellow	4.5 m
51.82.180	180	115 mm	aluminium oxide	PS30	yellow	4.5 m



## ABRASIVE TAPE, CLOTH, ROLL OF 5 METRES

Industrial quality abrasive cloth for all metals.

Flexible and kink-free due to the use of a fully synthetic resin binder, which also gives a good resistance to moisture.

Very resistant to abrasion, lasts significantly longer.

hardness : around 8.6 to 9.4 (diamond is 10)

ARTIKELNO	GRIT SIZE	WIDTH	TYPE OF GRIT	TYPE	COLOUR	LENGTH PER ROLL
51.83.040	40	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.050	50	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.060	60	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.080	80	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.100	100	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.120	120	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.150	150	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.180	180	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.220	220	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.240	240	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.280	280	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.320	320	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.360	360	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m
51.83.400	400	115 mm	aluminium oxide	Amaril Triumph KL-H	brown	5 m



## ABRASIVE TAPE, CLOTH, ROLL OF 50 METRES

Industrial quality abrasive cloth for all metals.

Flexible and kink-free due to the use of a fully synthetic resin binder, which also gives a good resistance to moisture.

Very resistant to abrasion, lasts significantly longer.

hardness : around 8.6 to 9.4 (diamond is 10)

ARTIKELNO	GRIT SIZE	WIDTH	TYPE OF GRIT	TYPE	COLOUR	LENGTH PER ROLL
51.84.040	40	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.060	60	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.080	80	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.100	100	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.120	120	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.150	150	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.180	180	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.240	240	115 mm	aluminium oxide	KL-361	brown	50 m
51.84.320	320	115 mm	aluminium oxide	KL-361	brown	50 m

## ABRASIVE DISC ALUMINIUM OXIDE 125 MM (8 DUST HOLES)

High grade abrasive disc for use on varnish, paint, filler and wood.  
High stock removal power.

hardness : approx. 8.6 to 9.4 (diamond is 10)



ARTIKELNO	GRIT SIZE	DIAMETER	TYPE OF GRIT	TYPE	COLOUR	NUMBER PER PACKAGE
<b>51.84.404</b>	24	125 mm (8 holes)	aluminium oxide	PS33	grey	100
<b>51.84.406</b>	60	125 mm (8 holes)	aluminium oxide	PS33	grey	100
<b>51.84.408</b>	80	125 mm (8 holes)	aluminium oxide	PS33	grey	100
<b>51.84.410</b>	100	125 mm (8 holes)	aluminium oxide	PS33	grey	100
<b>51.84.412</b>	120	125 mm (8 holes)	aluminium oxide	PS33	grey	100
<b>51.84.415</b>	150	125 mm (8 holes)	aluminium oxide	PS33	grey	100
<b>51.84.418</b>	180	125 mm (8 holes)	aluminium oxide	PS33	grey	100
<b>51.84.424</b>	240	125 mm (8 holes)	aluminium oxide	PS33	grey	100

## ABRASIVE DISC ALUMINIUM OXIDE 150 MM (14+1 DUST HOLES)

High grade abrasive disc for use on varnish, paint and filler.  
High stock removal speed.  
Highly reduced clogging and considerably longer life due to extra layer of active material.

hardness : approx. 8.6 to 9.4 (diamond is 10)



ARTIKELNO	GRIT SIZE	DIAMETER	TYPE OF GRIT	TYPE	COLOUR	NUMBER PER PACKAGE
<b>51.86.040</b>	40	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.060</b>	60	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.080</b>	80	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.100</b>	100	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.120</b>	120	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.150</b>	150	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.180</b>	180	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.220</b>	220	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.240</b>	240	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.320</b>	320	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.400</b>	400	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.500</b>	500	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100
<b>51.86.600</b>	600	150 mm (14+1 holes)	aluminium oxide	PS73	grey	100



## ABRASIVE DISC CORUNDUM 125 MM (8 DUST HOLES)

Industrial grade abrasive disc for metal and wood.  
High moisture resistance through use of full resin bond.  
Highly durable, lasts significantly longer.  
Homogenous abrasive surface.

hardness : approx. 8.6 to 9.4 (diamond is 10)

ARTIKELNO	GRIT SIZE	DIAMETER	TYPE OF GRIT	TYPE	COLOUR	NUMBER PER PACKAGE
51.85.024	24	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.040	40	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.060	60	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.080	80	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.100	100	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.120	120	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.150	150	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.180	180	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.220	220	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.240	240	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.320	320	125 mm (8 holes)	aluminium oxide	PS22K	brown	50
51.85.400	400	125 mm (8 holes)	aluminium oxide	PS22K	brown	50



## ABRASIVE DISC CORUNDUM 150 MM (6 DUST HOLES)

Industrial grade abrasive disc for metal and wood.  
High moisture resistance through use of full resin bond.  
Highly durable, lasts significantly longer.  
Homogenous abrasive surface.

hardness : approx. 8.6 to 9.4 (diamond is 10)

ARTIKELNO	GRIT SIZE	DIAMETER	TYPE OF GRIT	TYPE	COLOUR	NUMBER PER PACKAGE
51.87.024	24	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.040	40	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.060	60	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.080	80	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.100	100	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.120	120	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.150	150	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.180	180	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.220	220	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.240	240	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.320	320	150 mm (6 holes)	aluminium oxide	PS22K	brown	50
51.87.400	400	150 mm (6 holes)	aluminium oxide	PS22K	brown	50



## KIP MASKING TAPE EXTRA PREMIUM PLUS, WHITE

Premium product, impregnated crepe tape for the professional sector.  
Extremely strong adhesive force and high tear resistance.  
Outstanding water and humidity resistance due to special impregnation.  
For masking smooth substrates, mainly indoors.

removable : indoors : 7 days  
: outdoors : <1 day  
temperature : 80 °C  
material : crepe impregnated  
elongation : 8%



ARTIKELNO	WIDTH	COLOUR	THICKNESS	ROLL LENGTH	ROLLS PER BOX
52.20.118	18 mm	white	0.16 mm	50 m	48
52.20.124	24 mm	white	0.16 mm	50 m	36
52.20.136	36 mm	white	0.16 mm	50 m	24
52.20.148	48 mm	white	0.16 mm	50 m	20

## KIP MASKING TAPE WASHI-TEC® FOR OUTDOOR USE, BLUE

Premium product UV-, weather and age-resistant through special rubber adhesive.  
For safe masking on vulnerable substrates such as acrylic paint.  
This UV-resistant tape is highly tear resistant.

removable : indoors : 3 months  
: outdoors : 3 months  
temperature : 100 °C  
material : Washi paper  
elongation : 7%



ARTIKELNO	WIDTH	COLOUR	THICKNESS	ROLL LENGTH	ROLLS PER BOX
52.20.324	24 mm	blue	0.10 mm	50 m	36
52.20.336	36 mm	blue	0.10 mm	50 m	24
52.20.348	48 mm	blue	0.10 mm	50 m	20

## KIP MASKING TAPE WASHI-TEC® PREMIUM PLUS, GOLD/YELLOW

For the sharpest paint edges with extremely good adhesion and tensile strength, use this Kip Washi-Tec® Premium Plus tape.  
Thanks to continual development, this tape is very thin, supple but tear proof and stable.  
This means the tape can be applied accurately on smooth or lightly structured substrates preventing the paint running under it.  
This allows extremely sharp paint edges to be created.  
This UV-resistant tape is highly tear resistant.

removable : indoors : 6 months  
: outdoors : 3 months  
temperature : 120 °C  
material : Washi paper  
elongation : 6%



ARTIKELNO	WIDTH	COLOUR	THICKNESS	ROLL LENGTH	ROLLS PER BOX
52.20.519	18 mm	gold/yellow	0.09 mm	50 m	48
52.20.525	24 mm	gold/yellow	0.09 mm	50 m	36
52.20.538	36 mm	gold/yellow	0.09 mm	50 m	24
52.20.550	48 mm	gold/yellow	0.09 mm	50 m	20

## BRUSH ADVICE

Brushes should be stored as follows:

- Remove as much paint from the brush as possible by brushing it out as much as possible.
- Water-based paints can be easily removed from the brush by rinsing it with water (please consider the environment and do not rinse water off into the sewer).
- Synthetic paints are not easy to remove from a brush. Use a putty knife to scrape off the outside of the brush thoroughly and place it back in the paint tin.
- Next, clean the brush with turpentine or brush cleaning agent and dry it with a dry cloth.
- Never store the brush resting on its bristles, but store it suspended or flat in a cool place.
- For short-term storage, wrap the brush in aluminium foil.



## PRECISION BRUSH DISPOSABLE – SERIES 299

This disposable precision brush can be used for all paint applications on your vessel. Thanks to the full two-component epoxy adhesive, the brush has a longer shelf life.

bristle type : Chinese hog bristle 60% tops  
 bristle colour : white  
 set in : nickel-plated ferrule  
 handle : fully plastic handle, equipped with handy hang-up hole

ARTIKELNO	SIZE	DIAMETER	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.01.406</b>	No. 6	13 mm	40 mm	12
<b>53.01.408</b>	No. 8	16 mm	40 mm	12
<b>53.01.410</b>	No. 10	20 mm	40 mm	12
<b>53.01.412</b>	No. 12	23 mm	40 mm	12
<b>53.01.414</b>	No. 14	26 mm	40 mm	12
<b>53.01.416</b>	No. 16	29 mm	40 mm	12
<b>53.01.418</b>	No. 18	32 mm	40 mm	12
<b>53.01.420</b>	No. 20	35 mm	40 mm	12



## PRECISION BRUSH – SERIES 216

Precision brush with black Chinese hog bristle Chungking 60/70% tops. Professional quality and suitable for both acrylic and alkyd lacquers.

bristle type : Chinese hog bristle Chungking 60/70% tops  
 bristle colour : black  
 set in : round nickel-plated ferrule  
 handle : clear varnish wooden handle, equipped with hang-up hole

ARTIKELNO	SIZE	DIAMETER	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.03.406</b>	No. 6	13 mm	41 mm	12
<b>53.03.408</b>	No. 8	16 mm	46 mm	12
<b>53.03.410</b>	No. 10	20 mm	49 mm	12
<b>53.03.412</b>	No. 12	23 mm	52 mm	12
<b>53.03.414</b>	No. 14	26 mm	52 mm	12
<b>53.03.416</b>	No. 16	29 mm	52 mm	12
<b>53.03.418</b>	No. 18	32 mm	60 mm	12
<b>53.03.420</b>	No. 20	35 mm	60 mm	12

**POINTED PRECISION BRUSH – SERIES 240**

Bound pointed precision brush with black Chinese hog bristle Chungking 60/70% tops. Professional quality and suitable for both acrylic and alkyd lacquers.

bristle type : Chinese hog bristle Chungking 60/70% tops, bound with string  
 bristle colour : black  
 set in : round nickel-plated ferrule  
 handle : clear varnish wooden handle, equipped with hang-up hole

ARTIKELNO	SIZE	DIAMETER	BRISTLE LENGTH	NUMBER PER PACKAGE
53.05.408	No. 8	16 mm	45 mm	12
53.05.410	No. 10	20 mm	45 mm	12
53.05.412	No. 12	23 mm	50 mm	12
53.05.414	No. 14	26 mm	50 mm	12
53.05.416	No. 16	29 mm	59 mm	12
53.05.418	No. 18	32 mm	59 mm	12
53.05.420	No. 20	35 mm	64 mm	12

**POINTED PRECISION BRUSH GOUDHAANTJE PROF – SERIES 260**

Professional pointed precision brush with 90% tops pure, natural black Chinese hog bristle. For giving your paintwork an extremely smooth finish using both acrylic and alkyd lacquers.

bristle type : Chinese hog bristle Chungking 90% tops, with glued string  
 bristle colour : black  
 set in : round copper-plated ferrule  
 handle : clear varnish wooden handle, equipped with hang-up hole

ARTIKELNO	SIZE	DIAMETER	BRISTLE LENGTH	NUMBER PER PACKAGE
53.07.408	No. 8	16 mm	52 mm	12
53.07.410	No. 10	20 mm	52 mm	12
53.07.412	No. 12	23 mm	52 mm	12
53.07.414	No. 14	26 mm	59 mm	12
53.07.416	No. 16	29 mm	65 mm	12
53.07.418	No. 18	32 mm	65 mm	12
53.07.420	No. 20	35 mm	71 mm	12
53.07.422	No. 22	39 mm	77 mm	12



 Goudhaantje®

**POINTED PRECISION BRUSH GOUDHAANTJE FUTURA – SERIES 280**

Pointed precision brush for professional use with modified polyester filaments.

An excellent brush for working with both acrylic and alkyd lacquers.

Unlike hog bristle brushes, a synthetic brush does not need to be used several times before it can be used to achieve a smooth result.

bristle type : modified polyester filaments  
 bristle colour : white-green  
 set in : round Inox ferrule  
 handle : clear varnish wooden handle, equipped with hang-up hole

ARTIKELNO	SIZE	DIAMETER	BRISTLE LENGTH	NUMBER PER PACKAGE
53.09.410	No. 10	20 mm	52 mm	12
53.09.412	No. 12	23 mm	52 mm	12
53.09.414	No. 14	26 mm	60 mm	12
53.09.416	No. 16	29 mm	65 mm	12
53.09.418	No. 18	32 mm	70 mm	12
53.09.420	No. 20	35 mm	70 mm	12



 Goudhaantje®



### FLAT BRUSH DISPOSABLE – SERIES 699

This flat, disposable brush can be used for all paint applications on your vessels. Thanks to the full two-component epoxy adhesive, the brush has a longer shelf life.

bristle type : Chinese hog bristle  
 bristle colour : white  
 set in : nickel-plated ferrule  
 handle : fully plastic handle, equipped with handy hang-up hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.11.020</b>	No. 20	20 mm	40 mm	12
<b>53.11.030</b>	No. 30	30 mm	40 mm	12
<b>53.11.040</b>	No. 40	40 mm	40 mm	12
<b>53.11.050</b>	No. 50	50 mm	40 mm	12
<b>53.11.060</b>	No. 60	60 mm	40 mm	12
<b>53.11.070</b>	No. 70	70 mm	40 mm	12



### FLAT BRUSH MARINE – SERIES 616

Flat brush with varnished wooden handle and pure, natural, black, Chinese hog bristle Chungking 60/70% tops.

bristle type : pure, natural Chinese hog bristle Chungking 60/70% tops  
 bristle colour : black  
 set in : nickel-plated ferrule  
 handle : varnished wooden handle with handy hanging hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.12.320</b>	No. 20	20 mm	45 mm	12
<b>53.12.330</b>	No. 30	30 mm	45 mm	12
<b>53.12.340</b>	No. 40	40 mm	50 mm	12
<b>53.12.350</b>	No. 50	50 mm	50 mm	12
<b>53.12.360</b>	No. 60	60 mm	52 mm	12
<b>53.12.370</b>	No. 70	70 mm	58 mm	12
<b>53.12.400</b>	No. 100	100 mm	64 mm	12



### FLAT BRUSH DIY – SERIES 603

This double-thick, flat brush with red tip has synthetic hair. Excellent professional quality for varnishing, staining and applying top coats to larger areas.

bristle type : synthetic hair  
 bristle colour : black  
 set in : nickel-plated ferrule  
 handle : clear varnish wooden handle with red tip, equipped with hang-up hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.13.310</b>	1"	25 mm	47 mm	12
<b>53.13.315</b>	1.5"	37 mm	47 mm	12
<b>53.13.320</b>	2"	50 mm	56 mm	12
<b>53.13.325</b>	2.5"	62 mm	56 mm	12
<b>53.13.330</b>	3"	75 mm	58 mm	6

**FLAT BRUSH GOUDHAANTJE PROF – SERIES 660**

The top of the range for professional use and a perfect finish.  
The Goudhaantje Prof brush is double thick and has pure, natural Chinese Chungking hog bristle 90% tops.

bristle type : Chinese hog bristle Chungking 90% tops  
bristle colour : black  
set in : round nickel-plated ferrule  
handle : clear varnish wooden handle with yellow tip, equipped with hang-up hole



ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.15.310	1"	25 mm	50 mm	12
53.15.315	1.5"	37 mm	55 mm	12
53.15.320	2"	50 mm	64 mm	12
53.15.325	2.5"	62 mm	67 mm	12
53.15.330	3"	75 mm	75 mm	6

 Goudhaantje
**FLAT BRUSH GOUDHAANTJE FUTURA – SERIES 680**

Thanks to the modified polyester filaments, this professional, flat brush is suitable for both water-based and synthetic varnishes (VOC 2010).

Perfect for precision painting without brush strokes.

bristle type : double thick, modified polyester filaments,  
bristle colour : white-green  
set in : Inox ferrule  
handle : clear varnish wooden handle with green tip, equipped with hang-up hole



ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.17.310	1"	25 mm	55 mm	12
53.17.315	1.5"	37 mm	55 mm	12
53.17.320	2"	50 mm	62 mm	12
53.17.325	2.5"	62 mm	62 mm	12
53.17.330	3"	75 mm	69 mm	6

 Goudhaantje
**RADIATOR BRUSH DISPOSABLE – SERIES 499**

This radiator brush is fully glued, making it more sustainable for processing two-component varnishes.

bristle type : Chinese hog bristle  
bristle colour : white  
set in : nickel-plated ferrule  
handle : fully plastic, equipped with hang-up hole



ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.21.315	1.5"	37 mm	40 mm	12
53.21.320	2"	50 mm	40 mm	12
53.21.325	2.5"	62 mm	52 mm	12

**RADIATOR BRUSH WHITE BRISTLE – SERIES 403**

This radiator brush has a non-varnished handle with white, Chinese hog bristle Chungking 90% tops.

bristle type : Chinese hog bristle Chungking 90% tops  
bristle colour : white  
set in : nickel-plated ferrule  
handle : clear, wooden handle with hanging hole



ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.21.410	1"	25 mm	50 mm	12
53.21.415	1.5"	37 mm	50 mm	12
53.21.420	2"	50 mm	52 mm	12



### RADIATOR BRUSH WHITE BRISTLE – SERIES 550

This radiator brush has an ergonomic plastic handle with white, Chinese hog bristle Chungking 60/70% tops.

bristle type	: Chinese hog bristle Chungking 60/70% tops
bristle colour	: white
set in	: nickel-plated ferrule
handle	: ergonomic plastic handle with hanging hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.21.530	No. 30	30 mm	44 mm	12
53.21.550	No. 50	50 mm	47 mm	12
53.21.570	No. 70	70 mm	49 mm	12



### RADIATOR BRUSH DIY – SERIES 400

Especially suitable for construction work activities or lubricating dolphins and winches. The brush has pure, natural black Chungking hog hair 60/70% tops.

bristle type	: pure, natural Chinese hog bristle Chungking 60/70% tops
bristle colour	: black
set in	: nickel-plated ferrule
handle	: clear, wooden handle, equipped with hang-up hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.23.301	15 mm	15 mm	33 mm	12
53.23.302	20 mm	20 mm	38 mm	12
53.23.310	1"	25 mm	45 mm	12
53.23.315	1.5"	37 mm	45 mm	12
53.23.320	2"	50 mm	45 mm	12
53.23.325	2.5"	62 mm	54 mm	12
53.23.330	3"	62 mm	54 mm	12



### RADIATOR BRUSH GOUDHAANTJE PROF – SERIES 460

This radiator brush is extremely suitable for applying top coats to difficult to reach areas on board your vessel, like, for example, parts of the engine room.

The brush picks up enough paint thanks to its 90% tops pure Chinese hog hair content.

bristle type	: pure, natural Chinese hog bristle Chungking 90% tops
bristle colour	: black
set in	: copper-plated ferrule
handle	: clear, wooden handle, equipped with hang-up hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.25.310	1"	25 mm	47 mm	12
53.25.315	1.5"	37 mm	53 mm	12
53.25.320	2"	50 mm	54 mm	12
53.25.325	2.5"	62 mm	65 mm	12

**RADIATOR BRUSH GOUDHAANTJE FUTURA – SERIES 480**

Professional, double-thick radiator brush, suitable for both the new water-based varnishes and synthetic varnishes (VOC 2010). The brush is ready for use and will deliver a perfect result when you do not paint that often.

bristle type : double thick, modified polyester filaments  
 bristle colour : white-green  
 set in : Inox ferrule  
 handle : clear varnish wooden handle with green tip, equipped with hang-up hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.27.310	1"	25 mm	50 mm	12
53.27.315	1.5"	37 mm	50 mm	12
53.27.320	2"	50 mm	52 mm	12
53.27.325	2.5"	62 mm	52 mm	12


**RADIATOR BRUSH HOCKEY STICK – SERIES 401**

Angled model for painting with all paint types in difficult to reach areas.

bristle type : Chinese hog bristle Chungking 90% tops  
 bristle colour : white  
 set in : nickel-plated ferrule  
 handle : clear, wooden handle, equipped with hang-up hole

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.29.315	1.5"	37 mm	50 mm	12

**CURVED BRUSH GOUDHAANTJE PROF – SERIES 750**

High quality curved Lyon brush filled with 90% pure white Chinese hog bristle. Especially suitable for painting difficult to reach areas like upper frames and corners.

bristle type : pure Chinese hog bristle Chungking 90% tops  
 bristle colour : white  
 set in : silver-plated ferrule  
 handle : clear varnish wooden handle

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.33.314	No. 14	14 mm	30 mm	12
53.33.316	No. 16	16 mm	32 mm	12
53.33.318	No. 18	18 mm	35 mm	12
53.33.320	No. 20	20 mm	37 mm	12
53.33.322	No. 22	22 mm	40 mm	12
53.33.324	No. 24	24 mm	45 mm	12


**CURVED BRUSH GOUDHAANTJE FUTURA – SERIES 780**

Professional curved Lyon brush with modified polyester filaments. Thanks to the filaments, the brush can be used for both water-based and synthetic varnishes.

bristle type : modified polyester filaments  
 bristle colour : white-green  
 set in : silver-plated ferrule  
 handle : clear varnish beech wood handle

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
53.35.314	No. 14	14 mm	38 mm	12
53.35.316	No. 16	16 mm	38 mm	12
53.35.318	No. 18	18 mm	38 mm	12
53.35.320	No. 20	20 mm	42 mm	12
53.35.322	No. 22	22 mm	40 mm	12
53.35.324	No. 24	24 mm	45 mm	12





### LYON BRUSH STRAIGHT PROF – SERIES 700

Traditional brush, professional quality.

bristle type : pure Chinese hog bristle  
 bristle colour : black  
 set in : aluminium ferrule  
 handle : clear varnish wooden handle

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.41.304</b>	No. 4	4 mm	18 mm	12
<b>53.41.306</b>	No. 6	6 mm	20 mm	12
<b>53.41.308</b>	No. 8	8 mm	25 mm	12
<b>53.41.310</b>	No. 10	10 mm	26 mm	12
<b>53.41.312</b>	No. 12	12 mm	28 mm	12
<b>53.41.314</b>	No. 14	14 mm	33 mm	12
<b>53.41.316</b>	No. 16	16 mm	35 mm	12
<b>53.41.318</b>	No. 18	18 mm	38 mm	12
<b>53.41.320</b>	No. 20	20 mm	40 mm	12
<b>53.41.322</b>	No. 22	22 mm	41 mm	12
<b>53.41.324</b>	No. 24	24 mm	46 mm	12



### LYON BRUSH STRAIGHT FUTURA – SERIES 788

Traditional brush equipped with the latest synthetic filament.

Thanks to this, the brush can be used for a wide range of both water-based and synthetic paints.

bristle type : modified polyester filament  
 bristle colour : white-green  
 set in : stainless steel ferrule  
 handle : clear varnish wooden handle

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.43.304</b>	No. 4	4 mm	18 mm	12
<b>53.43.308</b>	No. 8	8 mm	25 mm	12
<b>53.43.312</b>	No. 12	12 mm	28 mm	12
<b>53.43.316</b>	No. 16	16 mm	35 mm	12
<b>53.43.320</b>	No. 20	20 mm	40 mm	12



### HOCKEY STICK STYLE PLASTIC HANDLE – SERIES 500

Solid ergonomic plastic, hockey stick style handle and 60/70% tops bristle.  
 Supplied complete!

bristle type : Chinese hog bristle Chungking 60/70% tops  
 bristle colour : white  
 set in : nickel-plated ferrule  
 handle : plastic handle

ARTIKELNO	SIZE	WIDTH	BRISTLE LENGTH	NUMBER PER PACKAGE
<b>53.44.330</b>	No. 30	30 mm	46 mm	1
<b>53.44.335</b>	No. 35	35 mm	46 mm	1
<b>53.44.340</b>	No. 40	40 mm	46 mm	1
<b>53.44.345</b>	No. 45	45 mm	46 mm	1
<b>53.44.350</b>	No. 50	50 mm	52 mm	1
<b>53.44.355</b>	No. 55	55 mm	52 mm	1



**VERO ANGLE BRUSH**

Sometimes also called Dutch tar brush.

For applying all types of paint and tar.

**Special octagonal handle with exceptional grip prevents the brush from twisting.**

bristle type : pig's bristle  
 set in : round, nickel-plated ferrule  
 handle : octagonal, bare sanded wooden handle, bolted to the brush

ARTIKELNO	DIAMETER	BRISTLE LENGTH	NUMBER PER PACKAGE
53.43.530	30 mm	45 mm	12
53.43.540	40 mm	45 mm	12
53.43.550	50 mm	55 mm	12
53.43.555	55 mm	55 mm	12
53.43.560	60 mm	55 mm	12
53.43.570	70 mm	60 mm	12

**VERO ANGLE BRUSH, SPARE HANDLE**

**Special octagonal handle with exceptional grip prevents the brush from twisting.**

ARTIKELNO	DESCRIPTION
53.43.598	for tar brushes with diameters of 30 and 40 mm
53.43.599	for tar brushes with diameters of 50, 60 and 70 mm

**TAR BRUSH HEAD**

For large-scale paintwork or small-scale tar work.

bristle type : pig's hair  
 set in : round, nickel-plated ferrule  
 handle : M4 with nut, NO HANDLE

ARTIKELNO	DIAMETER	BRISTLE LENGTH	NUMBER PER PACKAGE
53.47.330	30 mm	45 mm	12
53.47.340	40 mm	45 mm	12
53.47.350	50 mm	55 mm	12
53.47.360	60 mm	55 mm	12
53.47.370	70 mm	60 mm	12





## FOAM ROLLER, 10 PCS PER PACK

Super fine foam of the best quality for a smooth and even finish.  
Available in different sizes.

material : extra fine foam  
colour : white

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.50.060	5 cm	35 mm	straight	-	6 mm	20
53.50.080	10 cm	35 mm	bracket side round	-	6 mm	10
53.50.090	10 cm	35 mm	both sides round	-	6 mm	10



## FOAM ROLLER, INDIVIDUALLY PACKED

Super fine foam of the best quality for a smooth and even finish.  
Available in different sizes.

material : extra fine foam  
colour : white

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.51.005	5 cm	35 mm	straight	-	6 mm	1
53.51.080	10 cm	35 mm	bracket side round	-	6 mm	1
53.51.090	10 cm	35 mm	both sides round	-	6 mm	1



## LACQUER ROLLER, FOAM, CONCAVE

Manufactured from CFC-free and solvent-free foam material (55 kg/m<sup>3</sup>).  
Thanks to the inward rounding edges (concave), roller tracks are a thing of the past.  
Particularly suitable for a perfect finish thanks to the extra fine surface structure.

recommended for : synthetic resin, water-based and anti-corrosion varnishes  
also suitable for : polyester  
material : CFC-free and solvent-free foam  
colour : black

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.52.007	7 cm	35 mm	concave	-	6 mm	20
53.52.011	11 cm	35 mm	concave	-	6 mm	10



## LACQUER ROLLER, LACQUER FELT, ANZA ELITE

Felt roller for smooth substrate and smooth results.  
Lint-free and improved paint absorbency.  
Suitable for all paints, marine coatings and two-component varnishes.

- Improved fabric
- Unique rotating mechanism
- Improved absorbency
- Wash before use

material : polyester  
colour : white

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.52.905	2 x 5 cm	27 mm	felt	5 mm	6 mm	5
53.52.910	10 cm	23 mm	felt	5 mm	6 mm	5
53.52.915	15 cm	23 mm	felt	5 mm	6 mm	5



## LACQUER ROLLER, LACQUER FELT, GOUDHAANTJE

Already well known in shipping industry.  
The felt lacquer roller has a short and very tightly knit cover made from high-quality polyester fibres.  
This provides an even spread of the paint and a smooth finish to the surface.  
Extremely suitable for low and medium viscosity lacquers, stains and paints.

material : polyester  
colour : white

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.53.005</b>	5 cm	27 mm	felt	5 mm	6 mm	20
<b>53.53.010</b>	10 cm	27 mm	felt	5 mm	6 mm	10
<b>53.53.012</b>	12 cm	40 mm	felt	5 mm	6 mm	10
<b>53.53.018</b>	18 cm	58 mm	felt	5 mm	6 mm	2



## LACQUER ROLLER, VELVET

Also called flocked foam roller.  
Extremely suitable for water-based varnishes.

material : flocked foam  
colour : green

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.62.542</b>	10 cm	35 mm	bracket side round (green)	-	6 mm	10



## PAINT ROLLER, TRIPLE GOLD

Made of hard-wearing polyamide cover with optimum paint pick-up capacity and even distribution.  
For extended use with a fine structured and even finish.

material : polyamide  
colour : white with yellow and green stripes

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.55.010</b>	10 cm	41 mm	polyamide	12 mm	6 mm	10



## PAINT ROLLER, PERLON

Woven from prime quality polyamide and acrylic.  
Robust and strong with extremely good paint distribution.  
Suitable for all types of paint and varnish on smooth substrate.

material : polyamide and acrylic  
colour : white with red and grey stripes - white - white with yellow stripe

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.62.732</b>	10 cm	25 mm	white with red and grey stripes	12 mm	6 mm	10
<b>53.62.772</b>	10 cm	25 mm	white with yellow stripe	14 mm	6 mm	10
<b>53.62.786</b>	12 cm	45 mm	white	12 mm	6 mm	10
<b>53.65.732</b>	15 cm	30 mm	white with yellow stripe	12 mm	6 mm	10
<b>53.65.772</b>	16 cm	45 mm	white with yellow stripe	12 mm	6 mm	10





## PAINT ROLLER, VESTAN

Paint roller sleeves suitable for latex emulsions and bitumen.

material : vestan  
colour : yellow

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.55.018</b>	18 cm	75 mm	vestan	22 mm	8 mm	10
<b>53.55.025</b>	25 cm	75 mm	vestan	22 mm	8 mm	10



## PAINT ROLLER, SOFT CORE VESTAN

Paint roller sleeves suitable for latex emulsions and bitumen.  
Highly suitable for lightly structured substrates.

material : vestan  
colour : yellow

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.55.118</b>	18 cm	85 mm	softcore vestan	22 mm	8 mm	35
<b>53.55.125</b>	25 cm	85 mm	softcore vestan	22 mm	8 mm	35



## PAINT ROLLER, VELVET

Short pile solvent resistant, with lambs wool woven cover.  
Suitable for paints and varnishes with a high solvent content.

material : lambs wool woven cover  
colour : beige

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.57.010</b>	10 cm	25 mm	woven lambswool	4 mm	6 mm	10



## PAINT ROLLER, MICROSTAR

Made from specially modified solvent-resistant polyester fibre.  
Able to absorb up to six times its volume in paint.  
Optimum paint absorption, minimum spatter, ideal for working above head height.  
Does not become matted and is easy to clean.

recommended for : primers, varnishes, parquet lacquers, sealing  
also suitable for : water-based paints and dispersions  
material : specially modified solvent-resistant polyester fibre  
colour : white

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.57.310</b>	10 cm	27 mm	polyester fibers	5 mm	6 mm	10



## PAINT ROLLER, NYLON, GREEN STRIPE

These paint rollers are made from an extremely high solvent resistant polyamide cover with coated and wavy nylon fibres. Good paint pick-up capacity and even distribution. Low spatter, lint-free and also easy to clean.

recommended for : synthetic resin, anti-corrosion, two-component and polyester varnishes  
 material : polyamide cover with coated and wavy nylon fibres  
 colour : white with green stripe

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.58.010	10 cm	39 mm	green stripe	11 mm	6 mm	10
53.58.012	12 cm	52 mm	green stripe	11 mm	6 mm	10
53.58.015	15 cm	39 mm	green stripe	11 mm	6 mm	10
53.58.018	18 cm	70 mm	green stripe	11 mm	8 mm	10
53.58.025	25 cm	70 mm	green stripe	11 mm	8 mm	10



## PAINT ROLLER, NYLON, GREEN & BLUE STRIPE

These paint rollers are made from an extremely high solvent resistant polyamide cover with coated and wavy nylon fibres. Good paint pick-up capacity and even distribution. Low spatter, lint-free and also easy to clean.

recommended for : synthetic resin, anti-corrosion, two-component and polyester varnishes  
 material : polyamide cover with coated and wavy nylon fibres  
 colour : white with green & blue stripe

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.59.010	10 cm	29 mm	green and blue stripe	6 mm	6 mm	10
53.59.012	12 cm	42 mm	green and blue stripe	6 mm	6 mm	10
53.59.015	15 cm	29 mm	green and blue stripe	6 mm	6 mm	10
53.59.018	18 cm	60 mm	green and blue stripe	6 mm	8 mm	10
53.59.025	25 cm	60 mm	green and blue stripe	6 mm	8 mm	10



## PAINT ROLLER, NYLON, BLACK & YELLOW STRIPE

Nylon roller, short 8 mm pile for treated substrates. Suitable for metal paints, epoxy paints, polyester varnishes and two-component paints.

material : nylon  
 colour : white with black and yellow stripe

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.62.832	10 cm	25 mm	black and yellow stripe	8 mm	6 mm	10



## PAINT ROLLER, NYLON, RED & BLUE STRIPE

Nylon roller, short 8 mm pile for treated substrates. Suitable for metal paints, epoxy paints, polyester varnishes and two-component paints.

material : nylon  
 colour : white with red & blue stripe

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
53.62.886	12 cm	25 mm	red and blue stripe	8 mm	6 mm	5



## PAIN T AND TAR ROLLERS



### PAIN T ROLLER, POLYESTER, GREY STRIPE

Specially woven 12 mm polyester pile, twine.  
Lint-free, for a smooth result on plasterboard and MDF.  
Suitable for all dispersions and latex paints.

material : polyester  
colour : white with grey stripe

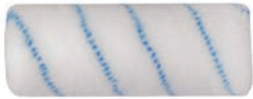
ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.62.790</b>	10 cm	25 mm	grey stripe	12 mm	6 mm	10



### PAIN T ROLLER, NYLON, BLUE STRIPE

Nylon roller, long 14 mm pile for untreated substrates.  
Suitable for metal paints, epoxy paints, polyester varnishes and two-component paints.

material : nylon  
colour : white with blue stripe



ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.62.835</b>	10 cm	35 mm	blue stripe	13 mm	6 mm	1
<b>53.66.764</b>	18 cm	50 mm	blue stripe	14 mm	8 mm	1
<b>53.66.766</b>	25 cm	50 mm	blue stripe	14 mm	8 mm	1



### PAIN T ROLLER LAMBS WOOL

Traditional tar roller made from genuine lambs wool.  
Fits all 8 mm roller frames.

material : lambswool  
colour : yellow

ARTIKELNO	WIDTH	DIAMETER	TYPE	FIBRE LENGTH	DIAMETER HANDLE	NUMBER PER PACKAGE
<b>53.66.944</b>	18 cm	50 mm	lambswool	20 mm	8 mm	10
<b>53.66.946</b>	25 cm	50 mm	lambswool	20 mm	8 mm	1

## HANDLE FOR ROLLERS

ARTIKELNO	ROLLER WIDTH	LENGTH HANDLE	DIAMETER HANDLE	NUMBER PER BOX
<b>53.70.005</b>	5-7 cm	20 cm	6 mm	20
<b>53.70.025</b>	10-12 cm	27 cm	6 mm	20
<b>53.70.045</b>	10-12 cm	42 cm	6 mm	20
<b>53.70.080</b>	10-12 cm	80 cm	6 mm	20
<b>53.70.100</b>	10-12 cm	100 cm	6 mm	10
<b>53.70.220</b>	15-16 cm	27 cm	6 mm	20
<b>53.70.518</b>	18-20 cm	30 cm	8 mm	20
<b>53.70.525</b>	25-27 cm	30 cm	8 mm	20



## HANDLE FOR ROLLERS METAL

ARTIKELNO	ROLLER WIDTH	LENGTH HANDLE	DIAMETER HANDLE	TYPE	NUMBER PER BOX
<b>53.71.100</b>	18-30 cm	30 cm	8 mm	adjustable	25



## TUBE ROLLER, SMALL

For tubes with diameters up to 75 mm (3").  
Complete with 35 cm handle and 4 rollers next to each other.  
For use with paint and tar.

ARTIKELNO	DESCRIPTION	DIAMETER	MATERIAL	FIBRE LENGTH	NUMBER PER PACKAGE
<b>53.72.205</b>	Tube roller, small	39 mm	white Perlon	12 mm	1
<b>53.72.210</b>	Replacement roller for small tube roller (set of 4)	39 mm	white Perlon	12 mm	1



# PAINT AND TAR TRAYS



## PAINT TRAY, NARROW

Stackable.

ARTIKELNO	MATERIAL	INTERNAL DIMENSIONS	COLOUR
<b>53.99.105</b>	plastic	28 x 13 x 5.5 cm	black



## PAINT TRAY

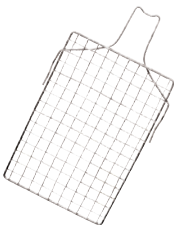
Stackable.

ARTIKELNO	MATERIAL	INTERNAL DIMENSIONS	COLOUR
<b>53.99.112</b>	plastic	20 x 18 x 5.5 cm	blue
<b>53.99.115</b>	plastic	26 x 22 x 5.5 cm	black
<b>53.99.125</b>	plastic	33 x 29 x 7 cm	black



## PAINT BUCKET

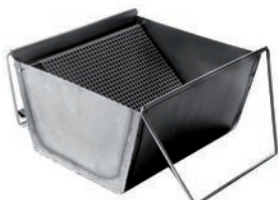
ARTIKELNO	MATERIAL	INTERNAL DIMENSIONS	CAPACITY	COLOUR
<b>53.99.340</b>	plastic	23 x 15 x 18 cm	8 L	black
<b>53.99.350</b>	plastic	28 x 18 x 20 cm	12 L	black



## PAINT GRID

For paint roller bucket, with handle.

ARTIKELNO	MATERIAL	INTERNAL DIMENSIONS	COLOUR
<b>53.99.410</b>	metal	21 x 10 cm	galvanized
<b>53.99.414</b>	metal	18 x 14 cm	galvanized
<b>53.99.420</b>	polyethylene	18 x 12 cm	blue
<b>53.99.450</b>	polyethylene	30 x 25 cm	black



## TAR AND PAINT TRAY

ARTIKELNO	MATERIAL	INTERNAL DIMENSIONS	CAPACITY	COLOUR
<b>53.99.550</b>	steel (untreated)	30 x 30 x 18 cm	12 L	bare metal



## CLEANING CLOTHS DARK COLOURED TRICOT

Selected only from cotton clothing such as T-shirts.  
Free of metal and plastic parts such as zips, buttons etc.

ARTIKELNO	WEIGHT	PACKAGING	NUMBER ON PALLET
54.03.351	5 kg	plastic carrier bag	66
54.03.354	10 kg	plastic	30
54.03.355	10 kg	box (pressed)	50
54.03.358	25 kg	bale	24



## CLEANING CLOTHS WHITE TRICOT, SPECIAL, COLOURED EDGE

Selected only from cotton clothing such as T-shirts.  
Free of metal and plastic parts such as zips, buttons etc.

ARTIKELNO	WEIGHT	PACKAGING	NUMBER ON PALLET
54.03.751	5 kg	plastic carrier bag	66
54.03.752	5 kg	box	90
54.03.754	10 kg	plastic	30
54.03.755	10 kg	box	50



## CLEANING CLOTHS WHITE TRICOT, PURE WHITE

Selected only from cotton clothing such as T-shirts.  
Free of metal and plastic parts such as zips, buttons etc.

ARTIKELNO	WEIGHT	PACKAGING	NUMBER ON PALLET
54.03.771	5 kg	plastic carrier bag	66
54.03.774	10 kg	plastic	30
54.03.775	10 kg	box	50
54.03.778	25 kg	bale	24





## OIL SPILL KIT, ZIPPER KIT

100% polypropylene, not treated with chemicals.  
 Small and compact first aid pack for accidents and leaks.  
 In transparent plastic bag with zip.  
 Contains 50 litres absorption capacity and personal protective equipment.

Contents:

20 mats, thick	: 50 x 40 cm	: 54.08.215
3 thin socks	: 120 x 8 cm	: 54.08.412
1 transparent plastic bag with zip		
1 pair of gloves		
1 rubbish bag with tie		
1 sheet of instructions		

ARTIKELNO	DESCRIPTION
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<b>54.08.110</b>	Oil spill kit, zipper kit
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## OIL SPILL DRUM, 30 LITRES

100% polypropylene, not treated with chemicals.  
 Not too big but very effective for inland shipping and other transport businesses, maintenance companies etc.  
 The watertight drum can be used to store the contaminated materials after the absorbents have been used and can be disposed of as a unit.  
 Contains 37 litres absorption capacity and simple personal protective equipment.

Contents:

10 mats, thick	: 50 x 40 cm	: 54.08.215
2 mini pillows	: 45 x 25 x 4 cm	: 54.08.315
2 thin socks	: 120 x 8 cm	: 54.08.412
1 drum with lid	: 30 litres	: 48.66.903
1 pair of gloves	: nitrile, 35 cm cap	: 75.12.047
1 heavyweight disposal bag	: 65 x 140 cm, 240 L	: 55.39.945
1 tie	: 7.6 x 380 mm	: 15.51.076
1 sticker	: Oil Spill Kit	: 10.57.250
1 sheet of instructions		

ARTIKELNO	DESCRIPTION
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<b>54.08.115</b>	Oil spill drum with content, 30 litres
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<b>54.08.116</b>	Loose content oil spill drum, 30 litres
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## OIL SPILL DRUM, 60 LITRES

100% polypropylene, not treated with chemicals.  
 Not too big but very effective for inland shipping and other transport businesses, maintenance companies, horticulture, water extraction companies etc.  
 The watertight drum can be used to store the contaminated materials after the absorbents have been used and can be disposed of as a unit.  
 Contains 75 litres absorption capacity and simple personal protective equipment.

Contents:

20 mats, thick	: 50 x 40 cm	: 54.08.215
4 mini pillows	: 45 x 25 x 4 cm	: 54.08.315
4 thin socks	: 120 x 8 cm	: 54.08.412
1 drum with lid	: 60 litres	: 48.66.906
2 pairs of gloves	: nitrile, 35 cm cap	: 75.12.047
2 heavyweight disposal bags	: 65 x 140 cm, 240 L	: 55.39.945
2 binders	: 7.6 x 380 mm	: 15.51.076
1 sticker	: Oil Spill Kit	: 10.57.250
1 sheet of instructions		

ARTIKELNO	DESCRIPTION
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<b>54.08.120</b>	Oil spill drum with content, 60 litres
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<b>54.08.121</b>	Loose content oil spill drum, 60 litres
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## OIL SPILL DRUM, 120 LITRES

100% polypropylene, not treated with chemicals.

Effective for emergencies on board ship, on the quay or on the work floor.

Can easily be used at several locations because of its compact format and light weight.

The watertight drum can be used to store the contaminated materials after the absorbents have been used and can be disposed of as a unit.

Contains 169 litres absorption capacity and simple personal protective equipment.

Contents:

35 mats, thick	: 50 x 40 cm	: 54.08.215
4 maxi pillows	: 45 x 45 x 4 cm	: 54.08.320
4 thin socks	: 120 x 8 cm	: 54.08.412
1 thick sock	: 300 x 15 cm	: 54.08.630
1 drum with lid	: 120 litres	: 48.66.912
3 pairs of gloves	: nitrile, 35 cm cap	: 75.12.047
5 heavyweight disposal bags	: 65 x 140 cm, 240 L	: 55.39.945
5 ties	: 7.6 x 380 mm	: 15.51.076
1 sticker	: Oil Spill Kit	: 10.57.250
1 sheet of instructions		

ARTIKELNO	DESCRIPTION
<b>54.08.135</b>	Oil spill drum with content, 120 litres
<b>54.08.136</b>	Loose content oil spill drum, 120 litres



## OIL SPILL DRUM, 210 LITRES

100% polypropylene, not treated with chemicals.

Effective for emergencies on board ship, on the quay or on the work floor.

Can easily be used at several locations because of its compact format and light weight.

The watertight drum can be used to store the contaminated materials after the absorbents have been used and can be disposed of as a unit.

Contains 251 litres absorption capacity and simple personal protective equipment.

Contents:

50 mats, thick	: 50 x 40 cm	: 54.08.215
5 maxi pillows	: 45 x 45 x 4 cm	: 54.08.320
4 thin socks	: 120 x 8 cm	: 54.08.412
2 thick socks	: 300 x 15 cm	: 54.08.630
1 drum with lid	: 210 litres	: 48.66.921
4 pairs of gloves	: nitrile, 35 cm cap	: 75.12.047
8 heavyweight disposal bags	: 65 x 140 cm, 240 L	: 55.39.945
8 ties	: 7.6 x 380 mm	: 15.51.076
1 sticker	: Oil Spill Kit	: 10.57.250
1 sheet of instructions		

ARTIKELNO	DESCRIPTION
<b>54.08.150</b>	Oil spill drum with content, 210 litres
<b>54.08.151</b>	Loose content oil spill drum, 210 litres



## SOPEP REGULATIONS

Different SOPEP's in force must be observed, depending on the trading area of the vessel.  
Subject to Port State control verification world-wide.

1. The **MARPOL 73/78** Annex I ( Regulation 26\*)
2. The **PANAMA CANEL SOPEP** requires thar vessel have shipboard SOPEP equipment ready for operational spills.
3. The **CALIFORNIA VRP** for non-tank vessels and tank vessels, specifying shipboard capacities capable of handling a 7 barrel ( 1100-litre) or 12 barrel (1900-litre) operational spill, respectively, e.g. under 400' LOA, the 7 barrel rule, over 400' LOA the 12 barrel rule.
4. The **USCG** approved **VRP** effective as of 8 August 2005 for non-tank vessels and tank vessels, applies the same rules as for the California VRP for vessels calling at US ports, e.g. on board capacities to be such as to handle a 7 barrel or 12 barrel operational spill respectively.
5. **SOPEP** = Shipboard Oil Spill Pollution Emergency Plan
6. **VRP** = Vessel Response Plan



## OIL SPILL RESPONSE KIT SOPEP

**According to MARPOL 73/78 and OPA of 1990, section 4202.**

100% polypropylene, not treated with chemicals.

Effective for emergencies on board ship, on the quay or on the work floor.

Can easily be used at several locations because of its compact format and light weight.

Contains 1,100 litres absorption capacity and simple personal protective equipment.

### Contents:

200 oil mats, thin	: 50 x 40 cm	: 54.08.210
50 chemical mats	: 50 x 40 cm	: 54.09.210
6 thin socks	: 120 x 8 cm	: 54.08.412
4 thick socks	: 300 x 15 cm	: 54.08.630
1 oil sweep	: 48 x 30 cm	: 54.08.901
1 chest with lid, watertight and lockable	: 114 x 82 x 70 cm	
2 zipper kits	: 54.08.110	
1 pair heavy duty protection gloves		
1 safety glass		
1 disposal bag		
1 anti-static handpump		

ARTIKELNO	OMSCHRIJVING
<b>54.08.180</b>	SOPEP oil spill response kit

## SOPEP OIL SPILL RESPONSE KIT, 7 BARRELS

According to MARPOL 73/78 and OPA of 1990, section 4202.

100% polypropylene, not treated with chemicals.

Effective for emergencies on board ship, on the quay or on the work floor.

Can easily be used at several locations because of its compact format and light weight.

Contains 1,100 litres absorption capacity and simple personal protective equipment.

Contents:

600 oil mats, thin	: 50 x 40 cm	: 54.08.210
12 thin socks	: 120 x 8 cm	: 54.08.412
12 thick socks	: 300 x 15 cm	: 54.08.630
20 mini pillows	: 45 x 25 x 4 cm	: 54.08.315
2 chests with lid, watertight and lockable	: 114 x 82 x 70 cm	
5 pair of chemical resistant gloves	: 86/686/EEG	
5 disposable coveralls	: 89/686/EEG art. 8.3	
5 chemical resistant goggles	: EN 166:2001	
5 dust masks	: EN 149:2001 + A1	
4 disposal bags MTL 103		
2 buckets 10 liter		
2 anti-static spatula		
1 anti-static handpump		



ARTIKELNO	DESCRIPTION
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54.08.185	SOPEP oil spill response kit, 7 barrels
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## SOPEP OIL SPILL RESPONSE KIT, 12 BARRELS

According to MARPOL 73/78 and OPA of 1990, section 4202.

100% polypropylene, not treated with chemicals.

Effective for emergencies on board ship, on the quay or on the work floor.

Can easily be used at several locations because of its compact format and light weight.

Contains 1,900 litres absorption capacity and simple personal protective equipment.

Contents:

600 oil mats, thin	: 50 x 40 cm	: 54.08.210
200 oil mats, thin	: 30 x 30 cm	: small
60 thin socks	: 120 x 8 cm	: 54.08.412
12 thick socks	: 300 x 15 cm	: 54.08.630
10 maxi pillows	: 45 x 55 x 4 cm	: 54.08.320
30 mini pillows	: 45 x 25 x 4 cm	: 54.08.315
3 chests with lid, watertight and lockable	: 114 x 82 x 70 cm	
10 pair of chemical resistant gloves	: 86/686/EEG	
10 disposable coveralls	: 89/686/EEG art. 8.3	
10 chemical resistant goggles	: EN 166:2001	
10 dust masks	: EN 149:2001 + A1	
5 disposal bags MTL 103		
4 buckets 10 liter		
4 anti-static spatula		
2 anti-static handpump		
1 Aqua break		



ARTIKELNO	DESCRIPTION
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54.08.190	SOPEP oil spill response kit, 12 barrels
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# ABSORPTION MATERIAL



## OIL ABSORBING MATERIALS

Suitable for use on land or on the water.  
Remains floating even when completely saturated.  
For the rapid absorption of spilled oil and/or fuels.  
100% polypropylene, not treated with chemicals.

colour : white



## ABSORPTION GRANULES

ARTIKELNO	WEIGHT	PACKAGING	NUMBER ON PALLET
54.08.201	20 kg	bag	55



## ABSORBING MATS, OIL ONLY

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
54.08.210	thin	50 cm	40 cm		0.0395 kg	200	0.7 L	WP200L-1
54.08.215	thick	50 cm	40 cm		0.0670 kg	100	1.4 L	WP100H-1



## ABSORBING ROLLS, OIL ONLY

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
54.08.248	narrow (NOT perforated)	4,400 cm	48 cm	0.8 cm	6.5 kg	2	132 L	WR44LS
54.08.296	wide (perforated)	4,400 cm	96 cm	0.4 cm	7.5 kg	1	170 L	WR44L



## ABSORBING PILLOWS, OIL ONLY

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
54.08.315	small	45 cm	25 cm	4 cm	0.26 kg	20	4.3 L	WPILL 25
54.08.320	large	45 cm	45 cm	4 cm	0.52 kg	10	9.8 L	WPILL 45



## ABSORBING SOCKS, OIL ONLY

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
54.08.412	thin	120 cm	8 cm	8 cm	0.8 kg	20	7.6 L	WSO120-20-1

## ABSORBING SOCKS + CONNECTOR, EXTRA STRONG, OIL ONLY

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
<b>54.08.630</b>	medium	300 cm	15 cm		3 kg	4	51 L	WB510 SN
<b>54.08.730</b>	thick	300 cm	20 cm		5 kg	4	85 L	WB810 SN
<b>54.08.760</b>	thick	600 cm	20 cm		10 kg	2	170 L	WB820 SN



## ABSORBING SWEEP, OIL ONLY

Equipped with nylon strap to attach.

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
<b>54.08.901</b>		30.5 m	48 cm			1	88.4 L	WSWL100F



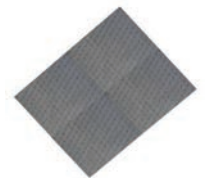
## CHEMICAL ABSORBENT MATERIALS

Universal absorbent materials for rapid absorption of spilled liquids such as chemicals, solvents, coolants, water as well as oil and/or fuel. 100% polypropylene, not treated with chemicals.

Colour : grey

## ABSORBING MATS, CHEMICALS, AND OTHER

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
<b>54.09.210</b>	thin	50 cm	40 cm			200	0.7 L	GPB200L



## ABSORBING ROLLS, CHEMICALS, AND OTHER

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
<b>54.09.248</b>	narrow	4,400 cm	48 cm			2	145 L	GRB44HS
<b>54.09.296</b>	wide	4,400 cm	96 cm			1	290 L	GRB44H



## ABSORBING HOSES, CHEMICALS, AND OTHER

ARTIKELNO	TYPE	LENGTH	WIDTH	THICKNESS	WEIGHT	BOX OF	CAPACITY OF EACH	SERIAL NUMBER
<b>54.09.412</b>	thin	120 cm	8 cm			20	3.8 L	GSU 120-20





## LEATHER CREAM

Leather cream is a product for the regular maintenance of leather. It soaks into the pores of the leather and keeps it supple. Preserves the leather and can be used on helmsman seats. Always try first on an inconspicuous area! Contains mineral oils mixed with high quality waxes.

### Instructions for use:

Rub in well with a sponge or cloth. Let it soak in for a while and polish if necessary. With regular use the leather will keep supple and water-resistant and the cream will also extend the leathers life.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
54.11.612	150 ml	metal tin	24



## COPPER POLISH

Made according to an old Dutch recipe. Make copper, silver, gold, stainless steel, brass, bronze, etc. shine again.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
54.16.250	500 ml	bottle	12
54.16.299	1,000 ml	bottle	12



## WONDERWAS (MIRACLE WAX), YELLOW BRAND

Yellow brand d'Arflon Wonderwas with PTFE, tested as best by the Dutch boating magazine Waterkampioen; easy to apply, long-lasting high gloss and protection. Suitable for paintwork, polyester, stainless steel, aluminium, etc. Do not use on porous surfaces.

### Instructions for use:

Shake bottle well before use. Apply a small quantity of Wonderwas with a damp cloth and then wipe off with a soft cloth.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
54.16.310	1,000 ml	bottle	12



## BONDERITE C-MC MANUVO 2 (P3 MANUVO 2) HAND SOAP

A Henkel product. Practical in use due to its liquid form.

- Cleans thoroughly
- Removes even the most persistent dirt such as graphite, soot etc
- Protects the skin because P3 Manuvo or Bonderite C-MC Manuvo 2 contains Manolin
- Does not block washbasins or pipes
- Contains no solvents or abrasives
- Contains an antibacterial additive

### Instructions for use:

Squirt P3 Manuvo or Bonderite C-MC Manuvo 2 onto dry hands, rub in thoroughly and rinse with clean water.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
54.25.501	0.5 L	dispenser	24

## ALCOLINE HYGIENIC HAND GEL, MACO

Hand gel with 70% alcohol.  
Use without water.

### Instructions:

Apply on dry clean hands, wrists and around nails. Apply enough gel to keep the hands visible and noticeably humid for 30 seconds. Wipe your hands completely dry with the same movement as when washing the hands.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
54.25.552	0.25 L	bottle	36
54.25.564	4.0 L	bottle + hand pump	4

## BACTOKIL HYGIENIC WASH GEL, MACO

**Contains Benzalkonium Chloride with disinfectant properties.**

Regularly washing your hands during the day reduces the risk of contamination and spreading of bacteria and viruses.

- very effective
- gentle on the hands
- pH neutral

### Instructions:

Apply the wash gel to wet or dry hands and rub in well for at least 20 seconds. Then rinse and dry hands with a cloth.



ARTIKELNO	CAPACITY	PACKAGING	COLOUR	ACIDITY	ABRASIVE	NUMBER PER BOX
54.25.603	0.3 L	bottle	pink	pH 7	-	24
54.25.640	4.0 L	bottle + hand pump	pink	pH 7	-	4

## SOFT SOAP PURPLE, MACO

Liquid, highly concentrated dispenser soap for light soiling.  
Exceptionally kind to skin and leaves hands smelling fresh.

- highly effective
- pleasant fragrance
- exceptionally kind to skin

Removes all **light soiling**.

Easy to pump and suitable for use in the CX-4 soap dispenser.



ARTIKELNO	CAPACITY	PACKAGING	COLOUR	ACIDITY	ABRASIVE	NUMBER PER BOX
54.25.650	5 L	can	purple	pH 6.5	-	4

# HAND CLEANING



## STARTER PACK, MACO CX-4 DISPENSER SYSTEM + 2 CARTRIDGES

Maco starter pack with a CX-4 soap dispenser and two yellow hand cleaner cartridges.

ARTIKELNO DESCRIPTION

54.25.999 Starter pack, Maco CX-4 dispenser system + 2 cartridges



## HAND CLEANER ORANGE, MACO

Classic solvent-free workplace hand cleaner for removing traditional soiling in garages, production, agriculture and shipping.

- universally applicable
- with skin-friendly granules
- very stable and long shelf-life

Removes all **medium soiling** such as oils, fat, grease, bitumen etc.  
Very easy to pump and suitable for use in the CX-4 soap dispenser.

ARTIKELNO	CAPACITY	PACKAGING	COLOUR	ACIDITY	ABRASIVE	NUMBER PER BOX
54.25.706	0,6 L	container	orange	pH 6	PE	12
54.25.740	4,0 L	bottle + hand pump	orange	pH 6	PE	4
54.25.741	4,0 L	CX-4 cartridge	orange	pH 6	PE	4
54.25.745	4,5 L	container	orange	pH 6	PE	4



## HAND CLEANER SPECIAL, MACO

Professional solvent-free hand cleaner for removing heavy soiling in the automotive, construction and metalworking industries.

- with skin-friendly granules
- moisturises the skin
- very stable and long shelf-life

Removes all **heavy soiling** such as oil, fat, grease, bitumen, rust, cement, brake fluid etc.  
Easy to pump and suitable for use in the CX-4 soap dispenser.

ARTIKELNO	CAPACITY	PACKAGING	COLOUR	ACIDITY	ABRASIVE	NUMBER PER BOX
54.25.806	0,6 L	container	cream	pH 6.5	PUR	12
54.25.840	4,0 L	bottle + hand pump	cream	pH 6.5	PUR	4
54.25.841	4,0 L	CX-4 cartridge	cream	pH 6.5	PUR	4
54.25.845	4,5 L	container	cream	pH 6.5	PUR	4



## HAND CLEANER YELLOW, MACO

Extremely powerful solvent-free citrus hand cleaner for removing heavy soiling in garages, printers, paint and heavy industries.

- extra cleaning power
- fresh citrus fragrance
- solvent free and pH neutral

Easily removes very **heavy soiling** such as oils and greases, tar, paint, glue, lacquers etc.  
Easy to pump and suitable for use in the CX-4 soap dispenser.

ARTIKELNO	CAPACITY	PACKAGING	COLOUR	ACIDITY	ABRASIVE	NUMBER PER BOX
54.25.906	0,6 L	container	yellow	pH 6	PE	12
54.25.940	4,0 L	bottle + hand pump	yellow	pH 6	PE	4
54.25.941	4,0 L	CX-4 cartridge	yellow	pH 6	PE	4
54.25.945	4,5 L	container	yellow	pH 6	PE	4
54.25.947	10 L	bucket	yellow	pH 6	PE	1



## POWER WIPES EXTRA, MACO

Professional impregnated hand cleaning wipes.  
Can also be used for cleaning hard substrates, tools and components.

- wipe size 19 x 24 cm
- sealable container with 75 wipes
- handy to use

Easily removes grease, dirt, oil, lubricants, paint, tar, ink and many other types of stubborn soiling.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER BOX
54.25.960	75 wipes	sealable container	6

## WALL HOLDER FOR 4.5 LITRE MACO CONTAINER

Wall holder for 4.5 litre Maco hand cleaner containers.

ARTIKELNO	DESCRIPTION
54.25.970	Wall holder for 4.5 litre Maco container



## CX-4 DISPENSERSYSTEM, MACO

The CX-4 soap dispenser with its patented, dual-valve system, is exceptionally robust, simple to use and has been designed to look good. Designed to last for many years.

### CX-4 Cartridges

An enclosed system for optimum hand hygiene.  
Each cartridge has 4-litre capacity and under normal use can be used for 800 hand washes.

The shape of the cartridge guarantees maximum yield; the cartridge empties completely to avoid waste.



ARTIKELNO	DESCRIPTION	CAPACITY
54.25.978	CX-4 dispensersystem, Maco	4 L

## HAND PUMP, MACO

Separate hand pump for the 4.5 and 5-litre Maco hand cleaner containers.

ARTIKELNO	DESCRIPTION
54.25.972	Hand pump for 4.5 litre Maco container
54.25.974	Hand pump for 5.0 litre Maco container
54.25.980	Heavy duty hand pump for 4.5 litre Maco container





## ZETTEX SHIP SHAMPOO



Zettex Ship Shampoo is a very high-quality shine shampoo with carnauba wax for a long-lasting pearl shine on all types of paints and plastics. The shampoo is environmentally friendly and provides a high-quality protective layer on your boat, yacht, truck or camper.

### How to use:

Dilute in a ratio of 1:100.  
The shampoo can be applied to the surface and then rinsed with water.  
If necessary, the surface can be cleaned afterwards.

### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.010	10 L	jerry can	pH 10.5	60



## ZETTEX SHIP CLEANER



Zettex Ship Cleaner is a universal powerful cleaner for the quick and effective removal of all kinds of contamination from all hard metal types. Cleans quickly, streak-free and very effective. Not suitable for soft metals such as aluminum. Suitable for use in foam and spray installations and can be diluted between 1:25 and 1:50 due to its concentrated composition.

### How to use:

Dilute according to the prescribed amount and spray on the surface.  
Let it work for some time and then rub it in with a broom and rinse with a high-pressure cleaner.  
Do not use in direct sunlight or on hot surfaces.

### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.101	1 L	bottle	pH 13.5	408
54.31.110	10 L	jerry can	pH 13.5	60



## ZETTEX SANITARY CLEANER



Zettex Sanitary Cleaner is a highly concentrated cleaner with a fresh scent, which is ideal for removing chalk and other contaminants in toilets, sinks, showers, floors, walls and other sanitary parts. Zettex Sanitary Cleaner is very powerful and can be diluted between 1:50 and 1:100.

### How to use:

Dilute Zettex Sanitary Cleaner according to the prescribed amount and spray on the surface.  
Let Zettex Sanitary Cleaner work for some time and then rub it in with a broom and rinse with a high-pressure cleaner.

### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.201	1 L	bottle	pH 4	408
54.31.210	10 L	jerry can	pH 4	60

**ZETTEX RUST AND LIME REMOVER**



Zettex Rust and Lime Remover is a concentrate based on phosphoric acid for removing rust and cleaning metal surfaces.

**How to use:**

For the removal of rust, burnt-on metal swarf, flash rust, lime deposits/ stains and cement veil.  
Also, brown rust stripes on drain pipes, chimneys, anchor vaults, ship decks, concrete mixers and ship bows.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**



ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.301	1 L	bottle	pH 1	408
54.31.310	10 L	jerry can	pH 1	60

**ZETTEX ALL PURPOSE CLEANER**



Zettex All Purpose Cleaner is a very universal material-safe and fresh cleaner for daily use.  
Is suitable for manual cleaning because of its mild formulation and effortlessly removes greases and oils.  
Can be used multifunctionally on floors, walls, sanitary facilities, kitchens and in offices.  
Can be diluted between 1:10 and 1:50.

**How to use:**

Dilute and spray it on the surface to be cleaned.  
Let it work for some time and then remove with chamois or mop.  
Leaves a very fresh scent.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**



ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.401	1 L	bottle	pH 10	408
54.31.410	10 L	jerry can	pH 10	60

**ZETTEX POWER CLEANER 99**



Zettex Power Cleaner 99 is a very powerful, high foaming alkaline cleaner for use in shipping and other industries on all types of surfaces.

For cleaning all types of paints, varnishes and surfaces.  
Zettex Power Cleaner 99 is when diluted a paint-safe product and can therefore be used on any ship's deck.  
Also suitable for removing grease and road dirt from concrete and facades.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**



ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.510	10 L	jerry can	pH 13	60
54.31.525	25 L	jerry can	pH 13	24

**ZETTEX POWER CLEANER 98**



Zettex Power Cleaner 98 is a very powerful, low foaming alkaline cleaner for use in shipping and other industries on all types of surfaces.

For cleaning all types of paints, varnishes and surfaces.  
Zettex Power Cleaner 98 is when diluted a paint-safe product and can therefore be used on any ship's deck.  
Also suitable for removing grease and road dirt from concrete and facades.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**



ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.610	10 L	jerry can	pH 13.5	60



## ZETTEX UNBLOCKER



Zettex Unblocker is a powerful, ready-to-use unblocker that quickly dissolves all blockages in drains. Organic substances such as soap, grease, paper, hair, etc. are removed thoroughly and effectively. The drainage systems are not affected, provided they are heat resistant. Suitable for professional use. Provide adequate ventilation. Do not allow to come into contact with galvanized, plastic, stainless steel and aluminum surfaces. Can cause severe burns if touched. Contains 96% sulfuric acid.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.701	1 L	bottle	pH 1	408



## ZETTEX ENGINE ROOM CLEANER



Zettex Engine Room Cleaner is a powerful alkaline foaming cleaner for the removal of soot, grease and oil. Provides a very fast separation of oily contaminants. This cleaner is highly concentrated, free of acids and universally applicable. Specially developed for the shipping and industrial branch and can also be used as a neutralizer. This Engine Room Cleaner does not bite, is ready to use and is biodegradable. This product must be processed undiluted. Excellent for use in a high-pressure cleaner or scrubber.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.801	1 L	spray bottle	pH 12	408
54.31.810	10 L	jerry can	pH 12	60



## ZETTEX COLD DEGREASER



Zettex Cold Degreaser can be used for removing heavy industrial pollution such as grease and lubricants. Effectively cleans machine parts and sheet metal. It can also be used for cleaning greasy floors and walls. Zettex Cold Degreaser is composed of highly effective emulsifiers and hydrocarbon solvents with a low evaporation loss.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.31.910	10 L	jerry can	pH unknown	60



## ZETTEX INDUSTRIAL CLEANER



Zettex Industrial Cleaner is a safe and very efficient cleaner for removing all heavy duty oil and grime. Industrial Cleaner is very suitable as an engine room cleaner for the shipping sector and other industries. Deep cleans the most common heavy duty dirt and grime and can be used as a neutralizing agent.

**Uses:**

For cleaning machines, installations, freight transport, transport material, engines, boats, caravans, floors and so on. Can be used in scrubbing machines and diluted 1:50. Zettex Industrial Cleaner is free from chlorine and CFCs and therefore suitable for any type of environment.

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.32.000	500 ML	spray bottle	pH 13	408
54.32.010	10 L	jerry can	pH 13	60
54.32.025	25 L	jerry can	pH 13	24

## ZETTEX GLASS AND SURFACE CLEANER



Zettex Glass and Surface Cleaner is a ready-to-use cleaner for simple and effective cleaning of all types of surfaces. Effortlessly removes grease, nicotine and all kinds of contamination from windowsills, workplaces, doors, window frames and all common surfaces in and around the house.

### How to use:

Zettex Glass and Surface Cleaner is ready to use and can be sprayed with a spray bottle on the surface to be cleaned. Let it work for some time and then rub the surface with a chamois, paper or cloth. Cleans streak-free and very efficiently.

### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!



ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.32.101	1 L	spray bottle	pH 7	408

## ZETTEX ELECTRO CLEAN



Zettex Electro Clean is a clear and odourless degreaser designed for the safe cleaning of sensitive electronic components. Much more friendly alternative to traditional cold degreasers, petroleum, trichlor, perchlor, white spirits and stream cleaners. For cleaning all types of electrical installations and connections such dynamos, starter motors, electric motors and connections. Also suitable as a universal sink and wash basin degreaser.

### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.32.210	10 L	jerry can	pH 7	60



## ZETTEX ALUMINIUM AND STAINLESS STEEL CLEANER



Zettex Aluminum and Stainless Steel Cleaner is a special powerful cleaner for soft metals such as aluminum and stainless steel. Due to its unique formulation, it does not bite the substrate and is therefore very safe to use. Very versatile and can be used for cleaning deck hatches, tanks, grids, doors, frames and all other types of aluminum and stainless steel.

### How to use:

Dilute according to the prescribed amount and spray on the substrate. In most cases you need to use 10% solution. Let it work for some time and then rub it in with a broom and rinse with a high-pressure cleaner. Do not use in sunlight or on hot surfaces.

### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!

ARTIKELNO	CAPACITY	PACKAGING	ACIDITY	NUMBER ON PALLET
54.32.310	10 L	jerry can	pH 1	60





## BONDERITE C-MC X POWDER (P3-X POWDER)

%

Henkel introduced the P3-X powder cleaning product to the market for the first time in 1956. The product was therefore 45 years old in 2001 and is still virtually the same composition.

Bonderite C-MC X powder (P3-X powder) has been a familiar product in shipping, the garage world and the food processing industry for years.

Bonderite C-MC X powder (P3-X powder) is mildly alkaline.

The powder has powerful cleaning properties but is not harmful to humans, materials or the environment.

The reason for this is that the product consists mainly of soaps.

Bonderite C-MC X (P3-X powder) is biodegradable.

Use concentration : 0.5 - 10%

External characteristics : white, coarse grained powder

### SCALE:

1 pallet CK (enclosed pallet)

2 pallets CH (enclosed pallets)

ARTIKELNO	CAPACITY	PACKAGING	NUMBER ON PALLET
54.33.207	7.5 kg	bucket	55



## BONDERITE C-MC X LIQUID (P3-X LIQUID)

%

Bonderite C-MC X liquid (P3-X liquid) came about due to the demand for a liquid form of P3-X powder.

Bonderite C-MC X liquid (P3-X liquid) is mildly alkaline.

The power of this product is that it contains powerful cleaning components but forms virtually no compounds with the contamination.

In other words, it does not interfere with the natural separation of oil and water, so the oils and fats appear immediately on the surface of the water.

This means that Bonderite C-MC X (P3-X liquid) is ahead of its time in the context of environmental legislation.

Bonderite C-MC X liquid (P3-X liquid) is biodegradable.

Use concentration : 0.5 - 10%

External characteristics : pale yellow liquid

### SCALE:

1 pallet CK (enclosed pallet)

2 pallets CH (enclosed pallets)

ARTIKELNO	CAPACITY	PACKAGING	NUMBER ON PALLET
54.33.410	10 kg	jerry can	40



## BONDERITE C-MC A (P3-A)



Bonderite C-MC A (P3-A) is a liquid, neutral cleaning product with a mild composition. Bonderite C-MC A (P3-A) is a universal cleaner and can be used in almost all cleaning situations. This product is often used for ships' decks, vehicles and interiors. Bonderite C-MC A (P3-A) is biodegradable.

Use concentration : 0.1 - 10%  
External characteristics : yellow liquid

### SCALE:

1 pallet CK (enclosed pallet)  
2 pallets CH (enclosed pallets)

ARTIKELNO	CAPACITY	PACKAGING	NUMBER ON PALLET
54.33.610	10 kg	jerry can	40



## BONDERITE C-MC 2110 (P3-GLIN)



Bonderite C-MC 2110 (P3-Glin) is a universal (mild) alkaline cleaning product for general use with high pressure equipment and masks unpleasant smells.

Bonderite C-MC 2110 (P3-Glin) is used for:

- Commercial cleaning, such as floors, walls, plastics, ceramic and painted surfaces in stores, utility rooms, canteens etc.
- Cleaning machinery
- Cleaning vehicles

Bonderite C-MC 2110 (P3-Glin) has a pleasant, fresh smell and is biodegradable.

Use concentration : high pressure cleaner : 3 - 5%  
: floor cleaning machine : 3 - 10%  
: by hand : 3 - 50%

External characteristics : fluorescent green

### SCALE:

1 pallet CK (enclosed pallet)  
2 pallets CH (enclosed pallets)

ARTIKELNO	CAPACITY	PACKAGING	NUMBER ON PALLET
54.34.425	25 kg	jerry can	24



## SHIP'S HOLD FRESHENER AIRFRESH

Liquid for masking unpleasant odours.

- Water-based product, non-toxic and non-flammable.
- After cleaning it masks the smell of fish oil and other foul-smelling loads.
- Can also be used to camouflage the smell of smoke after a fire.
- Can be added to cleaning products to give out a pleasant smell while cleaning.

### Application:

After a tank has been cleaned, it may well be clean but the smell of the load still lingers.

Airing the tank or area with the unpleasant smell then takes a lot of time.

In such cases, the use of SHIP'S HOLD FRESHENER is a solution for masking the unpleasant smell.

### Instructions for use:

Sprinkle the product in a 5 to 10% solution on the cleaned surface.

Or add 0.05% to 1% to the final rinse water.

To perfume aqueous cleaning products, add approx. 1% followed by thorough mixing.

ARTIKELNO	CAPACITY	PACKAGING	NUMBER ON PALLET
54.18.305	5 L	jerry can	1
54.18.325	25 L	jerry can	1



# SPONGES, CHAMOIS LEATHERS, SWABS



## CLEANING/POLISHING/PAINTING GLOVE/MITT

ARTIKELNO	MODEL	MATERIAL	COLOUR
55.02.570	Cleaning and polishing glove	micro fibre	green
55.02.575	Cleaning and painting mitt	synthetic lamb's wool	yellow
55.02.580	Wash glove	synthetic lamb's wool	yellow



## WASH GLOVE, DECKMATE

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE	DECKMATE TYPENUMBER
55.33.340	Wash glove (elastic cuff)	synthetic	orange	30 x 20 cm	28	DM210



## JUMBO SPONGE

Very large sponge.

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.123	Jumbo sponge	plastic	yellow	22 x 11 x 7 cm	30



## CAR SPONGE

Semicircular model that is comfortable to use.

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.125	Car sponge	viscose	yellow	19 x 5 x 8 cm	48



## NATURAL CHAMOIS LEATHER

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.326	Natural chamois leather	1st class chamois leather	yellow	59 x 38 cm	30



## CHAMOIS, DECKMATE

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE	DECKMATE TYPE-NUMBER
55.33.315	Chamois	synthetic	blue	69 x 43 cm	40	DM320

## VISCOSE CLOTHS

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.480	10 viscose cloths	viscose	yellow	38 x 38 cm	10



## DISHCLOTH, WAFFLE-WEAVE

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.525	Dishcloth. waffle-weave	100% cotton	white	35 x 35 cm	10



## MICROFIBRE PRODUCTS

Due to the combination of two exceptionally fine fibres, the cloth delivers:

- Working that is 10 x more effective than a traditional product
- Easy, quick and thorough cleaning
- The absorption and almost complete removal of every trace of water

Do not use on delicate surfaces: Perspex, spectacle lenses etc.

Washing : approx. 60 degrees to open the fibres.

Drying : NOT in a tumble dryer to avoid the fibres becoming clogged by fluff.

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.529	cloth MAX PAD	microfibre	blue	18 x 23 cm	2
55.03.530	cloth	microfibre	blue	40 x 40 cm	50
55.03.533	swab	microfibre	blue	60 x 50 cm	25



## DUSTER

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.550	Duster	100% cotton	yellow	40 x 40 cm	10



## SWAB, PROFI

ARTIKELNO	MODEL	MATERIAL	COLOUR	DIMENSIONS	NUMBER PER PACKAGE
55.03.721	Swab, profi	100% cotton (extra heavy quality)	white	80 x 70 cm	25





## SQUEEGEE

frame : aluminium with plastic handle + extension holder  
blade : single rubber strip

ARTIKELNO	MODEL	LENGTH	NUMBER PER BOX
55.05.427	squeegee	27 cm	25



## SQUEEGEE PROFI

Robust and practical model, used by window cleaners.

frame : Stainless steel  
blade : 1st class, high quality and hard wearing rubber

ARTIKELNO	MODEL	LENGTH	NUMBER PER BOX
55.05.455	squeegee	30 cm	20



## SQUEEGEE PROFI, REPLACEMENT RUBBER

1st class, high quality and hard wearing rubber.

ARTIKELNO	MODEL	LENGTH	NUMBER PER BOX
55.05.465	replacement rubber for squeegee profi	30 cm	10



## SQUEEGEE, VIKAN

The flexible curved form ensures a streak-free and polished surface. With integrated grip and the possibility of attaching to a Vikan stick.

frame : robust plastic  
squeegee : heavy rubber strip

ARTIKELNO	MODEL	LENGTH	NUMBER PER BOX	VIKAN TYPENUMBER
55.05.525	squeegee	25 cm	6	707752
55.05.535	squeegee	35 cm	6	707852
55.05.545	squeegee	45 cm	5	707952

## FLOOR SQUEEGEE, LINEA (EURO 2000)

frame : blue plastic + extension holder with coupling  
 blade : double 22 mm black foam rubber strip with 97% closed cells



ARTIKELNO	MODEL	LENGTH	TYPE	NUMBER PER BOX
55.06.545	floor squeegee	45 cm	water trapping edge	6

## FLOOR SQUEEGEE

frame : 1 mm thick galvanized steel  
 blade : double 30 mm black foam rubber strip with 97% closed cells, -25°C to +75°C



ARTIKELNO	MODEL	LENGTH	TYPE	NUMBER PER BOX
55.07.135	floor squeegee	35 cm	NO foam rubber	10
55.07.545	floor squeegee	45 cm	water trapping edge and reinforced extension holder	10
55.07.555	floor squeegee	55 cm	water trapping edge and reinforced extension holder	10
55.07.575	floor squeegee	75 cm	water trapping edge and reinforced extension holder	10
55.07.599	floor squeegee	100 cm	water trapping edge and reinforced extension holder	10

## TANK SQUEEGEE

frame : 1 mm thick galvanized steel  
 blade : oil and acid resistant double 30 mm orange foam rubber strip with 97% closed cells, -25°C to +65°C



ARTIKELNO	MODEL	LENGTH	TYPE	NUMBER PER BOX
55.07.755	tank squeegee	55 cm	water trapping edge and reinforced extension holder	10
55.07.775	tank squeegee	75 cm	water trapping edge and reinforced extension holder	10
55.07.799	tank squeegee	100 cm	water trapping edge and extra reinforced extension holder, PROFI	10

## TANK SQUEEGEE, VIKAN

frame : robust plastic  
 blade : oil and acid resistant double black foam rubber strip



ARTIKELNO	MODEL	LENGTH	NUMBER PER BOX	VIKAN TYPENUMBER
55.07.640	tank squeegee	40 cm	12	708852-40
55.07.660	tank squeegee	60 cm	12	708852-60



## MOP, LINEA (EURO 2000)

fibre : twisted cotton (200 gr), approx. 20 cm long  
 mount : red plastic + extension holder with coupling (French thread)

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.08.450	Linea mop (EURO 2000)	50



## MOP, VIKAN

fibre : twisted cotton (250 gr), approx. 25 cm long  
 mount : grey plastic with Vikan coupling

ARTIKELNO	DESCRIPTION	NUMBER PER BOX	VIKAN TYPENUMBER
55.08.455	Vikan mop	25	372518



## MOP, HEAVY DUTY

Shipping version.

fibre : double twisted cotton approx. 30 cm long  
 mount : blue PVC with handle holder

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.08.460	Mop, heavy duty	30



## SUPER MOP, VIKAN

fibre : double twisted cotton (450 gr), approx. 40 cm long  
 mount : white/yellow plastic with Vikan adapter

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.08.480	Vikan super mop holder	10
55.08.490	Vikan super mop	10



## DRY MOP, DECKMATE

Made from 36 synthetic chamois strips 45 mm wide, length approx. 27/39 cm.

ARTIKELNO	DESCRIPTION	NUMBER PER BOX	DECKMATE TYPENUMBER
55.33.305	Deckmate dry mop	24	DM330

**TOILET BRUSH SET**

Completely made of white plastic.  
Wall mount at the back.  
Bottom can be removed.



ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	HANDLE LENGTH	NUMBER PER BOX
55.09.550	toilet brush set	PPN synthetic	33 mm	white plastic	37 cm	10

**WASHING UP BRUSH, FIBRE, CLASSIC**

handle with metal hook.



ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	HANDLE LENGTH	NUMBER PER BOX
55.13.350	washing up brush fibre		22 mm	wood (Ø49 mm)	20 cm	50

**WASHING UP BRUSH, NYLON**

ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	HANDLE LENGTH	NUMBER PER BOX
55.13.750	washing up brush nylon		22 mm	plastic	19 cm	16

**SCRUBBING BRUSH**

ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	DIMENSIONS	NUMBER PER BOX
55.17.320	scrubbing brush	fibre (soft)	25 mm	wood	155 x 45 mm	56
55.17.520	scrubbing brush	union bassine/fibre (hard)	25 mm	wood	155 x 45 mm	56

**SCRUBBING BRUSH, LINEA (EURO 2000)**

Hygienic due to the use of plastic.



ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	DIMENSIONS	NUMBER PER BOX
55.18.720	scrubbing brush	nylon	30 mm	grey plastic	180 x 40/60 mm	10

**WERKBORSTEL, VIKAN**

ARTIKELNO	SOORT BORSTEL	SOORT VEZEL	LENGTE VEZEL	MONTUUR	AFMETINGEN	NUMBER PER BOX	VIKAN TYPENUMBER
55.19.720	nail brush	polyester (hard)	15 mm	black plastic	120 x 45 x 40 mm	15	644052
55.19.740	scrubbing brush	polyester (hard)	20-25 mm	black plastic	165 x 50 x 45 mm	20	358752
55.19.760	scrubbing brush	polyester (hard)	30-35 mm	black plastic	200 x 70 x 60 mm	15	389052

**INTERIOR BRUSH, VIKAN**

ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	DIMENSIONS	NUMBER PER BOX	VIKAN TYPENUMBER
55.20.100	interior brush	natural (soft)	20 mm	black plastic	Ø22 x 155 mm	36	631559

# SCRUBBING



## BENCH BRUSHES

Densely filled and always first class materials.  
Replaced if fibres fall out.  
Houley extra densely packed.

ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	FILLING	MOUNT	HANDLE LENGTH	NUMBER PER BOX
55.21.350	bench brush	fibre	45 mm	normal	wood	short	30
55.21.365	bench brush	Rilsan	50 mm	extra dense (Houley)	wood	short	16
55.21.375	bench brush	fibre	40 / 60 mm	extra dense (Houley)	wood	long	14
55.21.380	bench brush	rilsan	40 / 60 mm	extra dense (Houley)	wood	long	14

## HAND BRUSHES, VIKAN

Densely filled and always first class materials.  
Replaced if fibres fall out.



ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	HANDLE LENGTH	NUMBER PER BOX	VIKAN TYPENUMBER
55.21.405	rim brush	polyester (hard)	30 mm	black plastic	short	12	525352
55.21.408	bench brush	polyester (soft)	30 mm	black plastic	short	5	450252
55.21.410	bench brush	polyester (hard)	30 mm	black plastic	short	5	450052
55.21.423	bench brush	polyester (soft)	45 mm	black plastic	short	5	522752
55.21.425	bench brush	polyester (soft)	45 mm	black plastic	long	5	522252
55.21.439	wash brush small	polyester (soft)	45 mm	black plastic	ergonomic	9	525252
55.21.440	wash brush large	polyester (soft)	45 mm	black plastic	ergonomic	5	524652



## DECKHOUSE BRUSH, FIBRE

ARTIKELNO	TYPE OF BRUSH	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	HANDLE LENGTH	NUMBER PER BOX
55.21.550	deckhouse brush	fibre	60 mm	wood (Ø110 mm)	37 cm	20



## LONG HANDLED SCRUBBING BRUSH, HOULEY ECO, 50/70 FIBRE

Replaced if fibres fall out.

Fibre : first class 50 mm fibres, 70 mm end fibres, anchor in black coconut, 50 mm  
Mount : bare wood, 235 x 70 mm

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.29.610	Houley eco long handled scrubbing brush, 50/70 fibre	10



## LONG HANDLED SCRUBBING BRUSH, HOULEY, 50/80 FIBRE

Densely filled and always first class materials.  
Replaced if fibres fall out.

Fibre : first class 50 mm fibres, 80 mm end fibres, anchor in black coconut, 50 mm  
Mount : bare wood, 250 x 70 mm



ARTIKELNO	DESCRIPTION	NUMBER PER BOX
<b>55.29.630</b>	Houley long handled scrubbing brush, 50/80 fibre	10

## LONG HANDLED SCRUBBING BRUSH, LINEA FIBRE (EURO 2000) 40/55

Fibre : 40 mm fibres, 55 mm end fibres  
Mount : grey/white plastic, 215 x 60 mm



ARTIKELNO	DESCRIPTION	NUMBER PER BOX
<b>55.29.710</b>	Linea long handled scrubbing brush fibre (EURO 2000)	10

## LONG HANDLED SCRUBBING BRUSH, IDEAAAL NYLON

German long handled scrubbing brush, known as the "Schiff-Schrubber"

Fibre : white and blue (anchor) 70 mm nylon  
Mount : bare wood, 250 x 70 mm



ARTIKELNO	DESCRIPTION	NUMBER PER BOX
<b>55.31.500</b>	Ideaal long handled scrubbing brush, nylon	10

## LONG HANDLED SCRUBBING BRUSH, IDEAAAL NYLON, RED-WHITE, 55/70

Well-known long handled scrubbing brush, a trusted product for many years.  
Beautiful long handled scrubbing brush, lasts a long time, suitable for hot water.

Fibre : 55 mm white nylon, 70 mm red nylon end fibres  
Mount : bare wood, 250 x 70 mm



ARTIKELNO	DESCRIPTION	NUMBER PER BOX
<b>55.31.550</b>	Ideaal long handled scrubbing brush, nylon, red-white, 55/70	10



## LONG HANDLED SCRUBBING BRUSH, HOULEY NYLON, 40/55

Three coloured long handled scrubbing brush, with anchor.  
Densely filled and always first class materials.

Fibre : 40 mm assorted coloured nylon, 55 mm end fibres  
Mount : bare wood, 250 x 70 mm

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.31.610	Houley long handled scrubbing brush, nylon, 40/55	10



## LONG HANDLED SCRUBBING BRUSH, IDEAAAL RILSAN, 55/70

A nice long handled scrubbing brush, long life, suitable for hot water.

Fibre : 55 mm blue Rilsan, 70 mm red Rilsan end fibres, 55 mm white Rilsan anchor  
Mount : bare wood, 250 x 70 mm

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.31.618	Ideaal long handled scrubbing brush, rilsan, 50/70	10



## LONG HANDLED SCRUBBING BRUSH, HOULEY RILSAN, 50/70 + BUMPER

Different assorted colours.  
Densely filled and always first class materials.

Fibre : 50 mm assorted coloured A class Rilsan, 70 mm end fibres  
Filling density : approx. 120 grams  
Mount : bare wood, 220 x 65 mm

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.31.620	Houley long handled scrubbing brush, rilsan, 50/70 + bumper	10



## LONG HANDLED SCRUBBING BRUSH, LINEA (EURO 2000) 55/65

Fibre : 55 mm white Rilsan, 65 mm red Rilsan end fibres  
Mount : grey/white plastic, 215 x 60 mm

ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.31.650	Linea long handled scrubbing brush (EURO 2000)	10

## LONG HANDLED SCRUBBING BRUSH, LINEA HARD NYLON (EURO 2000)

Fibre : 30 mm hard white nylon  
Mount : blue plastic, 215 x 60 mm



ARTIKELNO	DESCRIPTION	NUMBER PER BOX
55.31.660	Linea long handled scrubbing brush, hard nylon (EURO 2000)	6

## LONGHANDLED SCRUBBING BRUSH, VIKAN HARD NYLON WHITE

Fibre : white polypropylen, 25 mm  
Mount : white plastic, 300 x 70 mm



ARTIKELNO	DESCRIPTION	NUMBER PER BOX	VIKAN TYPENUMBER
55.31.669	Vikan long handled scrubbing brush, hard nylon white	5	3660

## LONGHANDLED SCRUBBING BRUSH, VIKAN HARD NYLON + WATER HOLE

Fibre : red nylon, 30 mm  
Mount : red plastic, 270 x 75 mm + water hole



ARTIKELNO	DESCRIPTION	NUMBER PER BOX	VIKAN TYPENUMBER
55.31.670	Vikan long handled scrubbing brush, hard nylon + water hole	10	70414

## LONGHANDLED SCRUBBING BRUSH, VIKAN HARD NYLON RED

Fibre : red nylon, 45 mm  
Mount : red plastic, 305 x 85 mm



ARTIKELNO	DESCRIPTION	NUMBER PER BOX	VIKAN TYPENUMBER
55.31.680	Vikan long handled scrubbing brush, hard nylon red	10	70414



## LONG HANDLED SCRUBBING BRUSH, VIKAN + BUMPER AND WATER HOLE

Fibre : 45 mm red and green polyester  
Mount : black plastic + bumper and water hole

ARTIKELNO	DESCRIPTION	DIMENSIONS	NUMBER PER BOX	VIKAN TYPENUMBER
55.31.920	Vikan long handled scrubbing brush, normal	250 x 65 mm	1	475552
55.31.922	Vikan long handled scrubbing brush, large	350 x 65 mm	1	475752
55.31.925	Vikan long handled scrubbing brush, V-shaped	250 x 85 mm	1	524752



## LONG HANDLED SCRUBBING BRUSH, VIKAN SUPERSOFT + BUMPER AND WATER HOLE

New type of long-handled scrubbing brush with tremendous water-retention properties. Particularly for vertical (high) surfaces.

Fibre : black supersoft split Krex fibres of 100 mm  
Mount : black plastic of 255 x 65 mm + bumper and water hole

ARTIKELNO	DESCRIPTION	NUMBER PER BOX	VIKAN TYPENUMBER
55.31.941	Vikan long handled scrubbing brush, supersoft	1	SPEC1123



## LONG HANDLED SCRUBBING BRUSH, VIKAN ANGLED MODEL + BUMPER AND WATER HOLE

Fitted with rotating coupling at 45 degrees.

Fibre : 50 mm red and green polyester  
Mount : black plastic, 200 x 70 mm + bumper and water hole

ARTIKELNO	DESCRIPTION	NUMBER PER BOX	VIKAN TYPENUMBER
55.31.950	Vikan long handled scrubbing brush, angled model	1	526852



## LONG HANDLED SCRUBBING BRUSH, VIKAN 'WATER HEDGEHOG' + WATER HOLE

Large, long handled scrubbing brush with slanting fibres for cleaning places that are difficult to reach.

Fibre : 45 mm red and green polyester  
Mount : black plastic, 130 x 50 mm + water hole

ARTIKELNO	DESCRIPTION	NUMBER PER BOX	VIKAN TYPENUMBER
55.31.960	Vikan long handled scrubbing brush, 'water hedgehog'	2	545252

## DECKMATE

This line of professional cleaning tools is ideal for the everyday user. A simple but very efficient cleaning system that, in combination with telescopic handles, can be used anywhere. All parts are equipped with a Quick release system ensuring that they are easy to change and don't come loose during use. Deck Mate is the result of 10 years' experience and exchange of suggestions, compliments and complaints from our valued customers.

## TELESCOPIC HANDLE 25/22 MM, DECKMATE

Made from heated deep drawn anodized aluminium tube for extra strength. The stainless steel securing system secures the handle in every position. The handle also has a comfortable plastic grip.

ARTIKELNO	LENGTH	NUMBER PER BOX	DECKMATE TYPENUMBER
55.33.018	181 / 107 cm	25	DM454
55.33.027	278 / 156 cm	25	DM456



## LONG HANDLED SCRUBBING BRUSH, DECKMATE

Wooden mount treated with varnish. Rubber buffer all around to protect paintwork.



ARTIKELNO	DESCRIPTION	APPLICATION	NUMBER PER BOX	DECKMATE TYPENUMBER
55.33.110	Deckmate long handled scrubbing brush, soft	paintwork	24	DM110
55.33.120	Deckmate long handled scrubbing brush, normal	general	24	DM120
55.33.130	Deckmate long handled scrubbing brush, hard	gangway and teak decks	24	DM130

## SWIVEL PLATE + ACCESSORIES, DECKMATE

Multi-functional holder made from sustainable ABS plastic. Equipped with Velcro strips to fasten accessories such as the well-finished wash cover or scourers.



ARTIKELNO	DESCRIPTION	APPLICATION	DIMENSIONS	NUMBER PER BOX
55.33.215	Deckmate swivel plate	-	24 x 9 cm	56
55.33.230	Deckmate wash cover micro fibre	also to dry	29 x 16 x 5 cm	24
55.33.260	Deckmate scourer soft	NOT for paintwork	25 x 10 x 2.5 cm	24
55.33.261	Deckmate scourer medium	NOT for paintwork	25 x 10 x 2.5 cm	24



## HAND BRUSH

Densely filled and always first class materials.  
Replaced if fibres fall out.

ARTIKELNO	MODEL	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX
55.37.263	hard	100% union	30 mm	bare wood	6
55.37.310	medium	100% coconut	90 mm	bare wood	40
55.37.423	soft and full	50% horse hair / 50 % PVC	40 mm	plastic	40
55.37.550	soft	100% pig's bristles	40 mm	varnished wood	6



## DUSTPAN

ARTIKELNO	MATERIAL	TYPE	HANDLE LENGTH	NUMBER PER BOX
55.37.825	steel	lacquered	-	25
55.37.827	steel	galvanized	long handle	10



## RUBBISH BAGS

Article number: 55.39.938 DOES NOT HAVE A KOMO QUALITY MARK, but has been manufactured in accordance with KOMO specifications.

ARTIKELNO	DIMENSIONS	CAPACITY	COLOUR	NUMBER PER ROLL	THICKNESS	NUMBER PER BOX
55.39.935	60 x 80 cm	60 L	grey	20	23 m	25
55.39.938	60 x 80 cm	60 L	grey	20	50 mu	20
55.39.940	70 x 110 cm	120 L	blue	20	25 mu	15
55.39.945	65 x 140 cm	240 L	blue	10	70 mu	10



## BROOM, HAIR/NYLON

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX
55.41.330	300 x 70 mm	10% horse hair / 90% nylon	50 mm	semi-circular, clear varnished wood	10
55.41.340	400 x 70 mm	10% horse hair / 90% nylon	50 mm	semi-circular, clear varnished wood	10
55.41.350	500 x 70 mm	10% horse hair / 90% nylon	50 mm	semi-circular, clear varnished wood	10
55.41.360	600 x 70 mm	10% horse hair / 90% nylon	50 mm	semi-circular, clear varnished wood	10

## BROOM, HOULEY

Fitted with heavy duty handle holder.  
Densely filled and always first class materials.  
Replaced if fibres fall out.

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX
55.43.420	600 x 63 mm	coconut	90 mm	bare wood	12
55.43.430	800 x 63 mm	coconut	90 mm	bare wood	12
55.43.440	1,000 x 63 mm	coconut	90 mm	bare wood	6
55.43.450	600 x 63 mm	Colombo	90 mm	bare wood	12
55.43.470	1,000 x 63 mm	Colombo	90 mm	bare wood	6
55.43.599	1,000 x 63 mm	Bassine Afrique	90 mm	bare wood	6



## BROOM/HALL BRUSH, VIKAN

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX	VIKAN TYPENUMBER
55.43.640	440 x 60 mm	PVC (hard)	55 mm	black painted wood	1	311552
55.43.660	660 x 60 mm	PVC (hard)	55 mm	black painted wood	1	311752



## BROOM VIKAN PVC, SMALL

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX	VIKAN TYPENUMBER
55.45.355	360 x 80 mm	PVC (hard)	105 mm	bare wood	5	2517



## BROOM PVC, BIG

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX
55.45.750	500 x 65 mm	PVC (hard)	80 mm	bare wood	10





## SHIP'S BROOM HOULEY BAHIA + STIFFENERS (ORE BROOM)

Particularly suitable for sweeping up heavy and/or coarse materials such as coal, gravel, stones and ores. Densely filled and always first class materials. Replaced if fibres fall out.

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX
55.46.550	300 x 75 mm	50% Bahia / 30% Bassine Afrique / 20% nylon stiffeners	130 mm	bare wood	12



## SHIP'S BROOM BAHIA, SMALL

A great success for many years, perfect quality and affordable. Durable and GENUINE BAHIA fibres, 100%

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX
55.51.425	250 x 65 mm	100 % Bahia A class	110 mm	bare wood	10



## SHIP'S BROOM BAHIA (BAHIA CROWN)

A great success for many years, perfect quality and affordable. Durable and GENUINE BAHIA fibres, 100%

ARTIKELNO	DIMENSIONS	TYPE OF FIBRE	LENGTH FIBRE	MOUNT	NUMBER PER BOX
55.51.550	280 x 70 mm	100 % Bahia A class	135 mm	bare wood	12



## ROAD SALT

Affordable product to clear snow and ice.  
Prevent surface-freezing as a result of night frost, by prior spreading.

ARTIKELNO	PACKAGING	WEIGHT	NUMBER ON PALLET
55.71.107	pale	7.5 kg	90
55.71.110	bag	10.0 kg	96
55.71.125	bag	25.0 kg	50



## ICE-REMOVING THAW GRANULES

Works **5x longer and 30 x faster** than road salt.  
Prevent surface-freezing as a result of night frost, by prior spreading.

ARTIKELNO	PACKAGING	WEIGHT	NUMBER ON PALLET
55.71.210	pale	10.0 kg	60



## SNOW MOVER, PLASTIC

Very sturdy plastic snow shovel, not DIY store quality!  
Also suitable for shovelling light materials such as grains, animal feed and cargo residues.  
Without metal strip to avoid scratching aluminium hatches on decks, side decks and cabin roofs!  
Includes slightly curved wooden handle with plastic D-grip.

ARTIKELNO	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
55.71.320	450 x 350 mm	plastic	130 cm	blue
55.71.330	500 x 410 mm	plastic	130 cm	blue





## SNOW MOVER / PLOUGH HOLD MOVER, STEEL

Also very suitable for collecting together load residues or for scraping the hold floor clean.  
Complete with wooden handle.

ARTIKELNO	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
<b>55.71.340</b>	400 x 180 x 2.10 mm	galvanized steel	130 cm	bare
<b>55.71.545</b>	450 x 290 x 1.25 mm	galvanized steel	140 cm	bare



## SNOW SHOVEL, VIKAN

Simple but very practical plastic shovel.  
Made of strong but light plastic with black handle, red D-grip and green blade.

ARTIKELNO	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR	VIKAN TYPENUMBER
<b>55.71.610</b>	330 x 270 mm	plastic	65 cm	green	561552

**HAND SHOVEL**

Used for shovelling up load residues from between the rails and for removing dog excrement.  
Steel blade with wooden handle.

ARTIKELNO	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
<b>55.73.330</b>	170 x 110 mm	galvanized steel	21 cm	bare
<b>55.73.335</b>	260 x 180 mm	galvanized steel	60 cm	black lacquered

**SMALL TANK SHOVEL**

Entirely made of aluminium with slanting handle that is welded in place.  
Is used for shovelling up load residues from tankers, for cleaning under the plates in the engine room and for removing dog excrement.

ARTIKELNO	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
<b>55.73.350</b>	190 x 150 mm	aluminium	16 cm	bare

**FLAT SHOVEL**

Sometimes also referred to as a garden shovel.  
Sand shovel with raised edge, Dutch model, made of clear lacquered hardened steel.  
Complete with semi-curved ash Blijham handle with T-grip.

ARTIKELNO	BLADE SIZE	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
<b>55.75.602</b>	No. 00	260 x 220 mm	hardened steel	90 cm	clear lacquered





## HOLSTEIN OR CONCRETE SHOVEL

Ore or gravel shovel of hardened steel with extra hardened blade, clear/red lacquered. Complete with slightly curved ash knob handle.

ARTIKELNO	BLADE SIZE	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
<b>55.79.904</b>	No. 1	290 x 235 mm	hardened steel	130 cm	clear/red lacquered



## BALLAST SHOVEL METAL

Made of black lacquered hardened steel or bare aluminium. Complete with straight ash handle with a plastic D-grip and wooden hilt.

ARTIKELNO	BLADE SIZE	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
<b>55.85.800</b>	No. 0	300 x 235 mm	hardened steel	100 cm	black lacquered
<b>55.85.802</b>	No. 2	305 x 245 mm	hardened steel	100 cm	black lacquered
<b>55.85.804</b>	No. 4	320 x 255 mm	hardened steel	100 cm	black lacquered
<b>55.87.800</b>	No. 0	300 x 235 mm	aluminium	100 cm	bare
<b>55.87.802</b>	No. 2	320 x 255 mm	aluminium	100 cm	bare
<b>55.87.804</b>	No. 4	335 x 280 mm	aluminium	100 cm	bare



## BALLAST SHOVEL, PLASTIC

Very sturdy plastic ballast shovel suited for shovelling light materials such as grains and animal feed. Also perfect as a snow shovel. Without metal strip to avoid scratching aluminium hatches on decks, side decks and cabin roofs! Complete with slightly curved beech handle with plastic D-grip.

ARTIKELNO	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR
<b>55.88.320</b>	335 x 300 mm	plastic	130 cm	blue
<b>55.88.340</b>	420 x 395 mm	plastic	130 cm	red
<b>55.88.360</b>	460 x 350 mm	glass fibre reinforced	130 cm	silver grey

**BALLAST SYNTHETIC SHOVEL, VIKAN**

Made of strong but light plastic with handle and D-grip in one.

ARTIKELNO	BLADE SIZE	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR	VIKAN TYPENUMBER
<b>55.88.802</b>	No. 2	330 x 270 mm	plastic	98 cm	green	56112
<b>55.88.806</b>	No. 6	370 x 340 mm	plastic	98 cm	green	56012

**GRAIN SHOVEL WITH STRIP**

Made of corrugated aluminium and fitted with a wear strip.

Complete with a straight ash handle with plastic D-grip with wooden hilt or straight knob handle.

ARTIKELNO	BLADE SIZE	BLADE DIMENSIONS HXW	MATERIAL	HANDLE LENGTH	COLOUR	VERSION
<b>55.91.802</b>	No. 2	440 x 325 mm	aluminium	100 cm	bare	D-grip
<b>55.91.902</b>	No. 2	440 x 325 mm	aluminium	130 cm	bare	knob handle



# WOODEN FENDERS



## WEDGE

ARTIKELNO	MATERIAL	DIMENSIONS
56.05.009	ash wood	240 x 60 x 60/5 mm



## WOODEN FENDER



Flat model, made of poplar wood, one long side has two sloping ends. Also has two 25 mm diameter holes.

### SCALE:

50 items	FH
100 items	FG
200 items	FF
300 items	FC

ARTIKELNO	MODEL	HEIGHT X THICKNESS X LENGTH	MATERIAL	WEIGHT	NUMBER ON PALLET
56.06.312	small	12 x 11 x 100 cm	poplar wood	9 kg	50
56.06.315	large	15 x 10 x 100 cm	poplar wood	10 kg	50



## WOODEN FENDER, EXTRA LARGE



Flat model, made of poplar, one long side has two sloping ends. Also has two 25 mm diameter holes.

### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!

ARTIKELNO	MODEL	HEIGHT X THICKNESS X LENGTH	MATERIAL	WEIGHT	NUMBER ON PALLET
56.06.520	extra large	15 x 15 x 100 cm	poplar wood	15 kg	25
56.06.522	extra large	15 x 15 x 200 cm	poplar wood	30 kg	10
56.06.533	extra large	20 x 20 x 250 cm	poplar wood	65 kg	10



## FENDER, PLASTIC



Made from recycled plastic. With two sloping sides.

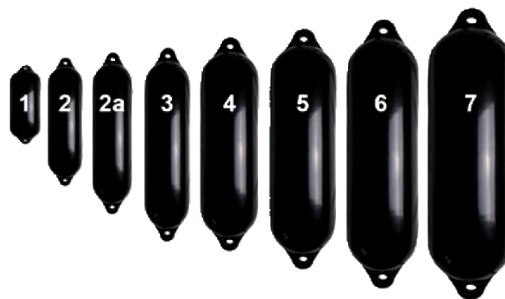
### ASK ABOUT OUR SPECIAL BULK-BUY PRICE!



ARTIKELNO	MODEL	HEIGHT X THICKNESS X LENGTH	MATERIAL	WEIGHT	NUMBER ON PALLET
56.06.810	small	10 x 10 x 110 cm	plastic	6 kg	100
56.06.812	Katchoe medium closed	11 x 14 x 110 cm	plastic	9 kg	70
56.06.816	large open	15 x 16 x 140 cm	plastic	17 kg	30
56.06.855	Katchoe large closed	15 x 16 x 140 cm	plastic	17 kg	35

## FENDER

Cylinder model, made of top quality flexible PVC



ARTIKELNO	DIAMETER	HEIGHT	WEIGHT	VOLUME	EYE DIAMETER	MATERIAL	COLOUR	MODEL
56.07.309	9 cm	30 cm	0.30 kg	2 L	18 mm	PVC	black	1
56.07.312	12 cm	42 cm	0.60 kg	4 L	18 mm	PVC	black	2
56.07.313	12 cm	55 cm	0.75 kg	5 L	20 mm	PVC	black	2A
56.07.315	15 cm	60 cm	1.20 kg	9 L	20 mm	PVC	black	3
56.07.319	19 cm	68 cm	1.80 kg	16 L	20 mm	PVC	black	4
56.07.322	22 cm	72 cm	2.40 kg	23 L	20 mm	PVC	black	5
56.07.325	25 cm	80 cm	3.00 kg	34 L	25 mm	PVC	black	6
56.07.330	30 cm	90 cm	4.00 kg	56 L	25 mm	PVC	black	7

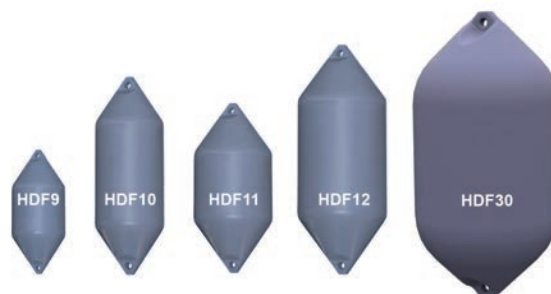
## MEGA FENDER

Cylinder model, made of top quality flexible PVC or high-quality HDX with a wall thickness of 8 mm, which is considerably stronger and much harder than PVC.

HDX fenders can be used by large commercial ships as spacer fenders.



ARTIKELNO	DIAMETER	HEIGHT	WEIGHT	VOLUME	EYE DIAMETER	MATERIAL	COLOUR	MODEL
56.07.735	35 cm	110 cm	4.5 kg	106 L	30 mm	PVC	black	1
56.07.745	45 cm	140 cm	7.2 kg	223 L	30 mm	PVC	black	2
56.07.760	60 cm	160 cm	13.0 kg	452 L	30 mm	PVC	black	3



ARTIKELNO	DIAMETER	HEIGHT	WEIGHT	VOLUME	EYE DIAMETER	MATERIAL	COLOUR	MODEL
56.07.852	50 cm	120 cm	11.0 kg	236 L	50 mm	HDX	grey	HDF9
56.07.856	50 cm	160 cm	18.0 kg	314 L	50 mm	HDX	grey	HDF10
56.07.865	65 cm	145 cm	20.0 kg	481 L	50 mm	HDX	grey	HDF11
56.07.868	65 cm	185 cm	30.0 kg	614 L	50 mm	HDX	grey	HDF12
56.07.893	117 cm	235 cm	85.0 kg	2,527 L	60 mm	HDX	grey	HDF30



## SPACER FENDER HD

Cylinder Model, made of HD-closed-cell foam, coated with black polyurethane and protected by a PE mesh  
Heavy centre pipe with 2 glands.

Foam : EVA foam with a density of 120/140 kg m<sup>3</sup>

ARTIKELNO	DIAMETER	HEIGHT	WEIGHT	VOLUME	EYE DIAMETER	MATERIAL	COLOUR	MODEL
56.07.960	50 cm	100 cm	30 kg	200 L	18 mm	EVA foam	black	HD

## BALL FENDER

Cylinder model made of top quality flexible PVC

Is often used in water sports and small commercial vessels such as inspection vessels as spacer fender at the bow and the stern.



ARTIKELNO	DIAMETER	HEIGHT	WEIGHT	VOLUME	EYE DIAMETER	MATERIAL	COLOUR	MODEL
56.08.035	35 cm	48 cm	1.5 kg	21 L	30 mm	PVC	black	1
56.08.045	45 cm	62 cm	2.8 kg	45 L	30 mm	PVC	black	2
56.08.055	55 cm	73 cm	3.8 kg	83 L	30 mm	PVC	black	3
56.08.065	65 cm	88 cm	4.9 kg	139 L	30 mm	PVC	black	4
56.08.085	85 cm	105 cm	6.8 kg	314 L	30 mm	PVC	black	5
56.08.100	100 cm	110 cm	7.2 kg	524 L	30 mm	PVC	black	6



## VALVE FOR PVC FENDER

ARTIKELNO	DESCRIPTION
56.08.200	Valve for PVC fender



## CORK-FILLED FENDER

Or cork bag, made of coir rope and filled with cork chips and waste.  
Fitted at the top with a rope eye/handle.

ARTIKELNO	DIAMETER	CIRCUMFERENCE	WEIGHT
56.08.530	35 cm	110 cm	4,5 kg
56.08.540	45 cm	150 cm	8.2 kg



## HANDSPIKE, CAPSTAN BAR

Top round, bottom square.

ARTIKELNO	LENGTH	MATERIAL
56.15.518	175 cm	ash wood
56.15.520	220 cm	ash wood



## SHOVEL HANDLE

ARTIKELNO	LENGTH	MODEL	MATERIAL	VERSION
56.20.140	100 cm	semi-curved	ash wood	T-grip
56.20.740	100 cm	straight	ash wood	D-grip
56.20.952	130 cm	slightly curved	ash wood	without grip
56.20.955	130 cm	slightly curved	beech wood	D-grip



## RUST SCRAPER HANDLE

Made of sanded hout, one end round, other end with hole and ring.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL	NUMBER PER PACKAGE
56.23.045	45 cm	29 mm	wood	25
56.23.065	65 cm	29 mm	wood	25
56.23.130	130 cm	29 mm	wood	25



## HANDLE HOLDER



ARTIKELNO	MODEL	MATERIAL	MOUNTING
56.25.012	Handle holder tapered	aluminium	internal and external thread
56.25.013	Handle holder with 2 feet	galvanized steel	opening Ø29 mm
56.25.015	Handle holder heavy duty	galvanized steel	opening Ø29 mm
56.25.018	Vikan handle holder	plastic	Vikan internal thread
56.25.019	Vikan screw piece for handle	plastic	opening Ø22 mm / Vikan external thread

## HANDLES

### BROOM, SCRUBBING BRUSH OR PAINT ROLLER HANDLE

Made of sanded wood, one end conical, other end round.

**BISON STRUCTURAL ADHESIVE (art.No. 49.57.305) is the answer for solid and waterproof fixing of a handle to a brush or broom.**

ARTIKELNO	LENGTH	DIAMETER	MATERIAL	NUMBER PER PACKAGE
<b>56.25.120</b>	120 cm	24 mm	Elliottis pine wood	25
<b>56.26.170</b>	170 cm	28 mm	Tauari wood	25
<b>56.26.200</b>	200 cm	28 mm	Elliottis pine wood	25
<b>56.26.250</b>	250 cm	28 mm	pine wood	25
<b>56.26.300</b>	300 cm	28 mm	pine wood	25

### TAR BRUSH HANDLE

Made of sanded hout, one end round, other end with steel ring and spring.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL	NUMBER PER PACKAGE
<b>56.27.170</b>	170 cm	30 mm	Elliottis pine wood	25

### LINEA FIBREGLASS HANDLE (EURO 2000)

The bottom end has a screw thread to facilitate making a strong connection.

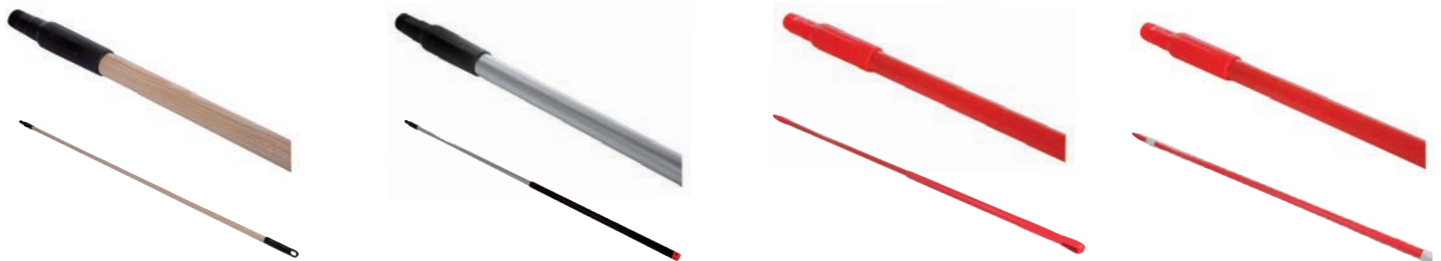
**Note:**

For a shorter handle, unscrew the handle with two people and saw some off (holding a shorter version in stock would not be attractive for you or us because of the small price difference).

ARTIKELNO	LENGTH	DIAMETER	MATERIAL	NUMBER PER PACKAGE
<b>56.28.317</b>	170 cm	23 mm	fibreglass	20

**HANDLE, VIKAN**

Very heavy duty handle, suitable for Vikan scrubbing brushes.  
Top end provided with plastic for good grip.



ARTIKELNO	LENGTH	DIAMETER	MATERIAL	GRIP	NUMBER PER PACKAGE
<b>56.28.517</b>	170 cm	25 mm	wood	125 mm	10
<b>56.28.617</b>	170 cm	25/31 mm	aluminium	700 mm	10
<b>56.28.717</b>	170 cm	25/34 mm	polypropylene	700 mm	10
<b>56.28.822</b>	(telescopisch)157 / 278 cm	25/31 mm	aluminium	700 mm	5

**HANDLE + WATER FLOW THROUGH, VIKAN**

Very heavy duty handle, suitable for Vikan scrubbing brushes.  
Top end provided with plastic for good grip.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL	GRIP	NUMBER PER PACKAGE
<b>56.28.915</b>	150 cm	25/31 mm	aluminium	700 mm	10
<b>56.28.927</b>	(telescopisch)161 / 284 cm	25/31 mm	aluminium	700 mm	5

**TELESCOPIC HANDLE**

Top catch and handle of plastic.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL	MOUNTING	NUMBER PER PACKAGE
<b>56.29.122</b>	2 x 100 cm	21/25 mm	aluminium	conically	10
<b>56.29.202</b>	2 x 200 cm	21/25 mm	aluminium	conically	10
<b>56.29.203</b>	2 x 300 cm	22/26 mm	aluminium	thread	10
<b>56.29.302</b>	3 x 200 cm	22/26 mm	aluminium	thread	10





## YACHT OAR, SLEEVE

ARTIKELNO	LENGTH	INSIDE DIAMETER	OUTSIDE DIAMETER
56.45.001	115 mm	44 mm	69/51 mm



## YACHT OAR, SPRUCE

Made of flexible and light spruce wood and assembled from several parts that are glued together to form a solid piece and prevent warping. Finished with water-proof varnish. Supplied **WITHOUT** sleeve.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL
56.45.150	150 cm	44 mm	spruce wood
56.45.180	180 cm	44 mm	spruce wood
56.45.210	210 cm	44 mm	spruce wood
56.45.240	240 cm	44 mm	spruce wood
56.45.270	270 cm	44 mm	spruce wood
56.45.300	300 cm	47 mm	spruce wood
56.45.330	330 cm	47 mm	spruce wood



## CLAMP-ON OAR, PINE

Made of pine wood, unvarnished, and fitted with oak clamps.

ARTIKELNO	LENGTH	MATERIAL	FOR ROWING BOAT
56.50.608	225 cm	pine wood	300 cm
56.50.609	245 cm	pine wood	350 cm
56.50.610	275 cm	pine wood	400 cm
56.50.611	305 cm	pine wood	450 cm
56.50.612	340 cm	pine wood	500 cm
56.50.613	365 cm	pine wood	600 cm

**CLAMP-ON-OAR, ASH**

Made of ash wood, varnished.

ARTIKELNO	LENGTH	MATERIAL	FOR ROWING BOAT
<b>56.50.821</b>	210 cm	ash wood	300 cm
<b>56.50.824</b>	240 cm	ash wood	350 cm
<b>56.50.827</b>	270 cm	ash wood	400 cm

**CLAMP-ON OAR, EYE BOLT**

Galvanized steel eye bolt including nut and washers, for clamp-on-oars.

ARTIKELNO	DESCRIPTION
<b>56.50.905</b>	Eye bolt including nut and rings

**SCULL (OAR), ASH**

Made of ash wood, unvarnished, completely sanded and with a tapered widening handle. Sometimes also known as a sweep but then it does not have a tapered handle but a thinner end as a handgrip.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL
<b>56.53.308</b>	225 cm		ash wood
<b>56.53.309</b>	250 cm		ash wood
<b>56.53.310</b>	275 cm		ash wood
<b>56.53.311</b>	300 cm		ash wood
<b>56.53.312</b>	350 cm		ash wood
<b>56.53.313</b>	400 cm		ash wood





## KNOB

Made of unvarnished wood, for (yacht)boathooks and barge poles.

ARTIKELNO	MODEL	DIAMETER	HEIGHT	DIAMETER HOLE	MATERIAL	FOR ARTICLE
<b>56.56.112</b>	small	45/30 mm	48 mm	20 mm	wood	yacht boathook
<b>56.56.113</b>	medium	65/35 mm	70 mm	22 mm	wood	boathook and barge pole 3 to 6 metres
<b>56.56.115</b>	large	70/40 mm	70 mm	25 mm	wood	boathook and barge pole 7 to 8 metres



## BOATHOOK

Made of steel and completely galvanized.

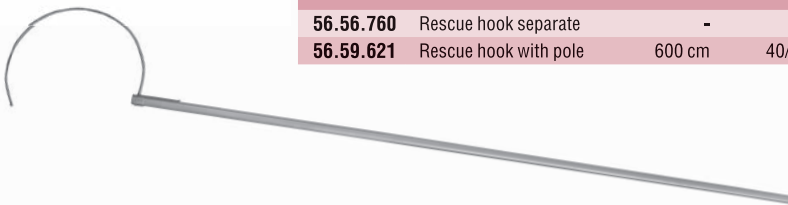
ARTIKELNO	LENGTH	MATERIAL	FOR ARTICLE
<b>56.56.306</b>	15.0 cm	galvanized steel	-
<b>56.56.308</b>	20.0 cm	galvanized steel	-
<b>56.56.310</b>	25.0 cm	galvanized steel	boathook 3 to 4 metres
<b>56.56.311</b>	27.5 cm	galvanized steel	boathook 4.5 to 6 metres
<b>56.56.312</b>	30.0 cm	galvanized steel	boathook 7 to 8 metres



## RESCUE HOOK WITH POLE

Hook made of galvanized steel, pole of aluminium.

ARTIKELNO	DESCRIPTION	LENGTH	DIAMETER	OPENING	DIAMETER HOLE	MATERIAL
<b>56.56.760</b>	Rescue hook separate	-	-	60 cm	40 mm	galvanized steel
<b>56.59.621</b>	Rescue hook with pole	600 cm	40/35 mm	60 cm	40 mm	galvanized steel / aluminium



### YACHT BOATHOOK

Cylindrical model, made of tauari, completely sanded, clear varnished and fitted with wooden knob.  
Hook made of plastic.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL
56.62.000	spare hook	30 mm	plastic
56.62.150	150 cm	30 mm	Tauari wood
56.62.200	200 cm	30 mm	Tauari wood
56.62.250	250 cm	30 mm	Tauari wood
56.62.300	300 cm	30 mm	Tauari wood
56.62.350	350 cm	30 mm	Tauari wood



### TELESCOPIC BOATHOOK

Made of aluminium with plastic hook, catch and handle.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL
56.65.122	2 x 125 cm	21/25 mm	aluminium
56.65.202	2 x 200 cm	21/25 mm	aluminium





## BOATHOOK, WOOD

Manufactured in the Netherlands from prime quality laminated spruce wood, completely sanded, treated with rot-resistant wood stain.  
Fitted with wooden knob and galvanized steel hook.  
Tapered towards both ends.  
Thickest part approx. 1/3 of the length from the hook.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL	LENGTH BOAT HOOK
56.72.510	300 cm	40 mm	spruce wood	25.0 cm
56.72.512	350 cm	40 mm	spruce wood	25.0 cm
56.72.514	400 cm	40 mm	spruce wood	25.0 cm
56.72.516	450 cm	50 mm	spruce wood	27.5 cm
56.72.518	500 cm	50 mm	spruce wood	27.5 cm
56.72.521	600 cm	55 mm	spruce wood	27.5 cm
56.72.525	700 cm	65 mm	spruce wood	30.0 cm
56.72.528	800 cm	70 mm	spruce wood	30.0 cm



## BOATHOOK, ALUMINIUM

Made of aluminium, 40 mm cylindrical tube.  
Fitted with heavy aluminium hook.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL
56.72.710	300 cm	40 mm	aluminium
56.72.712	350 cm	40 mm	aluminium
56.72.714	400 cm	40 mm	aluminium
56.72.716	450 cm	40 mm	aluminium
56.72.718	500 cm	40 mm	aluminium
56.72.721	600 cm	40 mm	aluminium



**BOATHOOK, ALUMINIUM + STAINLESS STEEL HOOK**

Made of aluminium, 30 or 45 mm cylindrical tube.  
Fitted with heavy stainless steel hook.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL
56.72.830	300 cm	30 mm	aluminium
56.72.840	400 cm	30 mm	aluminium
56.72.850	500 cm	30 mm	aluminium
56.72.860	600 cm	30 mm	aluminium
56.72.930	300 cm	45 mm	aluminium
56.72.940	400 cm	45 mm	aluminium
56.72.950	500 cm	45 mm	aluminium
56.72.960	600 cm	45 mm	aluminium
56.72.980	800 cm	45 mm	aluminium

**BARGE POLE, WOOD**

Manufactured in the Netherlands from prime quality laminated spruce wood, completely sanded, treated with rot-resistant wood stain.  
Fitted with wooden knob and ash toe.

Tapered toward both ends.

Thickest part approx. 1/3 of the length from the toe.

ARTIKELNO	LENGTH	DIAMETER	MATERIAL
56.88.530	300 cm	40 mm	spruce wood
56.88.535	350 cm	40 mm	spruce wood
56.88.540	400 cm	40 mm	spruce wood
56.88.545	450 cm	50 mm	spruce wood
56.88.550	500 cm	50 mm	spruce wood
56.88.560	600 cm	55 mm	spruce wood
56.88.570	700 cm	65 mm	spruce wood
56.88.580	800 cm	70 mm	spruce wood



## MAST BUTTONS



### MAST BUTTON FLAT, PLASTIC

For aluminium and wooden masts.

ARTIKELNO	DIAMETER	THICKNESS	PULLEY	MAST HOLE	COLOUR	FOR ARTICLE
<b>57.01.105</b>	125 mm	50 mm	no	40 mm	orange	lighting mast (57.35.650 to 57.40.600)
<b>57.01.106</b>	150 mm	50 mm	no	40 mm	orange	-
<b>57.01.107</b>	175 mm	50 mm	no	40 mm	orange	-
<b>57.01.305</b>	70 mm	25 mm	eye	17 mm	orange	flagstaff, simple model (57.15.150 to 57.15.300)



### MAST BUTTON FLAT, WOOD

For aluminium and wooden masts.

ARTIKELNO	DIAMETER	THICKNESS	PULLEY	MAST HOLE	COLOUR	FOR ARTICLE
<b>57.01.530</b>	75 mm	40 mm	yes	20 mm	unvarnished	-
<b>57.01.540</b>	100 mm	40 mm	yes	30 mm	unvarnished	-
<b>57.01.550</b>	125 mm	40 mm	yes	30 mm	unvarnished	-
<b>57.01.560</b>	150 mm	40 mm	yes	35 mm	unvarnished	-
<b>57.01.570</b>	175 mm	40 mm	yes	35 mm	unvarnished	-
<b>57.01.580</b>	200 mm	55 mm	yes	30 mm	unvarnished	-
<b>57.01.650</b>	125 mm	40 mm	yes	40 mm	unvarnished	flagstaff aluminium (57.21.200 to 57.21.600)



### MAST BUTTON PEAR-SHAPED, WOOD

For aluminium and wooden masts.

ARTIKELNO	DIAMETER	HEIGHT	PULLEY	MAST HOLE	COLOUR	FOR ARTICLE
<b>57.01.730</b>	50 mm	75 mm	yes	12 mm	unvarnished	-
<b>57.01.740</b>	70 mm	100 mm	yes	15 mm	unvarnished	-
<b>57.01.750</b>	90 mm	125 mm	yes	15 mm	unvarnished	-
<b>57.01.760</b>	115 mm	150 mm	yes	15 mm	unvarnished	-
<b>57.01.770</b>	130 mm	175 mm	yes	15 mm	unvarnished	-



### MAST BUTTON FLAT, STAINLESS STEEL 316 HIGHLY POLISHED

For aluminium and wooden masts.

ARTIKELNO	DIAMETER	THICKNESS	PULLEY	MAST HOLE	COLOUR	FOR ARTICLE
<b>57.01.947</b>	125 mm	50 mm	yes	30 mm	stainless steel 316 highly polished	-
<b>57.01.950</b>	125 mm	50 mm	yes	40 mm	stainless steel 316 highly polished	flagstaff stainless steel 316 high-gloss (57.22.020 to 57.22.060)

## YACHT FLAGSTAFF, HARDWOOD

Made of ash, with African teak button and two layers of varnish.  
In straight or curved versions.

ARTIKELNO	LENGTH	DIAMETER	MODEL	MATERIAL
<b>57.04.050</b>	50 cm	16 mm	straight (cylindrical)	ash wood
<b>57.04.060</b>	60 cm	20 mm	straight (cylindrical)	ash wood
<b>57.04.100</b>	100 cm	25 mm	straight (cylindrical)	ash wood
<b>57.04.125</b>	125 cm	25 mm	straight (cylindrical)	ash wood
<b>57.04.150</b>	150 cm	25 mm	straight (cylindrical)	ash wood
<b>57.05.100</b>	100 cm	25 mm	curved (cylindrical)	ash wood
<b>57.05.125</b>	125 cm	25 mm	curved (cylindrical)	ash wood
<b>57.05.150</b>	150 cm	25 mm	curved (cylindrical)	ash wood



## YACHT FLAGSTAFF, STAINLESS STEEL 316

ARTIKELNO	LENGTH	OUTSIDE DIAMETER	INSIDE DIAMETER	MODEL	MATERIAL
<b>57.06.100</b>	100 cm	25 mm	22 mm	straight (cylindrical)	stainless steel 316
<b>57.06.150</b>	150 cm	25 mm	22 mm	straight (cylindrical)	stainless steel 316





## FLAGSTAFF, SIMPLE MODEL

Made of plasticized wood and fitted with orange plastic button with eye.

ARTIKELNO	LENGTH	DIAMETER	MODEL	MATERIAL
<b>57.15.150</b>	150 cm	30 mm	straight (cylindrical)	plasticized wood
<b>57.15.200</b>	200 cm	30 mm	straight (cylindrical)	plasticized wood
<b>57.15.250</b>	250 cm	30 mm	straight (cylindrical)	plasticized wood
<b>57.15.300</b>	300 cm	30 mm	straight (cylindrical)	plasticized wood

## FLAGSTAFF HOLDER



ARTIKELNO	DIAMETER HOLE	MODEL	DIMENSIONS	BOLT HOLES	MATERIAL
<b>57.15.900</b>	25 mm	straight	Ø 65 mm	6 mm	stainless steel 304
<b>57.15.901</b>	25 mm	45°	Ø 65 mm	6 mm	stainless steel 304
<b>57.15.902</b>	32 mm	45°	126 x 88 mm	6 mm	plastic
<b>57.15.905</b>	32 mm	45°	85 x 85 mm	6 mm	aluminium
<b>57.15.941</b>	32 mm	45°	87 x 87 mm	6 mm	stainless steel 304
<b>57.16.040</b>	40 mm	45°	87 x 87 mm	6 mm	stainless steel 316
<b>57.16.240</b>	40 mm	folds back	250 x 140 x 300 mm	8 mm	stainless steel 316
<b>57.15.910</b>	32 mm	handy stick, for putting a flagstaff in the holder	-	-	plastic

## FLAGSTAFF, WOOD

Made of pine (Oregon Pine), completely clear varnished and fitted with button with sheave.

ARTIKELNO	LENGTH	LOWER DIAMETER	MODEL	MATERIAL
57.20.150	150 cm	40/45 mm	straight (tapered)	pine wood
57.20.200	200 cm	40/45 mm	straight (tapered)	pine wood
57.20.250	245 cm	40/45 mm	straight (tapered)	pine wood
57.20.300	300 cm	40/45 mm	straight (tapered)	pine wood
57.20.350	360 cm	40/45 mm	straight (tapered)	pine wood
57.20.400	390 cm	40/45 mm	straight (tapered)	pine wood
57.20.450	445 cm	40/45 mm	straight (tapered)	pine wood
57.20.500	490 cm	40/45 mm	straight (tapered)	pine wood



## FLAGSTAFF, ALUMINIUM

Made of aluminium and fitted with untreated wooden button with sheave.

Place button in water overnight to make fitting easier.

Saw off yourself to make other sizes.

ARTIKELNO	LENGTH	OUTSIDE DIAMETER	INSIDE DIAMETER	MODEL	MATERIAL
57.21.200	200 cm	40 mm	35 mm	straight (cylindrical)	aluminium
57.21.300	300 cm	40 mm	35 mm	straight (cylindrical)	aluminium
57.21.400	400 cm	40 mm	35 mm	straight (cylindrical)	aluminium
57.21.600	600 cm	40 mm	35 mm	straight (cylindrical)	aluminium





## FLAGSTAFF, STAINLESS STEEL 316

Made of stainless steel 316 and provided with high-gloss stainless steel 316 mast button with sheave. Should be cut by the customer if shorter sizes are required.

ARTIKELNO	LENGTH	OUTSIDE DIAMETER	INSIDE DIAMETER	MODEL	MATERIAL
57.22.020	200 cm	40 mm	36 mm	straight (cylindrical)	stainless steel 316
57.22.030	300 cm	40 mm	36 mm	straight (cylindrical)	stainless steel 316
57.22.040	400 cm	40 mm	36 mm	straight (cylindrical)	stainless steel 316
57.22.060	200 cm	40 mm	36 mm	straight (cylindrical)	stainless steel 316
57.22.220	200 cm	30 mm	26 mm	straight (cylindrical) + cleat	stainless steel 316



## FLAGSTAFF, WOOD PAINTED WHITE

Made of laminated wood (no cracks, no splits), sanded and painted white. Complete with orange plastic button with sheave, flag line and galvanized cleat.

ARTIKELNO	LENGTH	LOWER DIAMETER	TOP DIAMETER	MODEL	MATERIAL
57.25.040	400 cm	60 mm	45 mm	straight (tapered) + cleat	laminated wood
57.25.050	500 cm	60 mm	45 mm	straight (tapered) + cleat	laminated wood
57.25.060	600 cm	70 mm	50 mm	straight (tapered) + cleat	laminated wood
57.25.070	700 cm	80 mm	55 mm	straight (tapered) + cleat	laminated wood
57.25.080	800 cm	85 mm	55 mm	straight (tapered) + cleat	laminated wood

## LIGHTING MAST, ROUND

Popular mast, complete with button.  
Can easily be sawn off to shorten it.

ARTIKELNO	DESCRIPTION	LENGTH	LENGTH OF YARD	DIAMETER	DIAMETER BORE	MATERIAL	WEIGHT
<b>57.35.650</b>	Lighting mast round, unsteady	6.5 m	2.0 m	76/58/42/40 mm	15 mm	aluminium	12 kg
<b>57.35.655</b>	Lighting mast round, steady	6.5 m	2.0 m	76/58/42/40 mm	15 mm	aluminium	12 kg
<b>57.35.901</b>	Mast socket for round lighting mast	0.4 m	-	-	-	aluminium	3 kg



## LIGHTING MAST, STREAMLINED TAPERED

Mast with very nice lines, supplied with square foot (20x10x100 cm).

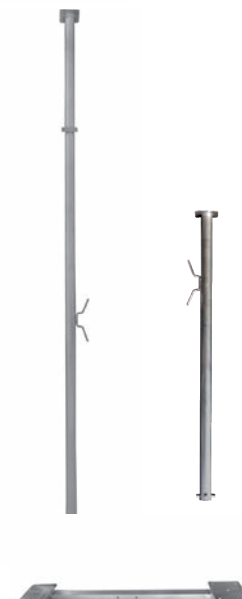
ARTIKELNO	DESCRIPTION	LENGTH	LENGTH OF YARD	DIAMETER	DIAMETER BORE	MATERIAL	WEIGHT
<b>57.40.600</b>	Lighting mast streamlined tapered	6.0 m	2.0 m	45 mm	15 mm	aluminium	12 kg
<b>57.40.901</b>	Mast socket for tapered lighting mast	0.6 m	-	-	-	aluminium	3 kg



## PUSHER TUG MAST

Simple pusher tug mast with a single lighting plate on top, double bayonet foot and cleat.  
Without yard but with a plate for fixing a removable yard (by means of two wing bolts).  
The extendable pusher tug mast is also equipped with two locking pins on a chain and is adjustable to five heights (4, 4.5, 5, 5.5 and 6 meters).

ARTIKELNO	DESCRIPTION	LENGTH	DIAMETER	LIGHTING PLATE	MATERIAL	WEIGHT
<b>57.47.400</b>	Pusher tug mast, without yard	4.0 m	80 mm	165 x 165 mm (4x M8)	aluminium	7 kg
<b>57.47.936</b>	Pusher tug mast extendable, without yard	4.0 - 6.0 m	80/45 mm	165 x 165 mm (4x M8)	aluminium	13 kg
<b>57.47.950</b>	Yard for pusher tug mast	1.5 m	80 mm	165 x 165 mm (4x M8)	aluminium	3 kg
<b>57.48.020</b>	Lantern mast	2.0 m	80 mm	165 x 165 mm (4x M8)	aluminium	4 kg





## RAT SHIELD

Flat version.

ARTIKELNO	DIAMETER	PASSAGE DIAMETER	MATERIAL
57.48.205	60 cm	8 cm	galvanized steel sheeting



## ROPE LADDER

Simple rope ladder with round rungs.

width : between ropes : 30 cm  
: overall : 40 cm  
diameter : rung : 35 mm  
: rope : 16 mm ( twice)  
materials : rung : wood (round)  
: rope : polypropylene film

ARTIKELNO	LENGTH	NUMBER OF RUNGS	WEIGHT
57.48.303	3 m	9	6 kg
57.48.304	4 m	12	8 kg
57.48.305	5 m	15	9 kg
57.48.306	6 m	18	11 kg
57.48.307	7 m	21	13 kg
57.48.308	8 m	24	15 kg
57.48.309	9 m	27	17 kg
57.48.310	10 m	30	19 kg



## ESCAPE OR BOAT LADDER

Tough rope ladder with flat steps.

width : step : 11 cm  
: between ropes : 40 cm  
: overall : 50 cm  
diameter : rope : 18 mm ( twice)  
materials : step : wood (flat)  
: rope : polypropylene film

ARTIKELNO	LENGTH	NUMBER OF STEPS	WEIGHT
57.48.503	3 m	9	18 kg
57.48.504	4 m	12	24 kg
57.48.505	5 m	15	30 kg
57.48.506	6 m	18	36 kg
57.48.507	7 m	21	42 kg
57.48.508	8 m	24	48 kg
57.48.509	9 m	27	54 kg
57.48.510	10 m	30	60 kg
57.48.512	12 m	36	72 kg





## PILOT LADDER

Tough rope ladder with flat steps, spreaders and with the lower steps made of rubber.

width : step : 11 cm  
 : between ropes : 40 cm  
 : overall : 52.5 cm  
 diameter : rope : 18 mm (twice)  
 materials : step : wood (flat) or rubber  
 : rope : polypropylene film



ARTIKELNO	LENGTH	NUMBER OF STEPS	WHICH BATTEN	WHICH RUBBER TREADS	WEIGHT
57.48.803	3 m	9	1	4	35 kg
57.48.804	4 m	12	2	4	41 kg
57.48.805	5 m	15	2	4	52 kg
57.48.806	6 m	18	2	4	58 kg
57.48.807	7 m	21	2	4	64 kg
57.48.808	8 m	24	3	4	75 kg
57.48.809	9 m	27	3	4	81 kg
57.48.810	10 m	30	3	4	87 kg



## PILOT LADDER / ESCAPE OR BOAT LADDER, PARTS

The repair of a step/batten is intended as a stopgap until the next port, after which they should be replaced.



ARTIKELNO	DESCRIPTION	DIMENSIONS	REMARKS
57.49.501	separate spool		
57.49.505	separate step, wood	525 x 120 x 28 mm	incl. 4 chocks
57.49.506	repair step, wood	525 x 120 x 28 mm	incl. 4 chocks
57.49.510	separate batten, wood	1,800 x 120 x 28 mm	incl. 4 chocks
57.49.511	repair batten, wood	1,800 x 120 x 28 mm	incl. 4 chocks
57.49.515	separate step, rubber	525 x 120 x 28 mm	



## HOLD LADDER ALUMINIUM EN 131

%

Extra robust industrial ladder for professional use.  
 Rails of heavy duty aluminium tubular section with high stiffness against bending, light weight and safe in use.  
 Square rungs with anti-slip profiling.  
 The rungs and rung supports form a single unit.  
 Including stabilizer bar with large rubber anti-slip feet (not at 8 and 10 rungs).

**Standard** : EN 131

**SCALE:**

5 items CK  
 10 items CH

ARTIKELNO	NUMBER OF RUNGS	LENGTH	MODEL	WIDTH	WIDTH BETWEEN THE RAILS	PROFILE DIMENSIONS	WEIGHT
57.52.108	8	240 cm	narrow	344 mm	298 mm	54 x 23 mm	3.70 kg
57.52.110	10	295 cm	narrow	344 mm	298 mm	54 x 23 mm	4.50 kg
57.52.112	12	350 cm	wide	512 mm	466 mm	57 x 23 mm	6.42 kg
57.52.114	14	405 cm	wide	512 mm	466 mm	63 x 23 mm	7.64 kg
57.52.116	16	465 cm	wide	512 mm	466 mm	70 x 23 mm	8.79 kg
57.52.118	18	520 cm	wide	512 mm	466 mm	77 x 23 mm	10.92 kg
57.52.120	20	575 cm	wide	512 mm	466 mm	77 x 23 mm	11.22 kg
57.52.122	22	630 cm	wide	512 mm	466 mm	80 x 23 mm	12.60 kg
57.52.124	24	690 cm	wide	512 mm	466 mm	80 x 23 mm	14.63 kg

## HOLD LADDER ALUMINIUM EN 131, PARTS



ARTIKELNO	DESCRIPTION	FOR LADDER
57.55.905	Stabilizer bar hold ladder complete (incl. mounting kit and rubber feet)	12-24 rungs
57.55.800	Loose rubber feet stabilizer bar	12-24 rungs
57.55.906	Loose mounting kit stabilizer bar	12-24 rungs
57.55.908	Top caps hold ladder	8-10 rungs
57.55.912	Top caps hold ladder	12 rungs
57.55.914	Top caps hold ladder	14 rungs
57.55.916	Top caps hold ladder	16 rungs
57.55.918	Top caps hold ladder	18-20 rungs
57.55.922	Top caps hold ladder	22-24 rungs

**HOLD LADDER, SAFETY HOOK**

To prevent slipping away against the edge of the hold.  
Suitable for our hold ladder aluminium EN 131, but can also be used for other ladders.  
Including fixing materials.

ARTIKELNO	HOOK OPENING	MATERIAL
<b>57.55.900</b>	30 mm	aluminium
<b>57.55.901</b>	50 mm	aluminium

**HOLD LADDER, STABILIZER BAR UNIVERSAL**

Universal stabilizer bar can be used for all kinds of ladders.  
Including fastenings.

ARTIKELNO	LENGTH	MATERIAL
<b>57.55.902</b>	100 cm	aluminium



# OUTBOARD LADDERS



## OUTBOARD LADDER

Made of aluminium with anti-slip steps, without handrail.  
From eight steps extra reinforced to prevent bending.

ARTIKELNO	NUMBER OF STEPS	TOTAL LENGTH	WIDTH	WIDTH BETWEEN THE RAILS	WEIGHT
57.65.003	3	94 cm	355 mm	295 mm	3.5 kg
57.65.004	4	119 cm	355 mm	295 mm	4.0 kg
57.65.005	5	148 cm	355 mm	295 mm	4.2 kg
57.65.006	6	170 cm	355 mm	295 mm	5.4 kg
57.65.007	7	193 cm	355 mm	295 mm	5.9 kg
57.65.008	8	205 cm	355 mm	295 mm	7.3 kg
57.65.009	9	238 cm	355 mm	295 mm	7.6 kg
57.65.010	10	261 cm	355 mm	295 mm	8.1 kg
57.65.011	11	283 cm	355 mm	295 mm	8.7 kg
57.65.012	12	307 cm	355 mm	295 mm	9.6 kg
57.65.013	13	330 cm	355 mm	295 mm	10.5 kg
57.65.014	14	354 cm	355 mm	295 mm	10.9 kg
57.65.015	15	363 cm	355 mm	295 mm	12.0 kg
57.65.016	16	390 cm	355 mm	295 mm	13.0 kg
57.65.017	17	419 cm	355 mm	295 mm	14.0 kg



## OUTBOARD LADDER, HANDRAIL

Made of aluminium for self assembly.  
Complete with stainless steel nuts, bolts and washers.

ARTIKELNO	DESCRIPTION
57.65.901	Handrail for outboard ladder



## OUTBOARD LADDER, SEPARATE LENGTHENED STEP

Made of aluminium for self assembly.  
Ensures the outboard ladder can be hung higher/lower.  
Handy when the ladder is too long.

ARTIKELNO	DESCRIPTION
57.65.905	Seperate lengthened rung for outboard ladder

## OUTBOARD LADDER NEN-EN 1502

**Made according to NEN-EN 1502 specifications, Inland navigation vessels - Boarding ladders.**

This standard specifies the type, dimensions, strength requirements and test conditions which shall be complied with for reasons of safety. Boarding ladders are used on inland navigation vessels for climbing into ship's boats, disembarking or crossing over onto vessels with lower decks. They are not intended for use by passengers.

Boarding ladders are generally required for vessels having a boarding height greater than 1,5 m above the light water-line (**ES-TRIN Article 13.02:4**).

They may be used up to a height of around 3,0 m above the light water-line.

Floating outboard ladder made of aluminum with anti-slip steps, complete with handrails and foldable support with locking mechanism.

An adapted hook is optionally available.

**Complete with NEN-EN 1502 certificate.**

ARTIKELNO	NUMBER OF STEPS	LENGTH	TOTAL LENGTH	WIDTH	WIDTH BETWEEN THE RAILS	WEIGHT
57.65.505	5	125 cm	212 cm	508 mm	500 mm	10 kg
57.65.506	6	153 cm	240 cm	508 mm	500 mm	12 kg
57.65.507	7	181 cm	268 cm	508 mm	500 mm	13 kg
57.65.508	8	209 cm	296 cm	508 mm	500 mm	14 kg
57.65.509	9	237 cm	324 cm	508 mm	500 mm	18 kg
57.65.510	10	265 cm	352 cm	508 mm	500 mm	20 kg
57.65.511	11	293 cm	380 cm	508 mm	500 mm	21 kg
57.65.512	12	321 cm	408 cm	508 mm	500 mm	24 kg
57.65.513	13	349 cm	436 cm	508 mm	500 mm	25 kg
57.65.514	14	377 cm	464 cm	508 mm	500 mm	27 kg
57.65.515	15	405 cm	492 cm	508 mm	500 mm	29 kg
57.65.516	16	433 cm	520 cm	508 mm	500 mm	31 kg
57.65.517	17	461 cm	548 cm	508 mm	500 mm	33 kg
57.65.585	Adapted hook	-	-	-	-	-



## OUTBOARD LADDER HEAVY, FOR TANKERS

Aluminium with anti-slip steps, complete with handrail.

ARTIKELNO	NUMBER OF STEPS	LENGTH	TOTAL LENGTH	WIDTH	WIDTH BETWEEN THE RAILS	WEIGHT
57.66.240	15	400 cm	430 cm	460 mm	360 mm	14 kg
57.66.245	17	450 cm	480 cm	460 mm	360 mm	15 kg
57.66.250	19	500 cm	530 cm	460 mm	360 mm	16 kg



# GANG PLANKS



## GANG PLANK WOOD

Produced in the Netherlands of top quality laminated and planed pine, treated with rot-resistant stain. Fitted with screwed hardwood anti-slip slats every 30/35 cm. Also fitted with a recess at both ends for rope attachment.

ARTIKELNO	LENGTH	WIDTH	THICKNESS	WEIGHT
<b>58.05.400</b>	400 cm	40 cm	5 cm	40 kg
<b>58.05.500</b>	500 cm	40 cm	5 cm	50 kg
<b>58.05.600</b>	600 cm	40 cm	5 cm	60 kg



## GANG PLANK WOOD, FITTINGS

ARTIKELNO	DESCRIPTION	LENGTH	MATERIAL
<b>58.05.901</b>	stanchion with fixing	85 cm	galvanized steel
<b>58.05.902</b>	stanchion base	-	galvanized steel



## GANGWAY NET / GANG PLANK NET

Plastic net with 3 mm yarns and 10 cm mesh. Fitted with rope border.

ARTIKELNO	DIMENSIONS
<b>58.10.340</b>	3 x 4 m
<b>58.10.350</b>	3 x 5 m
<b>58.10.360</b>	3 x 6 m
<b>58.10.370</b>	3 x 7 m
<b>58.10.380</b>	3 x 8 m
<b>58.10.390</b>	3 x 9 m
<b>58.10.399</b>	3 x 10 m

## GANG- / FLOATING PLANK WITH SPECIAL ANTI-SLIP GRID, ES-TRIN

Manufactured in accordance with the requirements of the ES-TRIN (13.02/3d).

Floating, light-weight aluminium gangplank with walking surface of special openwork ANTI-SLIP profiled grid.

It is almost impossible to slip on this, even with snow, ice, load residues, oil or mud on the plank or on shoes.

Complete with removable but secure stanchions with removable stanchion bases and removable rope fastenings.

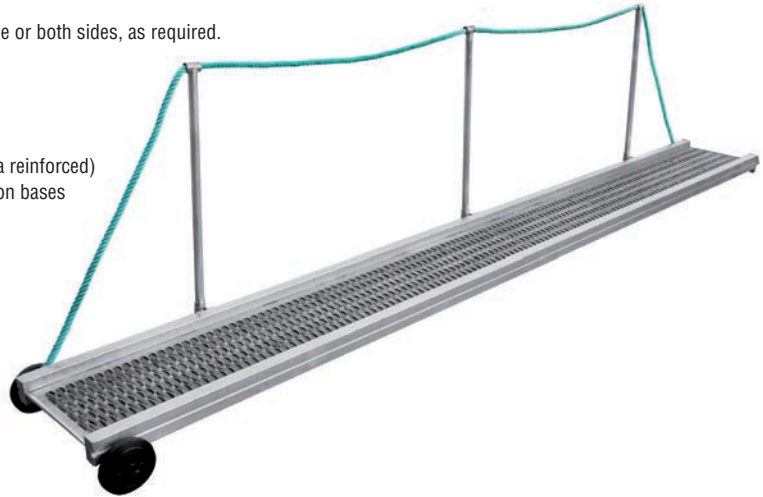
Also fitted with ORKAVA pe4 rope, diameter 20 mm.

Can also be retrofitted with extra stanchions and stanchion holders on one or both sides, as required.

Also available with wheels at one end.

material : aluminium  
 height : 200-600 cm : 110 mm  
 : 700-800 cm : 130 mm (this floating planks are extra reinforced)  
 width : 540 mm stanchion bases in place, 493 mm stanchion bases removed, 403 mm between the rails

stanchion height : 820/920 mm  
 load capacity : three persons, evenly distributed



ARTIKELNO	LENGTH	WEIGHT	NUMBER SCEPTERS	TUBE	DIMENSIONS TUBE	ES-TRIN APPROVED
58.20.200	200 cm	14 kg	2	single tube	80 x 45 mm	no
58.20.300	300 cm	20 kg	2	single tube	80 x 45 mm	no
58.20.400	400 cm	26 kg	3	single tube	80 x 45 mm	yes
58.20.500	500 cm	33 kg	3	single tube	80 x 45 mm	yes
58.20.600	600 cm	41 kg	3	single tube	80 x 45 mm	yes
58.20.700	700 cm	46 kg	4	single tube reinforced	80 x 45 mm	yes
58.20.800	800 cm	63 kg	4	single tube reinforced	80 x 45 mm	yes

## GANG- / FLOATING PLANK, WHEELS

ARTIKELNO	DESCRIPTION	DIAMETER	DIAMETER BORE
58.23.952	set of wheels for floating plank (complete with axles, washers and split pins)	160 mm	20.5 mm
58.23.971	wheel	160 mm	20.5 mm
58.23.972	axle	20 mm	20.5 mm
58.23.974	split pin with washer	-	20.5 mm



## GANG- / FLOATING PLANK, REPLACEMENT COMPONENTS

ARTIKELNO	DESCRIPTION	DIAMETER	LENGTH	ROPE THROUGHPUT
58.23.981	stanchion with fixing	30 mm	820/920 mm	25 mm
58.23.982	stanchion base threaded	30.5 mm	100 mm	-
58.23.983	rope fixing threaded	-	100 mm	25 mm



# GANG PLANKS

## GANG PLANK INLAND SHIPPING NEN-EN 526 (GERMAN DIN-NORM)

Made according to NEN-EN 526 specifications, European standard for gangways not longer than 8 meters.

This standard applies to normal inland shipping, not for passenger shipping.

The gangway has approval for its type, a calculation and a material specification.

All relevant details are noted on a plate, fastened to the plank.

Floating gangway of aluminium with walkway of special openwork ANTI SLIP profiled grid.

It is almost impossible to slip on this, even with snow, ice, load residues, oil or mud on the plank or on shoes.

Complete with removable but secured stanchions each with 2 rope guiding eyes.

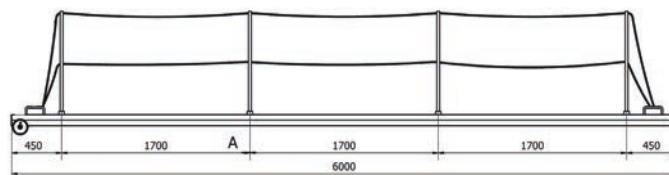
The stanchion pots are welded to the sides.

Also has black PP Multi 3 strand twisted rope, diameter 12 mm.

Delivered complete with wheels on one end.

Complete with NEN-EN 526 certificate from Bureau Veritas.

material	: seawater-resistant aluminium, alloy 6082 or 5754, hardening T5/T6	
height	: 200-700 cm	: 100 mm
	: 800 cm	: 150 mm
width	: 520 mm, 650 including wheels, 400 mm between sides	
highest stanchion	: 940/995 mm	
load capacity	: 3 persons, evenly distributed	



ARTIKELNO	LENGTH	WEIGHT	NUMBER SCEPTERS	TUBE	DIMENSIONS TUBE	ES-TRIN APPROVED
58.24.320	200 cm	18 kg	2	single tube	100 x 60 mm	no
58.24.330	300 cm	27 kg	3	single tube	100 x 60 mm	no
58.24.340	400 cm	36 kg	3	single tube	100 x 60 mm	yes
58.24.350	500 cm	45 kg	4	single tube	100 x 60 mm	yes
58.24.360	600 cm	54 kg	4	single tube	100 x 60 mm	yes
58.24.370	700 cm	63 kg	5	single tube	100 x 60 mm	yes
58.24.380	800 cm	72 kg	5	single tube	150 x 60 mm	yes

## GANG PLANK INLAND SHIPPING NEN-EN 526 (GERMAN DIN-NORM), REPLACEMENT COMPONENTS

For spare wheels, see article number 58.23.971.

ARTIKELNO	DESCRIPTION	DIAMETER	LENGTH	ROPE THROUGHPUT
58.24.415	stanchion	25 mm	940/995 mm	25 mm
58.24.500	stanchion rope PP Multi 3 strand twisted (black)	12 mm	-	-





## GANGWAYS FOR COASTAL SHIPPING NEN-EN 7061

**Meets the requirements of the NEN-EN 7061 standard.**

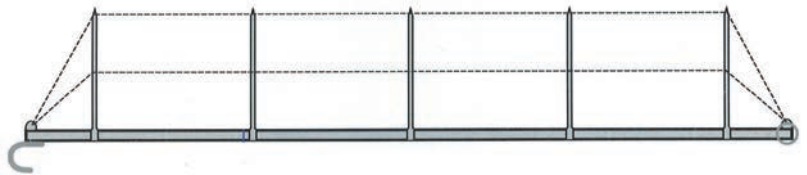
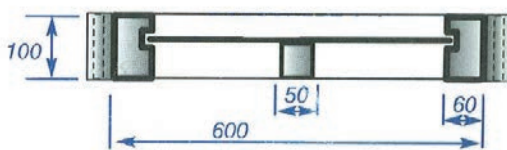
Floating aluminium gangway with walking surface of special openwork ANTI-SLIP profiled grid (Graepel plate).  
Sloping access at each end.

With heavy duty hooks at one end for suspension and nylon wheels at the other end.

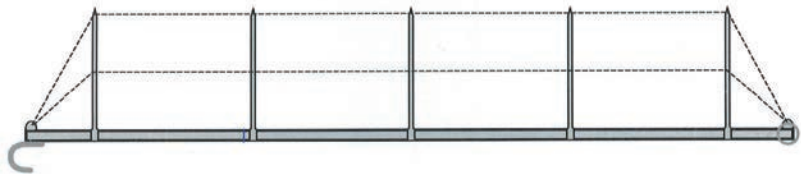
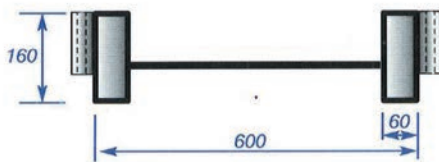
Complete with removable stainless steel stanchions with intermediate eyes on **both sides**.

**Complete with NEN-EN 7061 certificate.**

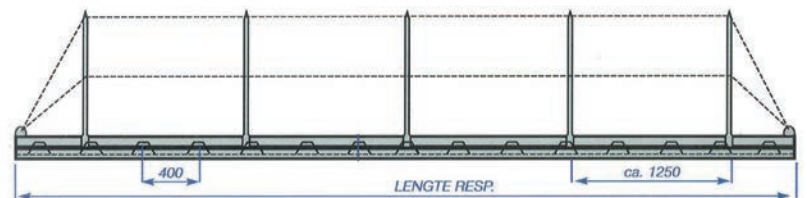
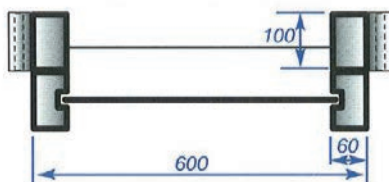
material : aluminium  
height : 100, 160, or 200 mm  
width : 680 mm stanchion bases in place, 600 mm stanchion bases removed, 480 mm between the rails  
stanchion height : 1000 mm from the walking surface



ARTIKELNO	LENGTH	WEIGHT	NUMBER SCEPTERS	TUBE	DIMENSIONS TUBE	VERSION
58.25.300	300 cm	30 kg	2 x 3	single tube	100 x 60 mm	
58.25.400	400 cm	40 kg	2 x 4	single tube	100 x 60 mm	
58.25.500	500 cm	50 kg	2 x 4	single tube	100 x 60 mm	
58.25.600	600 cm	60 kg	2 x 4	single tube	100 x 60 mm	
58.25.700	700 cm	70 kg	2 x 5	single tube	100 x 60 mm	



ARTIKELNO	LENGTH	WEIGHT	NUMBER SCEPTERS	TUBE	DIMENSIONS TUBE	VERSION
58.27.400	400 cm	48 kg	2 x 3	single tube	160 x 60 mm	Graepel + treads
58.27.500	500 cm	60 kg	2 x 4	single tube	160 x 60 mm	Graepel + treads
58.27.600	600 cm	72 kg	2 x 5	single tube	160 x 60 mm	Graepel + treads
58.27.700	700 cm	84 kg	2 x 5	single tube	160 x 60 mm	Graepel + treads
58.27.800	800 cm	96 kg	2 x 6	single tube	160 x 60 mm	Graepel + treads



ARTIKELNO	LENGTH	WEIGHT	NUMBER SCEPTERS	TUBE	DIMENSIONS TUBE	VERSION
58.29.400	400 cm	73 kg	2 x 3	double tube	100 x 60 mm	Graepel + treads
58.29.500	500 cm	92 kg	2 x 4	double tube	100 x 60 mm	Graepel + treads
58.29.600	600 cm	110 kg	2 x 5	double tube	100 x 60 mm	Graepel + treads
58.29.700	700 cm	129 kg	2 x 6	double tube	100 x 60 mm	Graepel + treads
58.29.800	800 cm	148 kg	2 x 7	double tube	100 x 60 mm	Graepel + treads
58.29.900	900 cm	158 kg	2 x 8	double tube	100 x 60 mm	Graepel + treads

## GANGWAYS FOR PASSENGER SHIPS NEN-EN 14206

**Complies with the latest ES-TRIN requirements: NEN-EN 14206.**

Special model, particularly suitable for passenger ships.

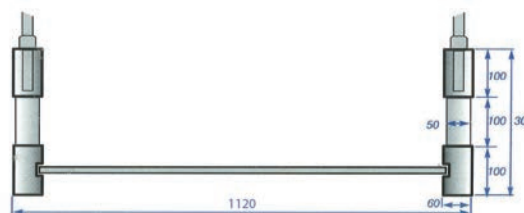
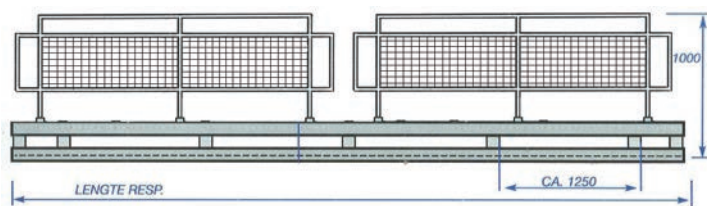
Also accessible for wheelchairs because the ant-slip slats are no wider than 30 cm.

Diamond plate walking surface and with U-section at one end for support and nylon wheels at the other end.

Complete with removable stainless steel railings fitted with fall-arrest nets on **both sides**.

**Complete with NEN-EN 14206 certificate.**

material : aluminium  
 height : 150 or 220 mm  
 width : 1120 mm, 900 mm between the rails  
 stanchion height : 1000 mm from the walking surface



ARTIKELNO	LENGTH	WEIGHT	NUMBER SCEPTERS	TUBE	DIMENSIONS TUBE
<b>58.30.200</b>	200 cm	38 kg	2 x 2	single tube	100 x 60 mm
<b>58.30.300</b>	300 cm	57 kg	2 x 3	single tube	100 x 60 mm
<b>58.30.400</b>	400 cm	76 kg	2 x 4	single tube	100 x 60 mm
<b>58.31.500</b>	500 cm	140 kg	2 x 4	single tube	160 x 60 mm
<b>58.31.600</b>	600 cm	168 kg	2 x 5	single tube	160 x 60 mm
<b>58.31.700</b>	700 cm	196 kg	2 x 6	single tube	160 x 60 mm
<b>58.31.800</b>	800 cm	224 kg	2 x 7	single tube	160 x 60 mm
<b>58.31.900</b>	900 cm	252 kg	2 x 8	single tube	160 x 60 mm

## HAWSER BASKET, ROUND

Robust aluminium model.  
Ideal for stowing hawsers and mooring cables.  
Prevents load residues on the deck after washing off.  
The dimensions between brackets ( ) are internal dimensions.



ARTIKELNO	TOP DIAMETER	LOWER DIAMETER	TOTAL HEIGHT	BIN HEIGHT	WEIGHT
<b>58.35.060</b>	60 (54) cm	41 (34) cm	52 cm	34 cm	3.5 kg
<b>58.35.080</b>	80 (74) cm	55 (51) cm	52 cm	34 cm	4.0 kg
<b>58.35.100</b>	100 (94) cm	80 (74) cm	52 cm	34 cm	4.7 kg
<b>58.35.125</b>	125 (121) cm	100 (94) cm	53 cm	34 cm	6.0 kg
<b>58.35.150</b>	150 (144) cm	125 (121) cm	53 cm	34 cm	7.0 kg
<b>58.35.180</b>	180 (174) cm	150 (144) cm	53 cm	34 cm	8.0 kg

## HAWSER BASKET, ROUND, CLASSIC

Robust aluminium model.  
Ideal for stowing hawsers and mooring cables.  
Prevents load residues on the deck after washing off.  
The dimensions between brackets ( ) are internal dimensions.



ARTIKELNO	TOP DIAMETER	LOWER DIAMETER
<b>58.35.206</b>	60 (54) cm	40 (34) cm
<b>58.35.208</b>	80 (74) cm	60 (54) cm
<b>58.35.210</b>	100 (94) cm	80 (74) cm
<b>58.35.212</b>	120 (117) cm	100 (94) cm
<b>58.35.215</b>	150 (144) cm	120 (116) cm

## HAWSER BASKET, OVAL

Robust aluminium model.  
Ideal for stowing hawsers and mooring cables.  
Prevents load residues on the deck after washing off.



ARTIKELNO	TOP DIAMETER	LOWER DIAMETER	TOTAL HEIGHT	BIN HEIGHT	WEIGHT
<b>58.35.512</b>	120 x 60 cm	93 x 41 cm	43 cm	34 cm	7.0 kg
<b>58.35.516</b>	160 x 80 cm	140 x 60 cm	43 cm	34 cm	7.2 kg
<b>58.35.520</b>	200 x 100 cm	180 x 80 cm	43 cm	34 cm	8.5 kg
<b>58.35.525</b>	250 x 125 cm	190 x 105 cm	43 cm	34 cm	9.6 kg
<b>58.35.530</b>	300 x 150 cm	270 x 125 cm	43 cm	34 cm	10.5 kg

## HAWSER BASKET, OVAL + INNER RING

Robust aluminium model.  
Ideal for stowing hawsers and mooring cables.  
Prevents load residues on the deck after washing off.  
Outside for steel wire, inside for rope, for example.



ARTIKELNO	TOP DIAMETER	LOWER DIAMETER	TOTAL HEIGHT	BIN HEIGHT	WEIGHT	INNER RING DIAMETER
<b>58.35.725</b>	250 x 120 cm	250 x 120 cm	49 cm	33 cm		220 x 95 cm

# HAWSER BASKETS



## HAWSER BASKET COVER, ROUND

Made of strong nylon/PVC fabric, closes completely at the top and sides, with elastic around the bottom edge.

ARTIKELNO	DIAMETER	COLOUR
<b>58.35.906</b>	60 cm	green
<b>58.35.907</b>	60 cm	blue
<b>58.35.908</b>	80 cm	green
<b>58.35.909</b>	80 cm	blue
<b>58.35.910</b>	100 cm	green
<b>58.35.911</b>	100 cm	blue
<b>58.35.925</b>	125 cm	green
<b>58.35.926</b>	125 cm	blue
<b>58.35.950</b>	150 cm	green
<b>58.35.951</b>	150 cm	blue



## HAWSER BASKET COVER, OVAL

Made of strong nylon/PVC fabric, closes completely at the top and sides, with elastic around the bottom edge.

ARTIKELNO	DIAMETER	COLOUR
<b>58.35.988</b>	120 x 60 cm	blue
<b>58.35.989</b>	120 x 60 cm	green
<b>58.35.990</b>	160 x 80 cm	blue
<b>58.35.992</b>	160 x 80 cm	green
<b>58.35.993</b>	200 x 100 cm	blue
<b>58.35.994</b>	200 x 100 cm	green
<b>58.35.995</b>	250 x 125 cm	blue
<b>58.35.996</b>	250 x 125 cm	green
<b>58.35.997</b>	300 x 150 cm	blue
<b>58.35.998</b>	300 x 150 cm	green





## STAINLESS STEEL ITEMS FOR COMMERCIAL SHIPPING

### Stainless steel items for commercial shipping

High quality products manufactured in the Netherlands from the best quality Type 316 stainless steel, guaranteeing quality. This is required so that safety can be guaranteed - for example, when using a rope guide (fairlead).

### Explanation of stainless steel material types

Type 304 (A2) stainless steel is the regular quality stainless steel.

This quality is often used indoors (in kitchens) and is less resistant to salt water and acids.

Type 316 (A4) stainless steel is the best quality stainless steel.

This quality is mainly used outdoors and is also called "stainless" steel.

Excellent resistance to salt water and acids.

### Processing and surface treatments

The welds of all items are acidified and ground smooth where necessary:

Mat : smooth finish and no further treatment

High-gloss : ground and high-gloss polished stainless steel

### Installation

We recommend having the stainless steel items installed by professionally qualified persons.

While being installed, the stainless steel items must be protected against welding spatter and damage..

## REGULATIONS GUARD RAIL FOR INLAND VESSELS

According to the latest requirements of the Shipping Inspectorate: ES-TRIN 2019

### ES-TRIN Article 14.02, paragraph 4 - Protection against falling

The outer edges of decks and side decks, as well as work stations where persons might fall more than 1 m, shall be fitted with bulwarks or coamings that are at least 0,90 m high or with a continuous guard rail in accordance with European Standard EN 711 : 2016. Where the shipside guard rails are retractable,

- a) a continuous handrail 0,02 to 0,04 m in diameter shall additionally be secured to the coaming at a height of 0,7 to 1,1 m; and
- b) signs in accordance with Annex 4, Figure 10, at least 15 cm in diameter, shall be affixed in clearly visible positions at the point where the side deck begins.

In order to take into account the corresponding transitional provisions and to ensure that the existing fleet is adapted, the following footnote has been added for Articles 32.02 and 33.02 in conjunction with Article 14.02 paragraph 4:

**However at the latest on renewal of the inland navigation vessel certificate after 1.1.2015, the craft must comply with the following requirements:**

- The outer edges of the decks, as well as work stations where persons might fall more than 1 m, shall be fitted with bulwarks or coamings that are at least 0,70 m height or with continuous guard rails in accordance with European Standard EN 711 : 1995, comprising a handrail, intermediate rail at knee height and foot rail.
- Side decks shall be fitted with a foot rail and continuous handrail that is secured to the coaming. Coaming handrails shall not be required where side decks are fitted with non-retractable shipside guard rails.

## GUARD RAIL FOR INLAND VESSELS

Slim elegant stanchions for plenty of space on deck.

Guard rail with two wires; one at 90 cm and a second one at 45 cm height.

Made of aluminum or stainless steel 316 high gloss.

Available in a fixed or flexible version, which reduces the risk of damage when mooring or in case of a collision.

Easy to replace after any damage, such as breakage.

The wires are also easy to exchange, because the wire ends can be fed through the holes in the scepter.

Stanchions with two feed-through holes of 12 mm, in the stainless steel version this is done with a special feed-through tube with rounded ends.

Material	: aluminum or stainless steel 316 high-gloss
Height wires	: 900 and 450 mm
Diameter stanchion	: aluminum : 30.0 x 5 mm
	: stainless steel 316 : 33.7 x 2 mm
Diameter wire	: 6/8 mm, 6mm, 6x19 galvanized steel and PVC transparent coating of 1 mm



# STAINLESS STEEL 316 GUARD RAIL FOR INLAND VESSELS

## GUARD RAIL FOR INLAND VESSELS, STANCHIONS



**SCALE:**  
20 items FK

ARTIKELNO	MOUNTING	MATERIAL	FINISH
59.01.111	fixed (welding pin included)	aluminium	mat
59.01.233	fixed (welding pin included)	stainless steel 316	high gloss
59.01.235	fixed (welding pin excluded)	stainless steel 316	high gloss
59.01.255	flexible (rubber), completely foldable (90°)	stainless steel 316	high gloss
59.01.266	flexible (cardan), limited foldable (10°)	stainless steel 316	high gloss



## GUARD RAIL FOR INLAND VESSELS, GUARD RAIL WIRE



**SCALE:**  
20 metres FK

ARTIKELNO	MATERIAL	DIAMETER OVERALL	DIAMETER STEEL WIRE	COMES AS/LENGTH	CONSTRUCTION
59.01.276	stainless steel 316	6 mm	6 mm	reel 1,000 m	7x19
59.01.286	galvanized steel / PVC coating transparent	8 mm	6 mm	reel 1,000 m	6x19 + 1pp
59.01.287	stainless steel 316 / PVC coating transparent	8 mm	6 mm	reel 1,000 m	7x19



## GUARD RAIL FOR INLAND VESSELS, MOUNTING SET



Excluding pressing of wire in the terminal.

2x turnbuckle M8 (fork / terminal), drill hole 6.5 mm (04.56.308)  
2x eye bolt M8, AFTER GRINDING the bolt is weldable (04.95.208)  
2x carabiner, 80 x 8 mm (05.01.608)  
2x drilling out guard rail terminal 5/6, 5 mm (98.59.01.295)

**SCALE:**  
20 items FK

ARTIKELNO	DESCRIPTION
59.01.295	Mounting set per guard rail wire stainless steel 316



## GUARD RAIL FOR INLAND VESSELS, HYDRAULIC PRESS SET

Manual hydraulic press set for pressing wire in the terminal.  
Custom-made press jaws.

ARTIKELNO	DESCRIPTION
59.01.300	Manual hydraulic press set





## RAILING GUIDE COAMING, TYPE 316 STAINLESS STEEL



When it isn't possible to install a railing on the outside of the gunwale. Simple but effective.

**SCALE:**  
20 items FK



ARTIKELNO	FOR DIAMETER WIRE	WIRE WIDTH (MM)	MATERIAL	FINISH
59.01.390	8 mm	10 mm	stainless steel 316	mat



## CLEAT, TYPE 316 STAINLESS STEEL



Ready to weld at your chosen location. Simple economical model and also available in a heavy-duty version. Ideal for attaching fenders in places where a bollard isn't suitable. For flag lines, etc.

**SCALE:**  
20 items FK

ARTIKELNO	LENGTH	THICKNESS	MODEL	MATERIAL	FINISH
59.02.132	300 mm	20 mm	simple	stainless steel 316	mat
59.02.221	200 mm	12 mm	heavy-duty	stainless steel 316	mat
59.02.233	250 mm	30 mm	heavy-duty	stainless steel 316	mat



## SMALL BOLLARD, LIGHT MODEL, TYPE 316 STAINLESS STEEL HIGH GLOSS



High gloss water sports model. In weldable version or with base plate and 4 holes. With solid and continuous pin.

**SCALE:**  
20 items FK



ARTIKELNO	HEIGHT	DIAMETER	THICKNESS PEN	WALL THICKNESS	VERSION	MATERIAL	FINISH
59.02.309	90 mm	50 mm	10 mm	2 mm	weldable	stainless steel 316 / stainless steel 304	high gloss
59.02.311	110 mm	60 mm	12 mm	2 mm	weldable	stainless steel 316 / stainless steel 304	high gloss
59.02.315	156 mm	80 mm	18 mm	2 mm	weldable	stainless steel 316 / stainless steel 304	high gloss
59.02.409	95 mm	50 mm	10 mm	2 mm	with base plate and 4 holes	stainless steel 316 / stainless steel 304	high gloss
59.02.412	120 mm	60 mm	12 mm	2 mm	with base plate and 4 holes	stainless steel 316 / stainless steel 304	high gloss
59.02.417	172 mm	80 mm	18 mm	2 mm	with base plate and 4 holes	stainless steel 316 / stainless steel 304	high gloss



## SMALL BOLLARD, HEAVY MODEL, TYPE 316 STAINLESS STEEL



Welding bollard for commercial shipping. Handy for hanging up fenders or guiding mooring rope. Fitted with a solid and continuous pin.

**SCALE:**  
20 items FK



ARTIKELNO	HEIGHT	DIAMETER	THICKNESS PEN	WALL THICKNESS	VERSION	MATERIAL	FINISH
59.02.614	150 mm	72 mm	20 mm	5.5 mm	weldable	stainless steel 316	mat
59.02.615	150 mm	72 mm	20 mm	5.5 mm	weldable	stainless steel 316	high gloss
59.02.619	200 mm	89 mm	25 mm	5.5 mm	weldable	stainless steel 316	mat
59.02.620	200 mm	89 mm	25 mm	5.5 mm	weldable	stainless steel 316	high gloss



## CLAMP, TYPE 316 STAINLESS STEEL



Convenient to use and, in high gloss, lovely to look at.  
Also a number of basic and simple models.  
Ready to be welded straight away.  
Solid, curved semicircle of 60 x 30 mm.

Total height : 120 mm  
Length : 130 mm  
Jaw opening : 60 mm

**SCALE:**  
20 items FK



ARTIKELNO	MATERIAL	FINISH
59.04.160	stainless steel 316	mat
59.04.161	stainless steel 316	high gloss

## ROPE GUIDE, TYPE 316 STAINLESS STEEL



Convenient to use and ready to be welded straight away.  
Manufactured from solid Type 316 stainless steel semicircular.  
Welded on steel welding plate with a thickness of 15 mm.

**SCALE:**  
20 items FK



ARTIKELNO	TYPE	HEIGHT	THROUGHPUT	THICKNESS	WELDING PLATE	MATERIAL	FINISH
59.04.260	semicircular	120 mm	60 x 170 mm	60 x 30 mm	330 x 80 x 15 mm	stainless steel 316	mat

## ROPE GUIDE FAIRLEAD, TYPE 316 STAINLESS STEEL HIGH GLOSS



Convenient to use and, in high gloss, lovely to look at.  
Also a number of basic and simple models.  
Ready to be welded straight away.  
Manufactured from Type 316 stainless steel, solid round or thick-walled pipe.  
In oblique or straight model.  
Welded on a steel base plate with a thickness of 15 mm.

**SCALE:**  
20 items FK



ARTIKELNO	TYPE	HEIGHT	THROUGHPUT	THICKNESS	WELDING PLATE	MATERIAL	FINISH
59.04.410	solid round (oblique)	160 mm	65 x 155 mm	60 mm	310 x 100 x 15 mm	stainless steel 316	high gloss
59.04.515	thick-walled pipe (straight)	264 mm	75 x 150 mm	114 x 9 mm	450 x 135 x 15 mm	stainless steel 316	high gloss
59.04.520	thick-walled pipe (oblique)	264 mm	75 x 150 mm	114 x 9 mm	450 x 135 x 15 mm	stainless steel 316	high gloss

## BAND BRAKE, TYPE 316 STAINLESS STEEL HIGH GLOSS

In high gloss, lovely to look at and easy to clean.  
Complete with spindle, deck support and fitted with high-quality brake lining.  
On request, manufactured to size.

ARTIKELNO	DIAMETER	MATERIAL	FINISH
59.04.950	500 mm	stainless steel 316	high gloss
59.04.960	600 mm	stainless steel 316	high gloss
59.04.970	700 mm	stainless steel 316	high gloss
59.04.975	750 mm	stainless steel 316	high gloss



## STAINLESS STEEL 316 ITEMS



### ROPE POT, ROPE DECK LEAD-THROUGH, TYPE 316 STAINLESS STEEL

%

With hinged lid, mandatory rotary toggle and a gasket for a watertight seal.  
Rope hook on bottom of lid.  
Top and bottom pipe fitted with 10 mm solid round for sliding the rope.  
Lid in high gloss.  
Weld mounting.

Height : 260 mm  
Wall thickness pipe : 8 mm

**SCALE:**  
20 items FK

ARTIKELNO	OUTSIDE DIA-METER	MATERIAL	FINISH
59.05.220	219 mm	stainless steel 316	mat with high gloss lid



### VENTILATION HOOD, TYPE 316 STAINLESS STEEL

%

Entirely in high gloss.  
Diameter adjustable by tightening the hood.  
Thanks to the rubber seal, the hood is also extremely splash-proof.  
Also fitted with mosquito screen.  
Weld mounting.

**SCALE:**  
20 items FK

ARTIKELNO	OUTSIDE DIA-METER	MATERIAL	FINISH
59.07.125	125 mm	stainless steel 316	high gloss
59.07.168	168 mm	stainless steel 316	high gloss

### WOODEN FENDER BRACKET, TYPE 316 STAINLESS STEEL

%

Set of two, for two wooden fenders.  
For weld mounting on the coaming.

Total height : 800mm  
Jaw opening : 200 mm  
Solid round : 25 mm

**SCALE:**  
20 items FK

ARTIKELNO	MATERIAL	FINISH
59.08.070	stainless steel 316	mat



### CHECKER PLATE STEP, TYPE 316 STAINLESS STEEL

%

For fore peak, aft peak or engine room.

**SCALE:**  
20 items FK

ARTIKELNO	DIMENSIONS (LXWXH)	THICKNESS	MATERIAL	FINISH
59.08.082	250 x 150 x 45 mm	4/5 mm	stainless steel 316	mat
59.08.084	400 x 150 x 45 mm	4/5 mm	stainless steel 316	mat

## CALIBRATION PLATE, TYPE 316 STAINLESS STEEL

With heavily engraved letters and numbers.  
For weld mounting on the existing calibration mark.

Dimensions : 300 x 40 mm  
Thickness : 5 mm  
Solid round : 25 mm

ARTIKELNO	MATERIAL	FINISH
59.08.134	stainless steel 316	mat

## HANDLE, TYPE 316 STAINLESS STEEL HIGH GLOSS

When getting on and off, fore peak, aft peak, engine room, etc.



Pipe diameter : 42.4 mm, 1.1/4"  
Wall thickness : 3 mm

### SCALE:

20 items FK

ARTIKELNO	DIMENSIONS	MATERIAL	FINISH
59.08.223	292.4 mm x 53.8 mm	stainless steel 316	high gloss
59.08.243	442.4 x 53.8 mm	stainless steel 316	high gloss



## GANGWAY SUPPORTS, TYPE 316 STAINLESS STEEL HIGH GLOSS

Set of two, for one gangway.  
Complete with two eyelets on the outside for lashing support.  
Top of pipe fitted with heavy rubber cap.  
With welding pin for mounting on the roof deck.  
Where relevant, several gangways on top of each other are possible.

Total height : 235 mm  
Width between : 635 mm  
Round tube : 33.7 x 2.5 mm

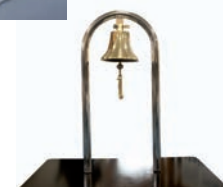
ARTIKELNO	MATERIAL	FINISH
59.08.266	stainless steel 316	high gloss



## STAND FOR SHIP'S BELL, TYPE 316 STAINLESS STEEL HIGH GLOSS

Superb stand for ship's bells.  
Solid and heavy, manufactured from 42.4 mm pipe with a wall thickness of 2.5 mm.  
Complete with welding pin and M16 bolt with round-head nut.  
Suitable for ship's bells with a diameter of up to 40 cm.

ARTIKELNO	DESCRIPTION	MATERIAL	FINISH
59.08.270	Stand for ship's bell single	stainless steel 316	high gloss
59.08.275	Stand for ship's bell double	stainless steel 316	high gloss



## STAINLESS STEEL 316 ITEMS



### ADN FRAME, TYPE 316 STAINLESS STEEL HIGH GLOSS

Suitable for two ADN signs of 65 cm.  
Complete with 16 stainless steel bolts with nut but without signs.  
Solid and heavy, manufactured from 42.4 mm pipe with a wall thickness of 2.5 mm.  
Fitted with 8 lips per sign as attachment and complete with welding pen.

Total height : 884 mm  
Total width : 1,420 mm  
Round tube : 33.7 x 2.5 mm

ARTIKELNO	MATERIAL	FINISH
59.08.292	stainless steel 316	high gloss



### BOAT SUPPORT, ALUMINIUM OR TYPE 316 STAINLESS STEEL

With flexible flat supports for good load capacity, so that the surface of your boat isn't damaged by the extra weight of the outboard motor.  
These surface supports can be mounted in several ways to accommodate many different boat types.

The surface supports are fitted with heavy yet flexible MacGregor rubber.

ARTIKELNO	VERSION	MATERIAL	FINISH
59.08.510	without wheels	aluminium	mat
59.08.535	with stainless steel 316 wheels with PU tread	aluminium / stainless steel 316	mat
59.08.550	with stainless steel 316 wheels with PU tread	stainless steel 316	mat



### SOS CABINET, TYPE 304 STAINLESS STEEL

Empty cabinet for mounting the activator for the engine room extinguishing system.  
**NOT TYPE 316 STAINLESS STEEL but TYPE 304!**

Door dimensions : hwxwd = 527.8 x 448.0 x 34.0 mm  
Cabinet dimensions : hwxwd = 495.5 x 380.0 x 226.0 mm  
Round tube : 33.7 x 2.5 mm

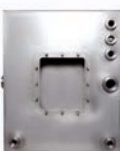


ARTIKELNO	DESCRIPTION	MATERIAL	FINISH
59.08.725	SOS cabinet steel with stainless steel 304 door	steel / stainless steel 304	mat
59.08.730	SOS cabinet stainless steel 304	stainless steel 304	mat



### EXPANSION TANK FOR COOLING WATER, TYPE 316 STAINLESS STEEL

Fitted with various connections and gauge glass.  
Complete with manhole and filler cap.  
With hanging brackets for easy attachment.  
Do NOT use with galvanised piping!



ARTIKELNO	DESCRIPTION	MATERIAL	FINISH
59.08.804	Expansion tank 40 liter	stainless steel 316	mat
59.08.805	Mounting strips (2 pieces)	stainless steel 316	mat

# Group 7

Personal protective equipment  
Workwear  
Footwear  
Tarpaulins  
Binoculars



# TARPAULINS



## BIG BAG

Big bag made of woven polypropylene with open top and flat bottom. Equipped with lifting loop at every corner.

ARTIKELNO	DESCRIPTION	COLOUR	DIMENSIONS (LXWXH)	SAFE WORKING LOAD
71.01.005	Big bag	white	90 x 90 x 110 cm	1,500 kg



## TARPAULIN LIGHTWEIGHT

For covering dry or dusty goods in the open air and to cover deck cargo on vessels.

materials : HDPE, high density polyethylene fabric, coated on both sides with LDPE (30 micron low density polyethylene)  
 construction : 10 x 10 strips per inch<sup>2</sup>  
 weight : approx. 100 gram per m<sup>2</sup>  
 finishing : eyes every other metre, seams welded and the edges stitched  
 dimensions : cut size, i.e. the remaining size, after seams and edges are made is smaller

ARTIKELNO	DIMENSIONS (CUT SIZE)
71.10.006	2 x 3 m
71.10.012	3 x 4 m
71.10.020	4 x 5 m
71.10.024	4 x 6 m
71.10.030	5 x 6 m
71.10.048	6 x 8 m
71.10.060	6 x 10 m
71.10.080	8 x 10 m
71.10.120	10 x 12 m
71.10.150	10 x 15 m



## TARPAULIN COVER

For covering your lubricating oil drums. Made from strong nylon/PVC cloth and with elastic at the bottom.

ARTIKELNO	DESCRIPTION	COLOUR	MATERIAL
71.24.055	tarpaulin cover 60 L drum	green (other colours on request)	nylon/PVC
71.24.060	tarpaulin cover 200 L drum	green (other colours on request)	nylon/PVC



## RUBBER BAND

ARTIKELNO	LENGTH	THICKNESS
71.25.020	20 cm	8 mm
71.25.025	25 cm	8 mm
71.25.040	40 cm	8 mm

## S-HOOK

ARTIKELNO	DIMENSIONS
<b>71.25.044</b>	40 x 4 mm
<b>71.25.066</b>	60 x 6 mm



## GROMMET AND PUNCH

ARTIKELNO	DESCRIPTION	TYPE	DIMENSIONS	NUMBER
<b>71.25.180</b>	grommet	10B	20 mm	100 items

ARTIKELNO	DESCRIPTION	TYPE	DIMENSIONS	NUMBER
<b>71.25.181</b>	stamp	10B	20 mm	
<b>71.25.182</b>	hollow punch	10B	20 mm	





## ADN BOX

**Minimal basic item for ADN vessels.  
Simple, good value for money.**

1x Large box with removable lid 40.03.210

### WITH CONTENTS:

1x Full face mask 73.43.144

**(To be used as escape set together with the following breathing filter)**

1x Breathing filter ABEK2-P3 73.45.632

**(To be used as escape set together with the mask specified above)**

1x Pair of safety glasses 73.21.050

1x Safety helmet 73.01.305

1x Chemical overall, size XL 74.00.467

1x Pair of gloves 35 cm, resistant to chemicals (nitril) 75.12.047

1x Pair of boots, steel toecap and sole, size 44 75.26.544

1x "A.D.N. safety equipment" sticker red/white 10.56.650

ARTIKELNO	DESCRIPTION
<b>73.00.350</b>	ADN box with content
<b>73.00.351</b>	Loose content ADN box



## SAFETY HELMET

Made from impact resistant polyethylene with polyethylene inner helmet.  
Meets the requirements of the Health and Safety Inspectorate.

Helmet shell material : high density polyethylene (HDPE)  
Interior : 6-point straps, with rotary knob  
Weight : 322 grams  
Standard : EN 397:2012+A1:2012  
: EN 50365:2002

### NB:

The lifespan of a helmet is very dependent on the material used. With **polyethylene** a lifetime of 5 years after production date is assumed.  
For transport and storage, assume a maximum of 2 years.  
For actual use assume a maximum of 3 years.



ARTIKELNO	COLOUR
73.01.305	yellow
73.01.307	orange
73.01.310	white
73.01.313	blue

## SAFETY HELMET, CLIP SET FOR GOGGLES

Two yellow plastic clips in which the head strap of goggles/wraparound safety glasses can be put.  
Fit virtually any safety helmet.  
Easy to fit.

ARTIKELNO	DESCRIPTION
73.01.390	Helmet clip set for goggles



## SAFETY HELMET, CHINSTRAP

ARTIKELNO	DESCRIPTION
73.01.395	Chinstrap for helmet



## SAFETY HELMET + GLASSES

The glasses are attached to the helmet and can be pushed up into the front of the helmet so that they are almost invisible.  
Meets the requirements of the Health and Safety Inspectorate.

Helmet shell material : polyamide  
Interior : 6-point woven straps, with rotary knob  
Weight : 410 grams  
Standard : EN 397 + A1:2013  
: EN 50365:2002  
Glasses material : clear polycarbonate  
Glasses weight : 65 grams  
Eye protection standard : 2-1.2 (OBX) 2 BKN 9 -EN 166 389 -B

### NB:

The lifespan of a helmet is very dependent on the material used. With **polyamide** a lifetime of 7 years after production date is assumed.  
For transport and storage, assume a maximum of 2 years.  
For actual use assume a maximum of 5 years.



ARTIKELNO	COLOUR
73.01.640	yellow
73.01.641	orange
73.01.642	blue
73.01.643	white

ARTIKELNO	COLOUR
73.01.651	Sweatband for safety helmet + glasses

## NOISE LEVELS, MEASURED IN DECIBELS

### decibels

10 - 20	Wristwatch
20 - 30	Rustling of leaves
30 - 40	Whispering
40 - 50	Quiet residential area.
50 - 60	Normal conversation
60 - 70	Radio at living room volume
70 - 80	Typewriter
80 - 90	Busy road
90 - 100	Circular saw
100 - 110	Drill
110 - 120	Live rock band
120 - 130	Jet engine
130 - 140	Pain limit

Extended exposure to a noise level over 80 decibels can result in damage to the hearing.

If the noise level gets above 80 decibels, the employer must provide hearing protection!

If the noise level gets above 90 decibels, the EMPLOYEE MUST wear hearing protection!

### What does SNR-value mean?

SNR is a single number rating system (Single Number Rating), according to the international standard ISO 4869. The tests are carried out by commercial laboratories that operate independently of the manufacturers.

The SNR-value is expressed in decibels (dBs) and is used as a guide for comparing the degree of sound-reducing capabilities of the different hearing protectors. The SNR-value is subtracted from the measured sound level to measure the degree of sound attenuation at the ear when wearing the hearing protector.



## EARPLUGS

Simple earplug for internal use.

Standard : EN 352-2

ARTIKELNO	DESCRIPTION	MODEL	SNR-VALUE	NUMBER PER BOX
<b>73.10.401</b>	3M E-A-R Classic	separate earplugs	28 dB(A)	250 pairs
<b>73.10.410</b>	Moldex Spark Plugs Soft	separate earplugs	35 dB(A)	200 pairs
<b>73.10.420</b>	Moldex Spark Plugs Cord	earplugs with cord	36 dB(A)	200 pairs



## EARPLUGS WITH FRAME

Earplugs for external use with frame for under the chin or behind the head.

Standard : EN 352-2

ARTIKELNO	DESCRIPTION	MODEL	SNR-VALUE	NUMBER PER BOX
<b>73.10.430</b>	Moldex Pura-Band	earplugs with frame	22 dB(A)	10

## HEARING PROTECTOR BASIC

Simple hearing protector.  
Height adjustable ear cups.

Standard : EN 352-1

ARTIKELNO	DESCRIPTION	TYPE	SNR-VALUE	MODEL	COLOUR	WEIGHT
73.12.205	Hearing protector	basic	23 dB(A)	headband	orange with black head frame	100 gr



## 3M PELTOR HEARING PROTECTION

Good hearing protection must provide sufficient defence, but first and foremost it must offer maximum comfort, so that it is actually worn in noisy conditions.

Soft unbreakable springy head frame with 2-point support system, the give is comfortable, no protruding pieces.  
Easy height adjustment, ear pads easy to replace.

Standard : EN 352-1:2002  
: EN 352-3:2002

### HEARING PROTECTOR, 3M PELTOR OPTIME I, H510A YELLOW

Versatile, quality hearing protector, light and comfortable, plenty of room for your ears, no sensation of isolation.  
Wide comfortable ear pads with soft foam filling.

ARTIKELNO	DESCRIPTION	TYPE	SNR-VALUE	MODEL	COLOUR	WEIGHT
73.16.030	3M Peltor Optime I	H510A	27 dB(A)	headband	yellow	180 gr



### HEARING PROTECTOR, 3M PELTOR OPTIME II, H520A GREEN

For years Peltor's best, used in airports and by government (olive drab), excellent damping, also at low frequencies. Skin-friendly layer on ear pads, with a layer of soft foam below it, and then a separate ring of liquid with a patented anti-leak system.

ARTIKELNO	DESCRIPTION	TYPE	SNR-VALUE	MODEL	COLOUR	WEIGHT
73.16.050	3M Peltor Optime II	H520A	31 dB(A)	headband	green	210 gr



### HEARING PROTECTOR, 3M PELTOR OPTIME III, H540A BLACK/RED

Significantly better damping than model H520A GREEN.  
Special differently shaped ear cups, also with a different wall thickness, separated by foam.  
Very uniform damping from high to low frequencies, nevertheless the human voice comes through well.  
Ear pads with soft foam layer and separate liquid ring.  
Noticeably more comfortable.

ARTIKELNO	DESCRIPTION	TYPE	SNR-VALUE	MODEL	COLOUR	WEIGHT
73.16.060	3M Peltor Optime III	H540A	35 dB(A)	headband	black/red	285 gr



# HEARING PROTECTION



## HEARING PROTECTOR HELMET MOUNTING, 3M PELTOR OPTIME I, H510P3E YELLOW

Versatile, quality hearing protector, light and comfortable, plenty of room for your ears, no sensation of isolation. Wide comfortable ear pads with soft foam filling.

ARTIKELNO	DESCRIPTION	TYPE	SNR-VALUE	MODEL	COLOUR	WEIGHT
73.16.130	3M Peltor Optime I	H510P3E	26 dB(A)	helmet mounting	yellow	205 gr



## HEARING PROTECTOR HELMET MOUNTING, 3M PELTOR OPTIME II, H520P3E GREEN

For years Peltor's best, used in airports and by government (olive drab), excellent damping, also at low frequencies. Skin-friendly layer on ear pads, with a layer of soft foam below it, and then a separate ring of liquid with a patented anti-leak system.

ARTIKELNO	DESCRIPTION	TYPE	SNR-VALUE	MODEL	COLOUR	WEIGHT
73.16.150	3M Peltor Optime II	H520P3E	30 dB(A)	helmet mounting	green	235 gr



## HEARING PROTECTOR HELMET MOUNTING, 3M PELTOR OPTIME III, H540P3E BLACK/RED

Significantly better damping than model H520P3E GREEN. Special differently shaped ear cups, also with a different wall thickness, separated by foam. Very uniform damping from high to low frequencies, nevertheless the human voice comes through well. Ear pads with soft foam layer and separate liquid ring. Noticeably more comfortable.

ARTIKELNO	DESCRIPTION	TYPE	SNR-VALUE	MODEL	COLOUR	WEIGHT
73.16.160	3M Peltor Optime III	H540P3E	34 dB(A)	helmet mounting	black/red	310 gr



## HEARING PROTECTOR, 3M PELTOR, HYGIENE SET

Interchangeable except with the HY54.

Comprises : 2 ear pads and 2 damping pads

ARTIKELNO	DESCRIPTION	TYPE	FOR COLOR	MATERIAL
73.16.953	3M Peltor Optime I hygiene set	HY51	yellow	foam layer
73.16.955	3M Peltor Optime II hygiene set	HY52	green	liquid ring and foam layer
73.16.956	3M Peltor Optime III hygiene set	HY54	black/red	liquid ring and foam layer



## HEARING PROTECTOR, 3M PELTOR, CLEAN COMFORT RING HY100

Improves comfort and hygiene in hot and cold workplaces all year round. Soft, easily replaceable cellulose comfort rings for once-only use. Hygienically packed in paper per pair.

ARTIKELNO	DESCRIPTION	TYPE
73.16.990	3M Peltor Optime clean comfort ring	HY100

## EYE PROTECTION

ADN article : 210 260, 1a  
 Workwear for every crew member : one pair of safety glasses.

## DUST GOGGLES

Simple goggles designed to offer effective protection against the impact of high speed and low energy particles, against liquid drops or splashes, coarse dust particles, gas and fine dust particles.  
 Can be worn over ordinary glasses.  
 Can be used in potentially explosive environments (ATEX).

Lens : clear acetate with anti-fogging and anti-scratch coating  
 Frame : clear flexible PVC with adjustable elastic strap  
 Standard : EN 166:2001  
 : EN 1149-1 / EN 1149-5 (ATEX)



ARTIKELNO	DESCRIPTION	TYPE
<b>73.20.155</b>	Dust goggles	ventilated
<b>73.20.156</b>	Dust goggles	closed

## DUST GOGGLES COMFORT

Comfortable safety goggles designed to provide effective protection against mechanical risks, chemicals, dust, liquid droplets and mist.  
 The goggles offer a wide field of view thanks to its wrap-around design.  
 Can be worn over ordinary glasses.

Lens : clear polycarbonate  
 Frame : vinyl with adjustable elastic strap  
 Standard : EN 166:2001  
 : EN 172:1994 / A1:2000 / A2:2001  
 : EN 170:2002



ARTIKELNO	DESCRIPTION	TYPE
<b>73.20.179</b>	Dust goggles comfort	ventilated
<b>73.20.180</b>	Dust goggles comfort	closed



## SAFETY GLASSES VISITORS VISITEX

Simple safety glasses, integral frame and lens.  
Can be worn over ordinary glasses.

Lens : clear polycarbonate  
Frame : clear polycarbonate  
Standard : EN 166:2001

ARTIKELNO	DESCRIPTION	TYPE
73.21.050	Safety glasses visitors visitex	clear lens



## SAFETY GLASSES 569

Modern wraparound safety glasses which are adjustable in length.

Lens : clear polycarbonate with anti-scratch coating  
Frame : blue polyamide  
Standard : EN 166:2001  
: EN 170:2002

ARTIKELNO	DESCRIPTION	TYPE
73.21.060	Safety glasses 569	clear lens



## SAFETY GLASSES 595

Modern wraparound safety glasses which are adjustable in length and height.

Lens : clear or dark gray polycarbonate with anti-scratch coating  
Frame : black polyamide  
Standard : EN 166:2001  
: EN 170:2002



ARTIKELNO	DESCRIPTION	TYPE
73.21.075	Safety glasses 595	clear lens
73.21.076	Safety glasses 595	dark grey lens



## SAFETY SUNGLASSES 3M

Modern 3M safety sunglasses with which also can be worn together with a helmet or hearing protection.  
Lightweight model.

Lens : dark gray polycarbonate with anti-scratch coating  
Frame : black plastic  
Standard : EN 166:2001

ARTIKELNO	DESCRIPTION	TYPE
73.22.055	Safety sunglasses 3M	dark grey lens

## FACE SHIELD

Simple and sound model.  
Has a tip-up visor of 32 cm wide and 19 cm high and an adjustable head strap.  
Provides face protection during such activities as grinding, drilling and cleaning.

Visor : clear polycarbonate  
Standard : EN 166:2001

ARTIKELNO	DESCRIPTION
73.23.120	Face shield basic
73.23.122	Face shield basic with helmet attachment



## FACE SHIELD, LUXE

Handsome, robust and very luxurious.  
Has a tip-up visor of 30 cm wide and 18 cm high and an adjustable head strap.  
Provides comfortable face protection during such activities as grinding, drilling and cleaning.  
Also equipped with chin protection.

Visor : clear polycarbonate with anti-scratch coating  
Standard : EN 166:2001

ARTIKELNO	DESCRIPTION
73.23.140	Face shield luxury + chin protection
73.23.142	Face shield luxury + chin protection with helmet attachment



## EYE FLUSHING BOTTLE

Eye washing is vital if an accident occurs whereby hazardous substances, wood or metal shavings, dust or any other contaminant gets into the eye.  
The sooner the eye is rinsed with a sodium chloride solution in case of dust, wood or metal shavings, the lower the risk of serious damage.  
Damage caused by acids and caustic solutions should be rinsed as quickly as possible with a pH neutral solution.  
Eye wash bottles are handy and can be used anywhere.

ARTIKELNO	DESCRIPTION	CAPACITY
73.28.505	Eye flushing bottle	500 ml
73.28.507	Eye flushing bottle pH neutral	250 ml
73.28.525	Wall holder for eye flushing bottle	500 ml





## EYEWASH, TAP MOUNTING

Easy to install in existing situations such as washbasin and sink.  
Comes with conversion kit for normal use.  
2 heads with caps.

ARTIKELNO	DESCRIPTION
73.28.711	Eyewash, tap mounting



## EMERGENCY SHOWER, COMPLETE

Complete emergency shower with eyewash for floor mounting and/or wall mounting.  
Body shower and eye wash can be used simultaneously or separately.  
Stainless steel eyewash bowl is not included, but is available separately.

Water connection	: 3/4 "internal thread
Shower head	: 1/2 "internal thread (spray angle 60° and gives rotation to the water)
Eyewash	: 1/2 "internal thread
Minimum water pressure	: 2.0 bar
Body shower	: 60 litres per minute
Eyewash	: 12 litres per minute
Floor mounting plate	: 100x100 mm, holes center to center 70 mm 4xø10 mm
Standard	: CE EN 15154 & ANSI Z 358.1

ARTIKELNO	DESCRIPTION	MATERIAL
73.28.944	Emergency shower, complete	galvanized steel
73.28.990	Eyewash bowl	stainless steel



## EMERGENCY SHOWER, SEPARATE SHOWER HEAD

ARTIKELNO	DESCRIPTION	MATERIAL	INTERNAL THREAD	LITRE	BAR	DIAMETER
73.28.755	Shower head eyewash	aluminium	3/4"	27 L	1.0 bar	35 mm
73.28.758	Shower head body shower	delrin	1/2"	60 L	2.0 bar	30 mm
73.28.760	Shower head body shower	delrin	1"	80 L	2.0 bar	50 mm
73.28.775	Shower head body shower	brass	1"	43 L	5.0 bar	110 mm



## BREATHING PROTECTION

The lifespan of a filter depends, among other things, on the concentration of the contamination and breathing intensity. A change in the smell and/or taste or increasing resistance to breathing indicates the filter needs replacing. Make sure there is always enough oxygen in the ambient air.

### AT LEAST 21.9% OXYGEN!

#### FILTER CLASSIFICATION according to DIN 3181, part 1 and EN-141 (gases), part 2 (fine dust)

0.1 volume % = 1000 ppm (parts per million)

+ Only for unopened factory packaging.

Even if they are unused and well-sealed, opened filters cannot be kept for over 6 months.

Used filters are not suitable for another gas.

filter type class (shelf life)	filter colour code	maximum concentration	protects against
AX (5 years+)	brown		Organic gasses, vapours and solvents with boiling point under 65°C (and over 65°C).
A1	brown	0.1 vol. %	Organic gasses, vapours and solvents with a boiling point over 65 °C. (Gas oil, petrol, paint fumes).
A2	brown	0.5 vol. %	
A3 (5 years+)	brown	1.0 vol. %	
B1	grey	0.1 vol. %	Inorganic gases and vapours, such as chlorine, sulphur, prussic acid etc.
B2	grey	0.5 vol. %	
B3 (4 years+)	grey	1.0 vol. %	
E1	yellow	0.1 vol. %	Sulphur dioxide, hydrochloric acid.
E2	yellow	0.5 vol. %	
E3 (3 years+)	yellow	1.0 vol. %	
K1	green	0.1 vol. %	Ammonia.
K2	green	0.5 vol. %	
K3 (3 years+)	green	1.0 vol. %	
P1 (unlimited)	white		Less harmful (inert) suspended fine dust with a MAC value over 10 mg/m <sup>3</sup> (Maximum Allowable Concentration).
P2 (unlimited)	white		Harmful fine dust with a MAC value under 0.1 to 10 mg/m <sup>3</sup> .
P3 (unlimited)	white		Toxic fine dust with a MAC value under 0.1 mg/m <sup>3</sup> , such as asbestos, carcinogens, spores, bacteria.

#### THE FOLLOWING FILTERS ARE RARELY USED, BUT CAN BE SUPPLIED

Hg	red	Mercury gases, 3 years+.
NO	blue	Nitrous gases, also nitrogen monoxide, 4 years+.
CO	black	Carbon monoxide.
Reactor SX	orange	Reactor filter, radioactive iodine, iodomethane, dichloromethane.

## FINE DUST MASK CE

Simple but effective dust mask for protecting mouth and nose.  
2 head straps, a metal nose piece and a foam rubber protective nose strip.

Standard : EN 149:2001



ARTIKELNO	TYPE	DESCRIPTION	COMES IN
<b>73.30.530</b>	P1	without exhalation valve	box of 20
<b>73.30.531</b>	P1	with exhalation valve	box of 12
<b>73.30.540</b>	P2	with exhalation valve	box of 12
<b>73.30.550</b>	P3	with exhalation valve	box of 5



## FINE DUST MASK CE, FOLDS BACK

Simple but effective dust mask for protecting mouth and nose.  
2 head straps, a metal nose piece and a foam rubber protective nose strip

Standard : EN 149:2001



ARTIKELNO	TYPE	DESCRIPTION	COMES IN
<b>73.30.630</b>	P1	without exhalation valve	box of 20
<b>73.30.631</b>	P1	with exhalation valve	box of 12
<b>73.30.640</b>	P2	with exhalation valve	box of 12
<b>73.30.650</b>	P3	with exhalation valve	box of 12



## HALF FACE MASK, SILICONE RUBBER

Mask made from silicone rubber for comfort.  
Has 2 outlet valves, simple to maintain and can be used with standard threaded filters (maximum 300 gram).

Colour : red with black  
Standard : EN 148-1 (threaded connection)

ARTIKELNO	DESCRIPTION
<b>73.40.765</b>	Half face mask, silicone rubber

## FULL FACE MASK

ADN article : 210 260, 1a

Workwear for every crew member:

A full face mask with a suitable breathing filter for the substance to be transported (an ABEK2-P3 filter is suitable for the majority of all hazardous substances). If necessary comes with special mask glasses if the user wears glasses.

## FULL FACE MASK, NATURAL / SYNTHETIC RUBBER

Simple but good mask with excellent fit due to a membrane of natural rubber.  
Mouth and nose piece made from synthetic rubber.  
Panoramic clear polycarbonate visor with anti-fogging and anti-scratch coating.  
Equipped with 5-point head strap.  
Can be used in potentially explosive environments (ATEX).

Weight : 580 gram  
Colour : orange with black  
Standard : EN 136:1998  
: EN 148-1 (threaded connection)

ARTIKELNO	DESCRIPTION
73.43.144	Full face mask, natural / synthetic rubber



## FULL FACE MASK, SYNTHETIC / SILICONE RUBBER

This mask is very comfortable because the seal against the face is a double synthetic rubber membrane.  
Mouth and nose piece made from skin-friendly silicone rubber.  
Generous clear polycarbonate visor with anti-scratch coating.  
Designed to prevent visor fogging by controlling the air flow in the mask, without perishable coating.  
Equipped with 6-point head strap.

Weight : 520 gram  
Colour : black  
Standard : EN 136:1998  
: EN 148-1 (threaded connection)  
: EN 166:2001

ARTIKELNO	DESCRIPTION
73.43.212	Full face mask, synthetic / silicone rubber



## BREATHING FILTERS

Dangerous if the ambient air contains under 20.9% oxygen.

If possible always use a filter that protects against the expected hazardous substance because this specific filter has a much longer lifetime. If there is uncertainty about the hazardous substance, use an ABEK2-P3 filter, but this has a substantially shorter lifetime - up to 70% less!

### NB!

Once a filter has been used for one type of gas or vapour, even if the filter is not yet saturated, afterwards the filter concerned may only be used for the same type of gas or vapour.

Take no risks, fit a new breathing filter!

Standard : EN 148-1 (threaded connection)  
: EN 14387:2004+A1:2008 (filter)



ARTIKELNO	TYPE	WEIGHT
73.45.020	AX	214 g
73.45.071	A2	266 g
73.45.429	K2	344 g
73.45.632	ABEK2-P3	429 g



## ESCAPE MASK

Simple but effective escape mask complete with PVC hood and flexible clear PVC visor. Includes mask with exhalation valve and 2 ABEK1-P3 filters

Colour : orange  
Standard : EN 140:1998

ARTIKELNO	DESCRIPTION
73.47.130	Escape mask complete

ARTIKELNO	DESCRIPTION
73.47.195	Spare filter (ABEK1-P3)

## FALL PROTECTION

ADN article : 210 260, 1d

Two safety lines.

A line of at least 30 metres with harness.

When entering a hold, **a total of 4 people are needed:**

- 1 person in the hold
- 1 person on watcoutside the hold
- 2 people on deck within earshot so that if there are problems, they can hoist the man out the hold by hand.

Manilla rope, see article: 01.40.020

## HARNESS, BASIC

Intended to haul up people in emergencies in an upright position quickly and safely from a depth.

Completely adjustable harness with leg straps and hoisting eye on the back.

Made from 45 mm wide synthetic tape, fasteners enable rapid securing of different body sizes and shapes.

All closures are at the front, so there is no need to reach behind.

With certificate.

Standard : EN 361:2002

ARTIKELNO	DESCRIPTION
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73.90.220	Harness
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## HARNESS, ATEX ZONE 1

Similar to the basic harness, but slightly more luxurious.

Intended to haul up people in emergencies in an upright position quickly and safely from a depth.

Completely adjustable harness with leg straps and hoisting eye on the back.

Made from 45 mm wide synthetic tape, fasteners enable rapid securing of different body sizes and shapes.

All closures are at the front, so there is no need to reach behind.

With certificate.

Standard : EN 361:2002  
: ATEX ZONE 1

ARTIKELNO	DESCRIPTION
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73.90.229	Harness ATEX. zone 1
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## CARABINER WITH SAFETY CLOSURE

Carabiner with safety closure (**non-ATEX**).

Material : chromed steel

Opening : 25 mm

ARTIKELNO	DESCRIPTION
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73.90.910	Carabiner with safety closure
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## KNEE PROTECTORS, IDEAAAL

Ergonomic round design with elastic strap.

ARTIKELNO	DESCRIPTION	COLOUR	MATERIAL
75.01.317	Ideaal knee protectors	black	PUR (CFC-free)



## KNEE PROTECTORS, HARMONICA

100% rubber knee protector with 4 folds and exchangeable pad.

ARTIKELNO	DESCRIPTION	COLOUR	MATERIAL
75.01.325	Harmonica knee protectors	black	rubber



## KNEE CUSHIONS, JOLLY

With excellent pressure distribution, no point loads.

The Jolly knee cushion is made of polyurethane foam, a high quality plastic that encloses millions of tiny air bubbles.

This extremely soft and flexible material ensures optimum relief of the knees.

The Jolly knee cushion is a practical tool for all activities.

ARTIKELNO	DESCRIPTION	COLOUR	MATERIAL	DIMENSIONS
75.01.354	Jolly knee cushions	red	polyurethane foam	37 x 25 cm

## GLOVES LEATHER, SPECIAL

Boxes with 100 or 120 pairs.

%

### SCALE:

1 box SH  
5 boxes SF



ARTIKELNO	MATERIAL	NUMBER PER PACKAGE	QUALITY	FINISHING AT WRIST	VERSION	SIZE	EN CLASS
75.08.543	Thick cow	100	A	gauntlet	driving, flannel lining	men 11	EN 388 (2132) - EN 511 (01)
75.09.155	Thin cow	120	C	gauntlet	cable mitt	men 10	EN 388 (2133)
75.09.165	Thick cow	100	A	gauntlet	cable mitt	men 10	-
75.09.175	Thick cow	100	A	gauntlet + cuff	cable mitt	men 10	none

## GLOVES LEATHER, AMERICAN

Boxes with 72 or 120 pairs.

%

### SCALE:

1 box SH  
5 boxes SF



ARTIKELNO	MATERIAL	NUMBER PER PACKAGE	QUALITY	FINISHING AT WRIST	VERSION	SIZE	EN CLASS
75.10.435	Thin cow	120	C	gauntlet		men 10	EN 388
75.10.735	Furniture leather	72	A	gauntlet		men 11	EN 388 (2121)
75.10.955	Thin cow	72	A	gauntlet		men 10	EN 388 (2133)
75.11.254	Thick cow	120	B	gauntlet		women 08	EN 388 (2133)
75.11.345	Thick cow	120	A	gauntlet	reinforced palm	men 10	EN 388 (2133)
75.11.365	Thick cow	120	A	gauntlet	reinforced palm + thumb	men 10	EN 388 (2133)
75.11.385	Thick cow	120	A	gauntlet	reinforced pistol	men 10	EN 388 (2133)
75.11.444	Thick cow	120	A	gauntlet	extra supple	men 11	EN 388 (2133)
75.11.464	Thick cow	120	A	gauntlet	fluorescent yellow	men 11	EN 388 (2133)

# HAND PROTECTION

## GLOVES, WATERPROOF



Boxes with 60, 144 or 1000 pairs.

**SCALE:**

1 box SH  
5 boxes SF



ARTIKELNO	MATERIAL	NUMBER PER PACKAGE	QUALITY	FINISHING AT WRIST	VERSION	SIZE	EN CLASS
75.12.014	Latex	1,000 (100 per box)	thin	cuff	powdered	women S	EN 455
75.12.015	Latex	1,000 (100 per box)	thin	cuff	powdered	women M	EN 455
75.12.016	Latex	1,000 (100 per box)	thin	cuff	powdered	men L	EN 455
75.12.017	Latex	1,000 (100 per box)	thin	cuff	powdered	men XL	EN 455

ARTIKELNO	MATERIAL	NUMBER PER PACKAGE	QUALITY	FINISHING AT WRIST	VERSION	SIZE	EN CLASS
75.12.047	Nitril	144	thin	gauntlet 35cm	chemical resistant	men 10	EN 388 (4101) - EN 374
75.12.355	Nitril	144	C	gauntlet	ventilated back	men 10	EN 388 (4111)
75.12.554	Nitril	144	B	gauntlet	ventilated back	women 08	EN 388 (4X22B)
75.12.555	Nitril	144	B	gauntlet	ventilated back	men 10	EN 388 (4X22B)
75.12.556	Nitril	144	B	gauntlet	closed back	men 10	EN 388 (4X22B)
75.13.389	PVC	60	A	gauntlet 40 cm	fully coated	men 10	EN 388 (4111)

## GLOVES, WINTER



Boxes with 60 pairs.

**SCALE:**

1 box SH  
5 boxes SF



ARTIKELNO	MATERIAL	NUMBER PER PACKAGE	QUALITY	FINISHING AT WRIST	VERSION	SIZE	EN CLASS
75.16.345	Furniture leather	60	B	gauntlet		men 10	EN 388 (3123)
75.16.565	Thin cow	60	A	gauntlet		men 10	EN 388 (3111)
75.18.564	PVC	60	A	gauntlet 12 cm	closed back	women 09	EN 388 - EN 374 - EN 511
75.18.565	PVC	60	A	gauntlet 12 cm	closed back	men 11	EN 388 - EN 374 - EN 511



## GLOVES, OTHER

Boxes with 120 or 144 pairs.

%

### SCALE:

1 box SH  
5 boxes SF

ARTIKELNO	MATERIAL	NUMBER PER PACKAGE	QUALITY	FINISHING AT WRIST	VERSION	SIZE	EN CLASS
<b>75.19.053</b>	Cotton	120	B	cuff	dots	men 10	-
<b>75.19.607</b>	Nitriflex	144	A	cuff	foam	ladies S	EN 388 (4131) - EN 407
<b>75.19.608</b>	Nitriflex	144	A	cuff	foam	ladies M	EN 388 (4131) - EN 407
<b>75.19.609</b>	Nitriflex	144	A	cuff	foam	men L	EN 388 (4131) - EN 407
<b>75.19.610</b>	Nitriflex	144	A	cuff	foam	men XL	EN 388 (4131) - EN 407
<b>75.19.611</b>	Nitriflex	144	A	cuff	foam	men 2XL	EN 388 (4131) - EN 407





## SWEDISH SLIPPER

Well finished step-in slipper.

Material upper : leather  
Material sole : rubber

ARTIKELNO	SIZE	COLOUR
75.20.839	39	black
75.20.840	40	black
75.20.841	41	black
75.20.842	42	black
75.20.843	43	black
75.20.844	44	black
75.20.845	45	black
75.20.846	46	black
75.20.847	47	black
75.20.848	48	black



## JOLLY FASHION, CLOSED BACK, BLUE

Lightweight clog with closed back and separate insole.

Material : polyurethane  
Material Insole : cork



ARTIKELNO	SIZE	COLOUR
75.23.135	35	blue
75.23.136	36	blue
75.23.137	37	blue
75.23.138	38	blue
75.23.139	39	blue
75.23.140	40	blue
75.23.141	41	blue
75.23.142	42	blue
75.23.143	43	blue
75.23.144	44	blue
75.23.145	45	blue
75.23.146	46	blue
75.23.147	47	blue



## JOLLY FASHION, CLOSED BACK, BROWN

Lightweight clog with closed back and separate insole.

Material : polyurethane  
Material Insole : cork



ARTIKELNO	SIZE	COLOUR
75.23.235	35	brown
75.23.236	36	brown
75.23.237	37	brown
75.23.238	38	brown
75.23.239	39	brown
75.23.240	40	brown
75.23.241	41	brown
75.23.242	42	brown
75.23.243	43	brown
75.23.244	44	brown
75.23.245	45	brown
75.23.246	46	brown
75.23.247	47	brown

**JOLLY CLOG, OPEN BACK, BLUE**

Lightweight clog with open back and separate insole.

Material : polyurethane  
Material Insole : cork

ARTIKELNO	SIZE	COLOUR
75.23.335	35	blue
75.23.336	36	blue
75.23.337	37	blue
75.23.338	38	blue
75.23.339	39	blue
75.23.340	40	blue
75.23.341	41	blue
75.23.342	42	blue
75.23.343	43	blue
75.23.344	44	blue
75.23.345	45	blue
75.23.346	46	blue
75.23.347	47	blue



**JOLLY, SEPARATE INSOLE**

Loose Insole for Jolly Fashion and Clog.

Material Insole : cork

ARTIKELNO	SIZE	COLOUR
75.23.435	35	checkered
75.23.436	36	checkered
75.23.437	37	checkered
75.23.438	38	checkered
75.23.439	39	checkered
75.23.440	40	checkered
75.23.441	41	checkered
75.23.442	42	checkered
75.23.443	43	checkered
75.23.444	44	checkered
75.23.445	45	checkered
75.23.446	46	checkered
75.23.447	47	checkered



## EUROPEAN SAFETY SHOE STANDARD, EN 20345

### S1

Shoes that are worn in dry conditions.

Requirements: closed heel, steel toecap, antistatic and energy absorbing heel.

### S2

Shoes that are worn in wet conditions.

Requirements: as for S1, but waterproof for at least 60 minutes.

### S3

Shoes that are worn in places where there is a risk of treading on sharp objects.

Requirements: as for S2, but with steel midsole or alternative.



## JOLLY ALPRO, STEEL TOECAP, S2

Lightweight clog with closed back and separate insole.

Material : polyurethane  
 Material Insole : cork  
 Safety toecap : steel  
 Standard : EN 20345:2011/ S2

ARTIKELNO	SIZE	COLOUR	SAFETY CATEGORY
75.23.738	38	blue	S2
75.23.739	39	blue	S2
75.23.740	40	blue	S2
75.23.741	41	blue	S2
75.23.742	42	blue	S2
75.23.743	43	blue	S2
75.23.744	44	blue	S2
75.23.745	45	blue	S2
75.23.746	46	blue	S2
75.23.747	47	blue	S2

## ROAD STARS LOAFER LIGHT, S2

Comfortable shoe to wear with wide sole.

Safety toecap : high-grade steel  
 Upper : prime choice leather  
 Inner lining : leather, easy breathing  
 Upper sole : polyurethane  
 Lower sole : technical polyurethane  
 Standard : EN 20345:2011/ S2



ARTIKELNO	SIZE	COLOUR	SAFETY CATEGORY
75.23.841	41	black	S2
75.23.842	42	black	S2
75.23.843	43	black	S2
75.23.844	44	black	S2
75.23.845	45	black	S2
75.23.846	46	black	S2
75.23.847	47	black	S2
75.23.848	48	black	S2
75.23.849	49	black	S2
75.23.850	50	black	S2

## ROAD STARS OFFSHORE BOOT LIGHT, S3

Attractive lined offshore boot.  
 Comfortable boot to wear with wide sole.

Safety toecap : high-grade steel  
 Upper : prime nubuck leather  
 Inner lining : Cambrelle  
 Upper sole : polyurethane  
 Lower sole : technical polyurethane  
 Standard : EN 20345:2011/ S3



ARTIKELNO	SIZE	COLOUR	SAFETY CATEGORY
75.24.038	38	black	S3
75.24.039	39	black	S3
75.24.040	40	black	S3
75.24.041	41	black	S3
75.24.042	42	black	S3
75.24.043	43	black	S3
75.24.044	44	black	S3
75.24.045	45	black	S3
75.24.046	46	black	S3
75.24.047	47	black	S3

# SAFETY SHOES



## BATA LOAFER ACT144 (CONCHO), S3

The ACT144 is a low loafer safety shoe made of full grain leather with a leather lining. The ACT144 safety shoe is ESD, has a steel toecap, FlexGuard® composite penetration resistant insert and falls within the S3 safety category.

The sole of this safety shoe is made of PU/PU material.

Double density PU shock absorbent sole, providing excellent grip and stability.

This safety shoe is resistant to hot and cold temperatures.

Available in two widths, W and XW.

<b>Width</b>	<b>: W, 37-49/XW, 38-49</b>
Characteristics	: antistatic, cold Insulation, ESD, energy absorption, fuel oil resistant outsole, heat Insulation, penetration resistant outsole, SRC, water resistant upper
Upper	: full grain leather
Inner lining	: leather
Inner sole	: non-woven inner sole
Insole	: Poliyou grey
Midsole	: PU black
Outsole	: PU grey
Model	: loafer, low
Safety toecap	: steel - impact resistance 200 J
Electrical properties	: ESD
Anti-perforation	: FlexGuard® synthetic midsole - penetration resistance 1100 N
Toecap	: no
Temperature	: hot, cold, normal
Safety standard	: CE EN ISO 20345:2011/S3 HI/CI/SRC/BS EN 61340-4-3:2002 Class 1, 2, 3
Features	: leather lining, Walkline® inside

ARTIKELNO	SIZE	WIDTH	COLOUR	SAFETY CATEGORY
75.25.937	37	W	black	S3
75.25.938	38	W	black	S3
75.25.939	39	W	black	S3
75.25.940	40	W	black	S3
75.25.941	41	W	black	S3
75.25.942	42	W	black	S3
75.25.943	43	W	black	S3
75.25.944	44	W	black	S3
75.25.945	45	W	black	S3
75.25.946	46	W	black	S3
75.25.947	47	W	black	S3
75.25.948	48	W	black	S3
75.25.949	49	W	black	S3
75.26.038	38	XW	black	S3
75.26.039	39	XW	black	S3
75.26.040	40	XW	black	S3
75.26.041	41	XW	black	S3
75.26.042	42	XW	black	S3
75.26.043	43	XW	black	S3
75.26.044	44	XW	black	S3
75.26.045	45	XW	black	S3
75.26.046	46	XW	black	S3
75.26.047	47	XW	black	S3
75.26.048	48	XW	black	S3
75.26.049	49	XW	black	S3

## BATA NOVA TRONIC BOA, S3

Nova offers increased performance and comfort to keep you energised all day long. The Nova has the latest Walkline® technology to push the boundaries of safety and comfort. High quality micro fibre materials and breathable fabrics are combined with a dynamic TPU Quattrotech and Walkline® 2.0 sole to create a shoe that is designed for safety, but looks ultra-stylish too. The Boa® lacing system makes tying your shoes easy. This system consists of a lace reel, a sturdy stainless steel lace and flexible lace guides, providing a consistent closure and even pressure distribution, which enhances blood circulation of the foot. The light and breathable materials make it easy to wear and keep you energised at work all-day long.



Characteristics	: antistatic, cold Insulation, ESD, energy absorption, fuel oil resistant outsole, heat Insulation, penetration resistant outsole, SRC, water resistant upper
Upper	: full grain leather, black
Inner lining	: Bata Cool Comfort® black textile
Inner sole	: non-woven inner sole
Insole	: Poliyou grey
Midsole	: PU black
Outsole	: TPU grey/orange
Model	: low
Safety toecap	: steel - impact resistance 200 J
Electrical properties	: ESD
Anti-perforation	: FlexGuard® synthetic midsole - penetration resistance 1100 N
Toecap	: PU
Closure	: Boa® lacing system
Temperature	: hot, cold, normal
Safety standard	: CE EN ISO 20345:2011/S3 HI/CI/SRC/BS EN 61340-4-3:2002 Class 1, 2, 3
Features	: Boa®, Bata Cool Comfort® lining, Walkline® inside

ARTIKELNO	SIZE	COLOUR	SAFETY CATEGORY
75.26.136	36	orange / black	S3
75.26.137	37	orange / black	S3
75.26.138	38	orange / black	S3
75.26.139	39	orange / black	S3
75.26.140	40	orange / black	S3
75.26.141	41	orange / black	S3
75.26.142	42	orange / black	S3
75.26.143	43	orange / black	S3
75.26.144	44	orange / black	S3
75.26.145	45	orange / black	S3
75.26.146	46	orange / black	S3
75.26.147	47	orange / black	S3
75.26.148	48	orange / black	S3



## KNEE BOOT

Attractive, sturdy boot made from extra supple and extremely good material anti-slip sole.

Material : PVC /Nitril  
 Upper : 20% Nitril (green)  
 Sole : 40% Nitril (beige)

ARTIKELNO	SIZE	COLOUR
75.26.736	36	green
75.26.737	37	green
75.26.738	38	green
75.26.739	39	green
75.26.740	40	green
75.26.741	41	green
75.26.742	42	green
75.26.743	43	green
75.26.744	44	green
75.26.745	45	green
75.26.746	46	green
75.26.747	47	green
75.26.748	48	green



## EUROPEAN SAFETY BOOT STANDARD, EN 20345

### S4

Boots made from one completely moulded or vulcanized shoe or boot.

Requirements: closed heel, steel toecap, oil resistant sole, antistatic, energy absorbing heel.

### S5

As for S4, but with steel midsole and studded sole.

## BATA WORKMASTER 2 SAFETY BOOT, S5

The Workmaster 2 is a black safety boot from Bata.

The Workmaster 2 is safety category S5, has a water resistant upper, TPU toecap and a PU/rubber sole.

Perfect for harsh working conditions.

Characteristics	: water resistant upper
Upper	: rubber, black
Inner lining	: polyester
Inner sole	: -
Insole	: EVA - textile
Midsole	: -
Outsole	: rubber - black
Model	: rubber boot
Safety toecap	: steel
Electrical properties	: no
Anti-perforation	: steel
Toecap	: no
Temperature	: cold, normal
Safety standard	: CE EN ISO 20345:2011/S5/SRA



ARTIKELNO	SIZE	COLOUR	SAFETY CATEGORY
75.26.538	38	black	S5
75.26.539	39	black	S5
75.26.540	40	black	S5
75.26.541	41	black	S5
75.26.542	42	black	S5
75.26.543	43	black	S5
75.26.544	44	black	S5
75.26.545	45	black	S5
75.26.546	46	black	S5



## SOCKS, BATA COOL-MS2

Especially for the summer.

The very latest technologies have been incorporated in this strong and moisture-regulating sock. For example SeaCell, a celluloid fibre with integrated algae that feed the feet with proteins, vitamins and carbohydrates.

Feet stay pleasantly cool and dry and optimum air circulation gives blisters little chance.

Super-soft and refreshing strong sock with a good fit.

Flannel sole gives extra protection and comfort.

Antibacterial fibres and vitalizing algae keep unpleasant smells away and keep feet fit.

Strengthened areas at the heel and toes for extra sustainability.

Composition: 24% polyamide, 20% Pro-Cool (polyester), 44% cotton, 10% SeaCellative (celluloid fibre), 1% Lycra (elastin), 1% Bekinox (metal fibre).

ARTIKELNO	SIZE	COLOUR
<b>75.29.735</b>	35 - 38	anthracite/grey
<b>75.29.739</b>	39 - 42	anthracite/grey
<b>75.29.743</b>	43 - 46	anthracite/grey
<b>75.29.747</b>	47 - 50	anthracite/grey



## SOCKS, BATA THERMO-MS3

Especially for the winter.

A warm, woollen sock with outstanding moisture regulation. The combination of pure wool and Pro-Cool mean that feet stay warm and dry under any circumstances.

Antibacterial fibres keep unpleasant smells away.

Air Flow ensures optimal air circulation.

Flannel areas on the ankle, Achilles heel and sole ensure extra comfort and protection.

Strengthened areas at the heels and toes for extra sustainability.

Composition: 75% Thermolite (polyester), 24% polyamide, 1% Lycra (elastin).

ARTIKELNO	SIZE	COLOUR
<b>75.29.835</b>	35 - 38	black/grey
<b>75.29.839</b>	39 - 42	black/grey
<b>75.29.843</b>	43 - 46	black/grey
<b>75.29.847</b>	47 - 50	black/grey

## GLOVES, FLEECE

ARTIKELNO	SIZE	COLOUR
75.30.505	M	dark blue
75.30.506	L	dark blue
75.30.507	XL	dark blue



## SCARF, FLEECE

ARTIKELNO	DIMENSIONS	COLOUR
75.30.522	150 x 25 cm	dark blue



## CAP, COMMANDO OR ROLL

ARTIKELNO	COLOUR
75.30.526	dark blue



## CAP, FLEECE

Made from fleece, lined with Thinsulate.

ARTIKELNO	COLOUR
75.30.536	dark blue





## CAP, HELMET

Winter cap to wear under a safety helmet.  
Equipped with velcro closure and flannel lining.  
100% cotton (flame retardant treated).

ARTIKELNO	COLOUR
75.30.572	dark blue/red



## CAP, WINTER

With ear flaps, fur lined.

ARTIKELNO	SIZE	HEAD SIZE	COLOUR
75.30.605	M / L	57 / 58 cm	dark blue
75.30.607	XL / XXL	59 / 61 cm	dark blue



## CAP, BIVOUAC

Made from acryl.

ARTIKELNO	COLOUR
75.30.676	dark blue

## PILOT JACKET BASIC

Very affordable jacket, sturdy and beautifully made with a luxurious look.

- Material : made of very strong Polyester  
 Lining : fixed quilted lining with padding  
 Design : waterproof fabric with taped seams  
 : fixed sleeves  
 : plastic zipper  
 : edge on the bottom and cuffs  
 : fleece lined collar  
 : inside pocket, 2 side pockets, phone pocket and pen pocket



ARTIKELNO	SIZE	COLOUR
75.37.148	S	dark blue
75.37.152	M	dark blue
75.37.156	L	dark blue
75.37.160	XL	dark blue
75.37.162	2XL	dark blue
75.37.164	3XL	dark blue

## PARKA BASIC

Affordable, but also attractive parka.  
 100% windproof and waterproof.

- Material : made from 100% polyester/PVC, 230 gr/m<sup>2</sup>  
 Lining : stepped thermo filling  
 Design : hood attached with a zip  
 : double closure with zip and press studs  
 : drawstring waist  
 : 2 chest pockets, 2 waist pockets and 1 inside pocket



ARTIKELNO	SIZE	COLOUR
75.37.504	S	dark blue
75.37.505	M	dark blue
75.37.506	L	dark blue
75.37.507	XL	dark blue
75.37.508	2XL	dark blue
75.37.509	3XL	dark blue



## SAFETY VEST

Is also called a traffic vest.

Material : mesh polyester  
Types of closure : velcro tape  
Standard : EN ISO 20471

ARTIKELNO	SIZE	COLOUR
<b>73.03.506</b>	M / L	fluorescent yellow
<b>73.03.507</b>	XL / XXL	fluorescent yellow
<b>73.03.516</b>	M / L	fluorescent orange
<b>73.03.517</b>	XL / XXL	fluorescent orange

**PROTECTIVE CLOTHING**

ADN article : 210 260, 1a

Workwear for every crew member:

Protective clothing (sometimes cotton overalls are sufficient, depending on the cargo).

**CHEMICAL OVERALLS, LIGHTWEIGHT**

Protection against liquid (spray and splashes) chemicals, NO splash and spray proof closures.  
Resistant to most mild chemicals, acids and bases.

Material : SMS (Spunbond Meltblown Spunbond) polypropylene  
Design : hood  
: zipper covered with flap  
: raglan sleeves  
: elasticated windcuff in sleeves and ankles  
Standard : EN ISO 13982-1 Type 5 (particle-tight clothing, design test method A / B)  
: EN ISO 13034 Type 6 (limited splash tight clothing, low level spray test)  
: EN ISO 13688:2013

ARTIKELNO	SIZE	COLOUR
74.00.464	S	white
74.00.465	M	white
74.00.466	L	white
74.00.467	XL	white
74.00.468	2XL	white

**CHEMICAL OVERALLS, WATERPROOF**

Heavy duty quality, intended for frequent use in industrial environments.  
Excellent resistance to acids, alkalis and liquid chemicals, poor to oil products.  
100% wind and waterproof.  
For excellent oil and petrol resistant overalls, see article number: 75.75.234 to 75.75.239.

Material : "CHEMTEX": double sided PVC coated polyester fabric, ± 360 g / m<sup>2</sup>  
Design : high frequency welded seams  
: fixed hood with velcro closure  
: zipper under double flap with velcro and press studs  
: raglan sleeves  
: unlined inside  
: elasticated windcuff in sleeves and ankles  
Standard : EN 14605:2005 + A1:2009 Type 3  
: EN 14605:2005 + A1:2009 Type 4  
: EN 343:2003 + A1:2007 Class 3-1  
: EN ISO 13688:2013

ARTIKELNO	SIZE	COLOUR
74.00.554	S	green
74.00.555	M	green
74.00.556	L	green
74.00.557	XL	green
74.00.558	2XL	green
74.00.559	3XL	green



## SIZES CONVERSION TABLE

Size	Size
M	48
L	50 / 52
XL	54 / 56
2XL	58 / 60
3XL	62 / 64

## OVERALLS, ZIPPER (RALLY), CHILDREN

Childrens overall equipped with zippers, type "rally overall".

Material	: 100% cotton, 300 g / m <sup>2</sup>
Design	: 2-way zip
	: press studs in sleeves and legs
	: elastic in the back / waist
	: 2 chest pockets with zip
	: 2 side pockets
	: 2 openings
	: back pocket and ruler pocket

ARTIKELNO	SIZE	COLOUR
75.47.098	98	cornflower blue
75.47.104	104	cornflower blue
75.47.116	116	cornflower blue
75.47.128	128	cornflower blue
75.47.140	140	cornflower blue
75.47.152	152	cornflower blue
75.47.164	164	cornflower blue
75.47.176	176 / 38	cornflower blue
75.48.098	98	red
75.48.104	104	red
75.48.116	116	red
75.48.128	128	red
75.48.140	140	red
75.48.152	152	red
75.48.164	164	red
75.48.176	176 / 38	red



## OVERALLS, AMERICAN DUNGAREES

American dungarees model.

Material	: 100% cotton, 300 g / m <sup>2</sup>
Design	: 1 large breast pocket with press stud fastening
	: 2 side pockets
	: 2 openings
	: back pocket and ruler pocket

ARTIKELNO	SIZE	COLOUR
75.53.046	46	dark blue
75.53.048	48	dark blue
75.53.050	50	dark blue
75.53.052	52	dark blue
75.53.054	54	dark blue
75.53.056	56	dark blue
75.53.058	58	dark blue
75.53.060	60	dark blue
75.53.062	62	dark blue
75.53.064	64	dark blue





**OVERALLS, KNEE PIECE FILLING**

Overall knee piece filling.



ARTIKELNO	COLOUR	THICKNESS	DIMENSIONS
75.56.009	black	1 cm	25 x 15 cm

**OVERALLS, BUTTON**

Overall with concealed button closure.

Material : 100% cotton, 300 g / m<sup>2</sup>  
 Design : concealed button closure  
 : press studs in sleeves and legs  
 : elastic in the back / waist  
 : 2 breast pockets with flaps  
 : 2 side pockets  
 : 2 openings  
 : back pocket and ruler pocket



ARTIKELNO	SIZE	COLOUR
75.56.044	44	dark blue
75.56.046	46	dark blue
75.56.048	48	dark blue
75.56.050	50	dark blue
75.56.052	52	dark blue
75.56.054	54	dark blue
75.56.056	56	dark blue
75.56.058	58	dark blue
75.56.060	60	dark blue
75.56.062	62	dark blue
75.56.064	64	dark blue
75.56.066	66	dark blue

**OVERALLS, PRESS STUD (OHS)**

Overall with concealed press stud fastening.  
 OHS (occupational health and safety) version.

Material : 100% cotton, 300 g / m<sup>2</sup>  
 Design : concealed press stud fastening  
 : press studs in sleeves and legs  
 : elastic in the back / waist  
 : 2 breast pockets with flaps  
 : 2 side pockets  
 : 2 openings  
 : back pocket and ruler pocket



ARTIKELNO	SIZE	COLOUR
75.57.044	44	dark blue
75.57.046	46	dark blue
75.57.048	48	dark blue
75.57.050	50	dark blue
75.57.052	52	dark blue
75.57.054	54	dark blue
75.57.056	56	dark blue
75.57.058	58	dark blue
75.57.060	60	dark blue
75.57.062	62	dark blue
75.57.064	64	dark blue
75.57.066	66	dark blue

# OVERALLS

## OVERALLS, ZIPPER (RALLY)

Overall equipped with zippers, type "rally overall".

- Material : 100% cotton, 300 g / m<sup>2</sup>
- Design : 2-way zip
- : press studs in sleeves and legs
- : elastic in the back / waist
- : 2 chest pockets with zip
- : 2 side pockets
- : 2 openings
- : back pocket and ruler pocket



ARTIKELNO	SIZE	COLOUR
75.58.146	46	cornflower blue
75.58.148	48	cornflower blue
75.58.150	50	cornflower blue
75.58.152	52	cornflower blue
75.58.154	54	cornflower blue
75.58.156	56	cornflower blue
75.58.158	58	cornflower blue
75.58.160	60	cornflower blue
75.58.162	62	cornflower blue
75.58.164	64	cornflower blue
75.58.166	66	cornflower blue
75.58.246	46	black
75.58.248	48	black
75.58.250	50	black
75.58.252	52	black
75.58.254	54	black
75.58.256	56	black
75.58.258	58	black
75.58.260	60	black
75.58.262	62	black
75.58.264	64	black
75.58.346	46	red
75.58.348	48	red
75.58.350	50	red
75.58.352	52	red
75.58.354	54	red
75.58.356	56	red
75.58.358	58	red
75.58.360	60	red
75.58.362	62	red
75.58.364	64	red
75.58.748	48	orange
75.58.750	50	orange
75.58.752	52	orange
75.58.754	54	orange
75.58.756	56	orange
75.58.758	58	orange
75.58.760	60	orange
75.58.762	62	orange
75.58.764	64	orange

**OVERALLS, FLAME RETARDANT**

Overall with concealed press stud fastening.  
Flame retardant due to Proban treatment.  
OHS (occupational health and safety) version.

Material	: 100% cotton, 370 g / m <sup>2</sup>
Design	: concealed press stud fastening : 2 breast pockets with flaps : 2 side pockets : 2 openings : 2 kneepad pockets
Standard	: <b>ISO 11611:2007-10 A1 Class 2</b> (protection during welding and related processes) : <b>ISO 11612:208 A1, B1, C1</b> (protection for employees exposed to heat)

ARTIKELNO	SIZE	COLOUR
75.63.046	46	dark blue
75.63.048	48	dark blue
75.63.050	50	dark blue
75.63.052	52	dark blue
75.63.054	54	dark blue
75.63.056	56	dark blue
75.63.058	58	dark blue
75.63.060	60	dark blue
75.63.062	62	dark blue
75.63.064	64	dark blue
75.63.066	66	dark blue

**OVERALLS, FLAME RETARDANT + ANTISTATIC**

Overall with concealed press stud fastening.  
Flame retardant due to Proban treatment and antistatic.  
OHS (occupational health and safety) version.

Material	: 60% cotton / 39% polyester / 1% antistatic, 370 g / m <sup>2</sup>
Design	: concealed press stud fastening : 2 breast pockets with flaps : 2 side pockets : 2 openings : 2 kneepad pockets
Standard	: <b>ISO 11611:2007-10 A1 Class 2</b> (protection during welding and related processes) : <b>ISO 11612:208 A1, B1, C1</b> (protection for employees exposed to heat) : <b>EN 1149-5</b> (protection against static electricity)

ARTIKELNO	SIZE	COLOUR
75.64.146	46	dark blue
75.64.148	48	dark blue
75.64.150	50	dark blue
75.64.152	52	dark blue
75.64.154	54	dark blue
75.64.156	56	dark blue
75.64.158	58	dark blue
75.64.160	60	dark blue
75.64.162	62	dark blue
75.64.164	64	dark blue
75.64.346	46	orange
75.64.348	48	orange
75.64.350	50	orange
75.64.352	52	orange
75.64.354	54	orange
75.64.356	56	orange
75.64.358	58	orange
75.64.360	60	orange
75.64.362	62	orange
75.64.364	64	orange





## RAIN SUIT, PVC/RAYON, YELLOW



Basic but well-made rain suit of PVC reinforced with rayon.  
Raincoat with double closure with zipper, press studs and fixed hood.  
Rainproof trousers with elastic at the waist.

**SCALE:**

30 items PH  
50 items PF

ARTIKELNO	SIZE	COLOUR
75.70.604	S	yellow
75.70.605	M	yellow
75.70.606	L	yellow
75.70.607	XL	yellow
75.70.608	2XL	yellow
75.70.609	3XL	yellow



## RAIN SUIT, PVC/POLYESTER, NAVY



Sturdy rain suit of 100% PVC reinforced with polyester, 170 g / m<sup>2</sup>.  
Raincoat with two front pockets with flaps, wind catchers on the sleeves, underarm ventilation, concealed hood in the collar and ventilated back panel.  
Rainproof trousers with elastic at the waist, press stud narrowing at the ankles, press stud fastening and two side slits.

**SCALE:**

30 items PH  
50 items PF

ARTIKELNO	SIZE	COLOUR
75.70.635	M	navy
75.70.636	L	navy
75.70.637	XL	navy
75.70.638	2XL	navy
75.70.639	3XL	navy

## RAINWEAR, STRETCH, WATERPROOF

Wearing rainwear is always very irritating when scrubbing (deck scrubbing), but this clothing will not hinder you at all. A really effective solution.

Safe: Your legs are not "locked up" when climbing up onto a bollard or hatch rim, and the hood turns with your head so there are no "dead corners".

Stretches up to 150% and goes back to the original shape again afterwards, never hinders movement.

### Water and windproof, yet breathing and moisture absorbing.

Very supple (also when extremely cold), light as a feather (up to approx. 50% lighter), noiseless, washes well and **PETROL AND OIL RESISTANT**.

Loose fitting clothing is dangerous, the comfort and elasticity let you choose the right size.

Very strong, very highly tear resistant and can also be repaired well.

## RAIN SUIT, PU STRETCH, NAVY

Beautiful rain suit with 100% PU stretch coating, 170 gr / m<sup>2</sup>.

Raincoat with double zip fastening and press stud flap, concealed hood in the collar, two reinforced front press stud pockets, press stud fastening at the sleeves and underarm ventilation.

Rainproof trousers with elastic at the waist and press stud narrowing at the ankles.

Washable up to +40 ° C.



### SCALE:

30 items      PH  
50 items      PF

ARTIKELNO	SIZE	COLOUR
75.70.664	S	navy
75.70.665	M	navy
75.70.666	L	navy
75.70.667	XL	navy
75.70.668	2XL	navy
75.70.669	3XL	navy

## RAINCOAT, STRETCH

Raincoat with a back length of 85 cm (size L), zip with flap and press studs, adjustable elastic sleeves with press studs, 2 inset front pockets with flaps, fixed hood, underarm ventilation, high-frequency welded seams.

ARTIKELNO	SIZE	COLOUR
75.74.014	S	dark blue
75.74.015	M	dark blue
75.74.016	L	dark blue
75.74.017	XL	dark blue
75.74.018	2XL	dark blue
75.74.019	3XL	dark blue





## RAINPROOF TROUSERS, STRETCH

Rainproof trousers with elastic waist, adjustable legs with press studs, double leg seam, high-frequency welded seams.

ARTIKELNO	SIZE	COLOUR
75.74.414	S	dark blue
75.74.415	M	dark blue
75.74.416	L	dark blue
75.74.417	XL	dark blue
75.74.418	2XL	dark blue
75.74.419	3XL	dark blue



## RAINPROOF TROUSERS – DUNGAREES, STRETCH

American overalls.

Back finished with facing, adjustable elastic shoulder straps, PVC buttons and buckles, adjustable legs with press studs, high-frequency welded seams.

ARTIKELNO	SIZE	COLOUR
75.74.514	S	dark blue
75.74.515	M	dark blue
75.74.516	L	dark blue
75.74.517	XL	dark blue
75.74.518	2XL	dark blue
75.74.519	3XL	dark blue



## WATERPROOF OVERALLS, STRETCH

Waterproof overalls for spray cleaning holds, lightweight and waterproof.

Fixed hood, zip with double storm flap and press studs, adjustable elastic sleeves with press studs, storm flaps in the sleeves, elastic at the waist, adjustable legs with press studs, high-frequency welded seams.

ARTIKELNO	SIZE	COLOUR
75.75.234	S	cornflower blue
75.75.235	M	cornflower blue
75.75.236	L	cornflower blue
75.75.237	XL	cornflower blue
75.75.238	2XL	cornflower blue
75.75.239	3XL	cornflower blue

## RAINWEAR, BREATHING, SIMPLY NO SWEAT

Elegant, breathing and waterproof clothing from SIMPLY NO SWEAT.

**Water resistance class 4**, highest class, at least 2 meters water column on fabric and seams.

**Breathability class 4**, highest class, Ret value must be less than 15.

**SIMPLY NO SWEAT has a Ret value of 4,10**, non-waterproof clothing has a Ret value of 3,9.

Standard : **EN 343 Class 4:4 Ret 4,10**

## RAINCOAT, BREATHING

SIMPLY NO SWEAT raincoat, back length 80 cm (size L).

Material : 100% polyester laminate, 210 g / m<sup>2</sup>  
 Design : zipper with flap and press studs  
 : adjustable elastic sleeves with press studs  
 : 2 front pockets with flap  
 : fixed hood  
 : mesh polyester lining  
 Standard : **EN 343 Class 4:4 Ret 4,10**

ARTIKELNO	SIZE	COLOUR
75.80.115	M	dark blue
75.80.116	L	dark blue
75.80.117	XL	dark blue
75.80.118	2XL	dark blue
75.80.119	3XL	dark blue



## RAINPROOF TROUSERS, BREATHING

SIMPLY NO SWEAT rainproof trousers.

Material : 100% polyester laminate, 210 g / m<sup>2</sup>  
 Design : elastic in the waist with drawstring  
 : adjustable legs with press studs  
 : mesh polyester lining  
 Standard : **EN 343 Class 4:4 Ret 4,10**

ARTIKELNO	SIZE	COLOUR
75.80.515	M	dark blue
75.80.516	L	dark blue
75.80.517	XL	dark blue
75.80.518	2XL	dark blue
75.80.519	3XL	dark blue



## WATERPROOF OVERALLS, BREATHING

SIMPLY NO SWEAT rainproof overalls with summer lining.



- Material : 100% polyester laminate, 210 g / m<sup>2</sup>  
 Design : smooth lining in legs  
 : chest pockets with flaps  
 : hood in collar  
 : side pockets with flap and velcro closure  
 : double ruler pocket  
 : leg pocket with flap  
 : legs adjustable with press stud fastening  
 : concealed zip with double storm flap and velcro closure  
 : extra reflection piping  
 : back pocket with flap and press studs  
 : elastic in the waist  
 : adjustable sleeves with velcro  
 : mesh polyester lining  
 Standard : **EN 343 Class 4:4 Ret 4,10**

ARTIKELNO	SIZE	COLOUR
75.81.304	S	dark blue
75.81.305	M	dark blue
75.81.306	L	dark blue
75.81.307	XL	dark blue
75.81.308	2XL	dark blue
75.81.309	3XL	dark blue

## WINTER OVERALLS WITH PERMANENT LINING, STRETCH

Fully lined winter overalls with matelasse in bicolour.



- Design : fixed quilted lining  
 : hood in collar  
 : zipper with double flap with velcro closure  
 : 2 breast pockets with flap and velcro closure  
 : 2 thigh pockets with flap and velcro closure  
 : elastic in the waist  
 : storm flaps in the sleeves  
 : zipper in the legs with extra flap  
 Standard : **EN 343 Class 3:1**

ARTIKELNO	SIZE	COLOUR
75.77.515	M	dark blue/cornflower blue
75.77.516	L	dark blue/cornflower blue
75.77.517	XL	dark blue/cornflower blue
75.77.518	2XL	dark blue/cornflower blue
75.77.519	M	dark blue/cornflower blue



## BINOCULAR 7X50 WA



Good prism binocular with centre focus adjustment.

The binocular comes with a tough carrying case with shoulder strap, lens protection caps, shoulder strap to attach the binocular and a lens cloth.

Porro / Roof prism	: Porro
Magnification	: 7x
Lens diameter	: 50 mm
Prism glass	: BK-7
Eyepieces diameter	: 20 mm
Lens coating	: multi-coated
Angle of view	: 7.5°
Field of view	: 122m/1000m
Eye relief	: 16 mm
In focus from	: 5 metres
Suitable for spectacle wearers	: suitable
Waterproof	: no
Weight	: 935 gr
Dimensions	: 193 x 180 x 62 mm
Body material	: rubber

### SCALE:

5 pieces	CK
10 pieces	CH

ARTIKELNO	DESCRIPTION
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77.02.215	Binocular 7x50 WA
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## BINOCULAR 7X50 FIXED FOCUS



Good binocular with automatic focussing.

The binocular comes with a tough carrying case with shoulder strap, lens protection caps, shoulder strap to attach the binocular and a lens cloth.

Porro / Roof prism	: Porro
Magnification	: 7x
Lens diameter	: 50 mm
Prism glass	: BK-7
Eyepieces diameter	: 20 mm
Lens coating	: fully coated
Angle of view	: 7°
Field of view	: 123m/1000m
Eye relief	: 17 mm
In focus from	: 4 metres
Suitable for spectacle wearers	: suitable
Waterproof	: no
Weight	: 740 gr
Dimensions	: 200 x 180 x 65 mm
Body material	: rubber

### SCALE:

5 pieces	CK
10 pieces	CH

ARTIKELNO	DESCRIPTION
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77.02.230	Binocular 7x50 fixed focus
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## BINOCULAR 7X50 FIXED FOCUS WITH GREEN COATING

%

Perfect thanks to automatic focussing.  
Once someone has used these, they will not want anything else.  
Double coated optics, extended rubber eyepiece edges.  
Comes with carrying case, strap and protective caps.  
Green coating gives much greater contrast in the twilight.

Porro / Roof prism : Porro  
Magnification : 7x  
Lens diameter : 50 mm  
Prism glass : BaK-4  
Lens coating : fully multi-coated  
Angle of view : 6.8°  
Suitable for spectacle wearers : suitable  
Body material : grey with black rubber

### SCALE:

5 pieces CK  
10 pieces CH

ARTIKELNO	DESCRIPTION
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77.02.239	Binocular 7x50 fixed focus with green coating (BRILLIANT)
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## BINOCULAR 7X50 WITH COMPASS AND WATERPROOF

%

This MacGyver binocular provides an extremely steady view and is fully waterproof.  
The binocular is filled with nitrogen so they are not susceptible to condensation on the inside of the lens.  
The binocular features a 360° electronically lit compass.  
The built in scale in the left-hand eyepiece means you can work out the distance to objects.  
This MacGyver binocular is robust and highly suitable for commercial shipping as well as for water sports.  
With Bak4 glass and the right coating, this binocular gives an extremely clear image and even in the dark you will see more with them than with the naked eye.  
The binocular comes with a tough carrying case with shoulder strap, lens protection caps, shoulder strap to attach the binocular and a lens cloth.

Porro / Roof prism : Porro  
Magnification : 7x  
Lens diameter : 50 mm  
Prism glass : BaK-4  
Eyepieces diameter : 23 mm  
Lens coating : fully multi-coated  
Angle of view : 7°  
Field of view : 122m/1000m  
Eye relief : 24 mm  
In focus from : 4 metres  
Suitable for spectacle wearers : suitable, diopter correction from -5 to +5  
Waterproof : yes  
Weight : 1058 gr  
Dimensions : 200 x 147 x 67 mm  
Body material : rubber

### SCALE:

5 pcs CK  
10 pcs CH

ARTIKELNO	DESCRIPTION
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77.02.300	Binocular 7x50 with compass and waterproof
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# Group 8

Valves and quick-release couplings  
Valves and hoses  
Flame arrestor grids  
Pressure and level switch/indicator  
Drinking water accessories





## NU-T-LINK, LINK V-BELT

**NU-T-LINK does best everywhere there are problems with ordinary V-belts.**

**Sizes A and B normally meet 85% of V-belt needs.**

Much longer lifetime in harmful environments.

Resistant to industrial chemicals, oils, wear, water and steam in a temperature range of -40 °C through +100 °C.

colour : orange  
 materials : high-grade polyurethane, polyester and stainless steel  
 comes as : roll of 5 metres with 1 key

### INSTRUCTIONS:

1. Pull the belt through the grooves of the V-belt pulley to determine the right length.
2. Remove one link in every 11 (9% pre-tensioning).
3. Join the ends of the belt to make it continuous.
4. Fit the belt around the pulleys and rotate slowly.



ARTIKELNO	TYPE	FOR GROOVE WIDTH	COMES IN	DESCRIPTION
81.06.510	Z	10 mm	5 m	(few sold)
81.06.513	A	13 mm	5 m	(many sold)
81.06.517	B	17 mm	5 m	(many sold)

ARTIKELNO	TYPE	FOR GROOVE WIDTH	COMES IN	DESCRIPTION
81.06.522	C	22 mm	5 m	(few sold)



## NU-T-LINK, KEY

For detaching and attaching NU-T-LINK belt links easily (any pair of pliers can also be used).

ARTIKELNO	DESCRIPTION
81.06.599	NU-T-LINK key



## BELT CONNECTOR

Made from steel.

packaging : box with 12 30 cm lengths incl. 6 30 cm lengths of nylon string

ARTIKELNO	SIZE	FOR BELT THICKNESS	SCREW WIDTH
81.10.102	No. 2	3.0 - 4.0 mm	1.2 mm
81.10.103	No. 3	4.0 - 5.0 mm	1.2 mm
81.10.104	No. 4	5.0 - 6.5 mm	1.4 mm
81.10.105	No. 5	6.5 - 8.0 mm	1.4 mm
81.10.106	No. 6	8.0 - 9.0 mm	1.4 mm

## BELT CONNECTOR, STRING

ARTIKELNO	THICKNESS	SIZE	LENGTH	MATERIAL
<b>81.10.420</b>	2.0 mm	No. 2/3	30 cm	Perlon
<b>81.10.425</b>	2.5 mm	No. 4	30 cm	Perlon
<b>81.10.430</b>	3.0 mm	No. 5	30 cm	Perlon
<b>81.10.440</b>	4.0 mm	No. 5/6	30 cm	Perlon



## BELT CONNECTION APPARATUS

For putting belt connectors in drive belts.  
Robustly made bench vice model (width 150 mm).

ARTIKELNO	DESCRIPTION
<b>81.10.712</b>	Belt connection apparatus



## DRIVE BELT, RUBBER/CANVAS

structure : 4 layer cotton

ARTIKELNO	THICKNESS	WIDTH
<b>81.12.030</b>	4.5 mm	30 mm
<b>81.12.040</b>	4.5 mm	40 mm
<b>81.12.050</b>	4.5 mm	50 mm



# ELECTRIC MOTORS



## DC ELECTRIC MOTORS IDEaal

motor sort	: brushless permanent magnet motor
type	: model B3
torque	: 1,9 Nm
speed	: 1400 rpm
shaft length	: 30 mm
amperage	: 100 W - 5.2 A
	: 150 W - 7.5 A
	: 200 W - 10.0 A
	: 250 W - 12.0 A
	: 300 W - 15.2 A

ARTIKELNO	VOLTAGE	WATT	HP	AMPERAGE	IP CLASS	SHAFT DIAMETER
<b>81.80.182</b>	24 V	300 W	0,4 hp	15,2 A	IP55	14 mm



## AC OR THREE PHASE ELECTRIC MOTORS

motor sort	: 230 volt, 1 phase induction motor with starting capacitor
	: 400 volt, 3 phase alternating current motor with short circuit terminal
class	: IP55 (other classes available)
type	: model B3 (other models available)
speed	: 1500 rpm

ARTIKELNO	VOLTAGE	WATT	HP	AMPERAGE	IP CLASS	SHAFT DIAMETER
<b>81.85.152</b>	230 V	250 W	0.33 hp	+/- 1.81 A	IP55	14 mm
<b>81.85.153</b>	230 V	375 W	0.50 hp	+/- 3.20 A	IP55	14 mm
<b>81.85.154</b>	230 V	550 W	0.75 hp	+/- 5.60 A	IP55	19 mm
<b>81.86.152</b>	400 V	250 W	0.33 hp	+/- 0.85 A	IP55	14 mm
<b>81.86.153</b>	400 V	375 W	0.50 hp	+/- 1.25 A	IP55	14 mm
<b>81.86.154</b>	400 V	550 W	0.75 hp	+/- 1.46 A	IP55	19 mm
<b>81.86.155</b>	400 V	750 W	1.00 hp	+/- 1.91 A	IP55	19 mm



## LABOUR

Installation, for example of an electric motor on a pressurized water system, connecting the cable and adjusting the safety cover (approx. 1 hour).

ARTIKELNO	DESCRIPTION
<b>98.00.1000</b>	Labour costs, field service rate (excl. travel costs)
<b>98.00.1001</b>	Labour costs, workshop rate

## DECK WASH HOSE, TRICOFLEX

Non-scoring, free of kinks and with limited oil resistance.

This hose is free of lead, cadmium and barium, so therefore environmentally friendly.

application : deck washing, spraying  
 liquid : water  
 colour : external : yellow  
           : internal : black  
 print : TRICOFLEX, every 35 cm  
 materials : PVC with polyester braiding  
 temp. range : -15 °C through +60 °C



ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.10.011	1/2"	12 mm	17 mm	10	25 m
83.10.012	1/2"	12 mm	17 mm	10	50 m
83.10.013	1/2"	12 mm	17 mm	10	100 m
83.10.018	3/4"	19 mm	25 mm	9	25 m
83.10.019	3/4"	19 mm	25 mm	9	50 m
83.10.020	3/4"	19 mm	25 mm	9	100 m
83.10.024	1"	25 mm	32 mm	8	25 m
83.10.025	1"	25 mm	32 mm	8	50 m
83.10.026	1"	25 mm	32 mm	8	100 m
83.10.031	1.1/4"	30 mm	39 mm	8	25 m
83.10.032	1.1/4"	30 mm	39 mm	8	50 m
83.10.033	1.1/4"	30 mm	39 mm	8	100 m
83.10.038	1.1/2"	40 mm	51 mm	8	50 m
83.10.050	2"	50 mm	63 mm	8	25 m

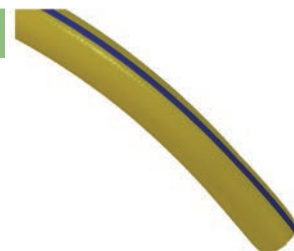
## DECK WASH HOSE, TOBBY

Wash-down hose with braided insert, which prevents kinks from forming.

Cadmium and Barium-free, so environmentally friendly.

UV and algae resistant.

application : hosing down, spraying  
 liquid : water  
 colour : outside : yellow with blue stripes  
           : inside : black  
 material : PVC with knitted polyester braiding  
 temp. range : -20 °C to +60 °C



ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.12.011	1/2"	12.5 mm	17 mm	10	25 m
83.12.012	1/2"	12.5 mm	17 mm	10	50 m
83.12.013	1/2"	12.5 mm	17 mm	10	100 m
83.12.018	3/4"	19 mm	24 mm	8	25 m
83.12.019	3/4"	19 mm	24 mm	8	50 m
83.12.020	3/4"	19 mm	24 mm	8	100 m
83.12.024	1"	25 mm	32 mm	7	25 m
83.12.025	1"	25 mm	32 mm	7	50 m
83.12.026	1"	25 mm	32 mm	7	100 m
83.12.031	1.1/4"	30 mm	38 mm	6	25 m
83.12.032	1.1/4"	30 mm	38 mm	6	50 m



## DECK WASH HOSE, PROFI TUBE

Very modern PVC hose, yet supple at low temperatures, lightweight and non-scoring, kink free and with limited oil resistance.

application	: deck washing, spraying
liquid	: water
colour	: external : grey/black : internal : grey
materials	: PVC with polyester braiding
temp. range	: -20 °C through +60 °C

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.14.712	1/2"	12.5 mm	17.3 mm	16	50 m
83.14.719	3/4"	19 mm	24.9 mm	11	50 m
83.14.724	1"	25 mm	32.5 mm	9	25 m
83.14.725	1"	25 mm	32.5 mm	9	50 m



## DECK WASH HOSE, GREEN

Premium multi-purpose hose for industrial applications with outstanding ozone and weather resistance. The EPDM rubber makes the hose very flexible and kink resistant, making it extremely user-friendly, even in the winter months. Good dimensional stability when used on a reel.

application	: deck wash, spraying
liquid	: water, hot water (up to 100 °C 3 Bar), air, various chemicals and liquids
colour	: external : green : internal : black
materials	: EPDM rubber
temp. range	: -30 °C to +100 °C

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.18.012	1/2"	13 mm	20.0 mm	10	40 m
83.18.019	3/4"	19 mm	27.5 mm	10	40 m
83.18.025	1"	25 mm	35.4 mm	10	40 m
83.18.032	1.1/4"	32 mm	41.4 mm	10	40 m
83.18.038	1.1/2"	38 mm	47.8 mm	10	40 m



## DECK WASH HOSE, PYTHON

Thanks to the use of prime quality EPDM rubber, this hose is not sensitive to UV radiation and will therefore not age, so scoring will be prevented. EPDM rubber is moreover extremely supple, which makes this hose ideal for winter use.

application	: deck wash, steam cleaning
liquid	: water
colour	: external : green : internal : black
print	: Parker PYTHON
materials	: EPDM rubber with polyester braiding
temp. range	: -20 °C through +110 °C

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.21.012	1/2"	13 mm	20 mm	20	40 m
83.21.019	3/4"	19 mm	27 mm	20	40 m
83.21.025	1"	25 mm	34 mm	20	40 m
83.21.026	1"	25 mm	34 mm	20	80 m
83.21.032	1.1/4"	32 mm	44 mm	20	40 m



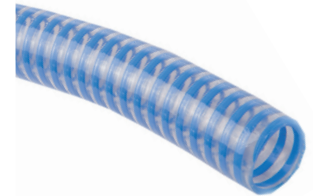


## SUCTION OR DISCHARGE HOSE, PVC

We have sold this hose with great success for many years. Applications include as suction hose for pumps and as discharge hose for submersible pumps.

application : suction hose, discharge water from submersible pumps  
 liquid : water  
 colour : clear transparent with blue spiral  
 materials : supple PVC with plastic spiral  
 temp. range : -10 °C through +60 °C

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.25.019	3/4"	20 mm	24.8 mm	5	50 m
83.25.025	1"	25 mm	29.8 mm	5	50 m
83.25.032	1 1/4"	32 mm	37.2 mm	5	50 m
83.25.038	1 1/2"	38 mm	44.0 mm	5	50 m
83.25.050	2"	50 mm	57.2 mm	5	50 m
83.25.063	2 1/2"	63 mm	70.4 mm	5	50 m
83.25.075	3"	76 mm	84.2 mm	4	50 m
83.25.100	4"	100 mm	110.8 mm	3	25 m



## SUCTION OR DISCHARGE HOSE, PVC, EXTRA SUPPLE

Ideal as suction hose for pumps or as discharge hose for submersible pumps.



**Can also be cut in shorter lengths!**

application : suction hose, discharge water from submersible pumps  
 liquid : water  
 colour : blue or black  
 materials : extremely supple PVC with plastic spiral  
 temp. range : -35 °C through +50 °C

### SCALE:

per roll FT

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.26.025	1"	25 mm	32.6 mm	3	50 m
83.26.032	1 1/4"	32 mm	40.0 mm	3	50 m
83.26.038	1 1/2"	38 mm	46.8 mm	2.6	50 m
83.26.050	2"	52 mm	61.6 mm	2.2	50 m
83.26.063	2 1/2"	63 mm	73.4 mm	2	50 m
83.26.075	3"	76 mm	87.0 mm	1.8	50 m
83.26.100	4"	102 mm	115.4 mm	1.3	50 m
83.26.108	4"	102 mm	115.4 mm	1.3	8 m
83.26.110	4"	102 mm	115.4 mm	1.3	8 m
Including 1x Kamlok quick coupling and hose clamp.					
83.26.125	5"	127 mm	142.0 mm	1.1	30 m
83.26.150	6"	152 mm	170.0 mm	0.9	20 m





## RADIATOR HOSE

Robust quality cooling water hose, complies with DIN73411 - ISO 1307 and therefore ideal for this important task.

application	: cooling water hose, as sleeve in a discharge line
liquid	: water
colour	: external : black with fabric print : internal : black and smooth
materials	: EPDM rubber with polyester braiding, wear resistant ozone and weather resistant and resistant to all antifreeze liquids.
temp. range	: -30 °C through +100 °C, briefly 110 °C
operating pressure	: 4 bar
bursting pressure	: 12 bar
comes as	: straight 1 metre lengths

Hose clamp approx. 10 mm bigger than inside diameter!

ARTIKELNO	INSIDE DIAMETER	OUTSIDE DIAMETER	SUITABLE FOR PIPE WITH OUTSIDE DIAMETER	HOSE CLAMP HEAVY DUTY MODEL
83.29.019	19 mm	27 mm		
83.29.020	20 mm	28 mm		
83.29.022	22 mm	30 mm	1/2"	85.07.029
83.29.025	25 mm	33 mm		
83.29.028	28 mm	36 mm	3/4"	85.07.036
83.29.030	30 mm	38 mm		
83.29.032	32 mm	40 mm	1"	85.07.040
83.29.035	35 mm	43 mm		
83.29.038	38 mm	46 mm		
83.29.040	40 mm	48 mm		
83.29.042	42 mm	50 mm	1.1/4"	85.07.048
83.29.045	45 mm	53 mm		
83.29.048	48 mm	56 mm	1.1/2"	85.07.056
83.29.050	50 mm	58 mm		
83.29.055	55 mm	62 mm		
83.29.060	60 mm	68 mm	2"	85.07.068
83.29.065	65 mm	73 mm		
83.29.070	70 mm	78 mm		
83.29.075	75 mm	83 mm	2.1/2"	85.07.080
83.29.080	80 mm	88 mm		
83.29.085	85 mm	93 mm		
83.29.090	90 mm	98 mm		
83.29.100	102 mm	112 mm		
83.29.110	110 mm	122 mm		
83.29.120	120 mm	132 mm		
83.29.125	127 mm	137 mm		
83.29.140	140 mm	152 mm		
83.29.150	152 mm	162 mm		



## FLAT, ROLL UP HOSE

Drain and discharge water hose.  
Takes up little space when rolled up.

application	: water removal
liquid	: water
colour	: external : blue : internal : black
materials	: PVC with polyester braiding
temp. range	: -0 °C through +30 °C



ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	FLAT WIDTH MEASURED	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.30.025	1"	25 mm	40 mm	10	50 m
83.30.032	1.1/4"	32 mm	50 mm	9	50 m
83.30.038	1.1/2"	38 mm	60 mm	9	50 m
83.30.050	2"	50 mm	80 mm	8	50 m
83.30.063	2.1/2"	63 mm	100 mm	8	50 m
83.30.075	3"	76 mm	120 mm	7	50 m
83.30.100	4"	100 mm	160 mm	7	50 m

## PROTECTIVE HOSE

Protects eyes in rope and steel wire.  
Protects electric cables from damage.

colour : white  
materials : polyester fabric



ARTIKELNO	INSIDE DIAMETER	FLAT WIDTH MEASURED	FOR DIAMETER WIRE	ROLL LENGTH
<b>83.32.025</b>	25 mm	35 - 40 mm	16 - 20 mm	50 m
<b>83.32.032</b>	38 mm	52 - 56 mm	22 - 24 mm	50 m
<b>83.32.040</b>	45 mm	65 - 71 mm	26 - 30 mm	50 m
<b>83.32.050</b>	52 mm	72 - 80 mm	32 - 40 mm	50 m
<b>83.32.060</b>	65 mm	92 - 100 mm	44 - 48 mm	50 m

## FIRE HOSE WITH COUPLING

Specially developed fire hose, withstands very high pressure.  
Has 2 integral aluminium Storz couplings.  
Takes up little space when rolled up.

application : fire-fighting  
liquid : water  
colour : external : red coated with PU (polyurethane)  
: internal : black  
materials : PVC with polyester braiding  
temp. range : -0 °C through +30 °C  
operational pressure : 17 bar  
bursting pressure : 50 bar (German DIN norm, 40 bar is Dutch standard)



ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	ALUM. STORZ COUPLING	ROLL LENGTH
<b>83.35.152</b>	1 1/2"	38 mm	NA 52	20 m
<b>83.35.181</b>	1 1/2"	38 mm	NA 81	20 m
<b>83.35.381</b>	3"	76 mm	NA 81	20 m

## FIRE HOSE WITH COUPLING, SOLAS

Specially developed fire hose, withstands very high pressure. Very flexible and manageable with good abrasion resistance.  
Minimum maintenance required; mold and rot free, resistant to heat, ozone and bad weather conditions.  
Has 2 integral aluminium Storz couplings.  
Takes up little space when rolled up.

application : fire-fighting  
liquid : water  
colour : external : red coated with acrylic  
: internal : black  
materials : EPDM rubber with polyester braiding  
temp. range : -40 °C to +100 °C  
operational pressure : 17 bar  
bursting pressure : 50 bar (German DIN standard, 40 bar is Dutch Standard)  
comes as : 20 metre length  
Standard : **SOLAS - MED 96/98/EC**  
: **EN 14540**  
: **NBN S 21-024**



ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	ALUM. STORZ COUPLING	ROLL LENGTH
<b>83.35.266</b>	2"	50 mm	NA 66	20 m
<b>83.35.281</b>	2"	50 mm	NA 81	20 m

## HOSES



### DRINKING WATER HOSE WITH COUPLING

Hose certified by the : Hygiene-Institut des Ruhrgebiets, Gelsenkirchen, Germany.  
A hose specially developed for drinking water.  
Takes up little space when rolled up.  
Has 2 integral Storz couplings.

certificate : KTW, Class C  
application : drinking water  
liquid : water  
colour : external : blue coated with PU (polyurethane)  
: internal : white  
materials : KTW rubber with polyester braiding  
temp. range : -40 °C through +80 °C.  
operational pressure : 16 bar  
bursting pressure : 65 bar

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	ALUM. STORZ COUPLING	ROLL LENGTH
83.40.266	2"	50 mm	NA 66	20 m



### PVC CLEAR HOSE

Limited resistance to oil, grease and petrol, as well as a few mild chemicals.

application : all sorts of uses  
liquid : water, light oils, mild acids  
colour : clear transparent  
materials : PVC without braiding  
temp. range : -15 °C through +60 °C



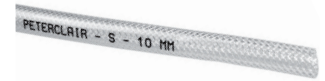
ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.45.002		2 mm	4 mm	0	100 m
83.45.004		4 mm	7 mm	0	50 m
83.45.005		5 mm	8 mm	0	50 m
83.45.006		6 mm	9 mm	0	50 m
83.45.007		7 mm	10 mm	0	50 m
83.45.008	5/16"	8 mm	11 mm	0	50 m
83.45.009		9 mm	12 mm	0	50 m
83.45.010	3/8"	10 mm	13 mm	0	50 m
83.45.012	1/2"	12 mm	16 mm	0	50 m
83.45.015		15 mm	19 mm	0	50 m
83.45.018		18 mm	22 mm	0	50 m
83.45.020	3/4"	20 mm	25 mm	0	50 m
83.45.025	1"	25 mm	31 mm	0	50 m
83.45.030	1.1/4"	30 mm	37 mm	0	25 m
83.45.040	1.1/2"	40 mm	48 mm	0	25 m
83.45.050	2"	50 mm	60 mm	0	25 m

## PVC HOSE WITH BRAIDING (AIR HOSE)

Limited resistance to grease, oil and petrol.

application : pressure hose for air, water, light oils  
 liquid : water, mild acids, mild chemicals  
 colour : clear transparent  
 materials : PVC with woven polyester braiding  
 temp. range : -15 °C through 60 °C

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.50.006	1/4"	6 mm	12 mm	20	50 m
83.50.008	5/16"	8 mm	14 mm	20	50 m
83.50.010	3/8"	10 mm	15 mm	20	50 m
83.50.012	1/2"	12 mm	18 mm	20	50 m
83.50.015	5/8"	16 mm	24 mm	20	50 m
83.50.019	3/4"	19 mm	26 mm	20	50 m
83.50.025	1"	25 mm	34 mm	15	50 m
83.50.032	1 1/4"	32 mm	42 mm	15	50 m
83.50.038	1.1/2"	38 mm	48 mm	10	50 m
83.50.050	2"	50 mm	60 mm	10	50 m



## NYLON AIR PIPING

For pneumatic purposes such as blue board and air horn.

colour : clear transparent  
 materials : nylon  
 temp. range : -40 °C through +100 °C

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.52.006		4 mm	6 mm	20	50 m
83.52.008	1/4"	6 mm	8 mm	14	50 m



## FUEL HOSE, PVC

Special fire resistant hose.



**Can also be cut in shorter lengths!**

application : fuels for engines, stoves etc.  
 medium : gas oil, hydrocarbons  
 colour : blue green transparent  
 materials : PVC with woven polyester braiding  
 temp. range : -15 °C through 60 °C

**SCALE:**

per roll FT

ARTIKELNO	INSIDE DIAMETER (INCH)	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER	OPERATING PRESSURE AT 20°C	ROLL LENGTH
83.71.510	3/8"	10 mm	16 mm	10	25 m
83.71.512	1/2"	12 mm	19 mm	10	25 m
83.71.519	3/4"	20 mm	28 mm	8	25 m
83.71.525	1"	25 mm	32 mm	8	25 m
83.71.532	1.1/4"	30 mm	39 mm	8	25 m



# HOSE CLAMPS



## HOSE CLAMP SCREWDRIVER

Flexible screwdriver for fitting and removing hose clamps.

ARTIKELNO	DESCRIPTION
85.05.000	Hose clamp screwdriver



## HOSE CLAMP

This worm screw hose clamp is made from heavy duty galvanized steel and is used in industry and automotive applications.

ARTIKELNO	DIAM. RANGE	INCH	CLAMP WIDTH	NUMBER PER BAG
85.05.009	8 - 12 mm	3/8"	12 mm	loose/20
85.05.011	10 - 16 mm	1/2"	12 mm	loose/20
85.05.013	12 - 20 mm	1/2"	12 mm	loose/10
85.05.018	16 - 27 mm	3/4"	12 mm	loose/10
85.05.020	20 - 32 mm	1"	12 mm	loose/10
85.05.025	25 - 40 mm	1.1/4"	12 mm	loose/10
85.05.040	40 - 60 mm	1.1/2"	12 mm	loose/10
85.05.055	50 - 70 mm	2"	12 mm	loose/10
85.05.060	60 - 80 mm	2.1/2"	12 mm	loose/10
85.05.070	70 - 90 mm	3"	12 mm	loose/10
85.05.090	90 - 110 mm	4"	12 mm	loose/10
85.05.110	110 - 130 mm	4.1/2"	12 mm	loose/10
85.05.150	130 - 160 mm	6"	12 mm	loose/10
85.05.170	160 - 180 mm	6"	12 mm	loose/10



## HOSE CLAMP, STAINLESS STEEL 304

This worm screw hose clamp is made from stainless steel 304 and is suitable for use in sea water and corrosive environments.

ARTIKELNO	DIAM. RANGE	INCH	CLAMP WIDTH	NUMBER PER BAG
85.06.009	8 - 12 mm	3/8"	12 mm	loose/20
85.06.011	10 - 16 mm	1/2"	12 mm	loose/20
85.06.013	12 - 20 mm	1/2"	12 mm	loose/10
85.06.018	16 - 27 mm	3/4"	12 mm	loose/10
85.06.025	25 - 40 mm	1"	12 mm	loose/10
85.06.030	32 - 44 mm	1.1/4"	12 mm	loose/10
85.06.040	40 - 60 mm	1.1/2"	12 mm	loose/10
85.06.055	50 - 70 mm	2"	12 mm	loose/10
85.06.060	60 - 80 mm	2.1/2"	12 mm	loose/10
85.06.070	70 - 90 mm	3"	12 mm	loose/10
85.06.090	90 - 110 mm	4"	12 mm	loose/10
85.06.120	120 - 140 mm	5"	12 mm	loose/10
85.06.140	130 - 160 mm	6"	12 mm	loose/10

## HOSE CLAMP, HEAVY DUTY

For larger hose diameters, or when a hose clamp has to meet tougher requirements.  
Completely galvanized with heavy duty hexagonal bolt.



ARTIKELNO	DIAM. RANGE	INCH	CLAMP WIDTH X CLAMP THICKNESS	BOLT THICKNESS
85.07.017	17 - 19 mm		20 x 0.8 mm	M6
85.07.020	20 - 22 mm	3/4"	20 x 0.8 mm	M6
85.07.023	23 - 25 mm		20 x 0.8 mm	M6
85.07.026	26 - 28 mm	1"	20 x 0.8 mm	M6
85.07.029	29 - 31 mm	1"	20 x 0.8 mm	M6
85.07.030	30 - 33 mm		20 x 0.8 mm	M6
85.07.032	32 - 35 mm		20 x 0.8 mm	M6
85.07.036	36 - 39 mm	1 1/4"	20 x 0.8 mm	M6
85.07.040	40 - 43 mm	1 1/2"	20 x 0.8 mm	M6
85.07.042	42 - 46 mm		20 x 0.8 mm	M6
85.07.044	44 - 47 mm		20 x 0.8 mm	M6
85.07.048	48 - 51 mm		20 x 0.8 mm	M6
85.07.052	52 - 55 mm		20 x 0.8 mm	M6
85.07.056	56 - 59 mm	2"	20 x 0.8 mm	M6
85.07.060	60 - 63 mm		20 x 0.8 mm	M6
85.07.064	64 - 67 mm		20 x 0.8 mm	M6
85.07.068	68 - 73 mm	2 1/2"	20 x 0.8 mm	M6
85.07.074	74 - 79 mm		20 x 0.8 mm	M6
85.07.080	80 - 85 mm	3"	23 x 1.2 mm	M8
85.07.086	86 - 91 mm		23 x 1.2 mm	M8
85.07.092	92 - 97 mm		23 x 1.2 mm	M8
85.07.098	98 - 103 mm		23 x 1.2 mm	M8
85.07.104	104 - 112 mm	4"	23 x 1.2 mm	(Ulex submersible pump) M8
85.07.113	113 - 121 mm		23 x 1.2 mm	M8
85.07.115	115 - 130 mm		23 x 1.2 mm	M8
85.07.122	122 - 130 mm		30 x 1.7 mm	M10
85.07.131	131 - 139 mm		30 x 1.7 mm	M10
85.07.140	140 - 148 mm		30 x 1.7 mm	M10
85.07.149	149 - 161 mm		30 x 1.7 mm	M10
85.07.162	162 - 174 mm		30 x 1.7 mm	M10
85.07.175	175 - 187 mm		30 x 1.7 mm	M10
85.07.188	188 - 200 mm		30 x 1.7 mm	M10
85.07.201	201 - 213 mm		30 x 1.7 mm	M10
85.07.214	214 - 226 mm		30 x 1.7 mm	M10
85.07.227	227 - 239 mm		30 x 1.7 mm	M10
85.07.240	240 - 252 mm		30 x 1.7 mm	M10
85.07.268	268 - 280 mm		30 x 1.7 mm	M10

## GARDENA

The flexible and simple click system for all watering and cleaning work on board. Simple and safe connection between the tap and watering accessories.



### GARDENA TAP CONNECTOR, PLASTIC

The Gardena tap connector allows the securement of a garden hose to a tap. Easy and comfortable handling thanks to special shape of the tap connector.

ARTIKELNO	INTERNAL THREAD	MATERIAL
<b>85.08.012</b>	21.0 mm (G 1/2")	plastic
<b>85.08.019</b>	26.5 mm (G 3/4")	plastic
<b>85.08.025</b>	33.3 mm (G 1")	plastic



### GARDENA TAP CONNECTOR PREMIUM, METAL

The Gardena Premium Tap Connector in high-quality metal design enables the secure connection of a garden hose to a tap. Handling is easy and convenient thanks to the special shape of the tap connector. It is produced of robust metal and therefore especially durable.

ARTIKELNO	INTERNAL THREAD	MATERIAL
<b>85.08.121</b>	21.0 mm (G 1/2")	metal
<b>85.08.126</b>	26.5 mm (G 3/4")	metal
<b>85.08.133</b>	33.3 mm (G 1")	metal



### GARDENA TAP CONNECTOR, WASHERS

Loose set of washers for Gardena tap connectors.

ARTIKELNO	TYPE COUPLING	NUMBER PER PACKAGE	MATERIAL
<b>85.08.155</b>	21.0 mm (G 1/2")	3	rubber
<b>85.08.156</b>	26.5 mm (G 3/4")	5	rubber
<b>85.08.157</b>	33.3 mm (G 1")	3	rubber



### GARDENA REPAIR CONNECTOR, PLASTIC

With a Gardena repair coupling you can quickly and easily repair a hose without tools. Cut out the damaged part and connect the two hose parts with the repair coupling.

**Power Grip:** Specially shaped union nut for a simple and very firm connection.

ARTIKELNO	HOSE CONNECTION	MATERIAL
<b>85.08.160</b>	13 mm (1/2") - 15 mm (5/8")	plastic
<b>85.08.165</b>	19 mm (3/4")	plastic



## GARDENA TAP ADAPTER, METAL

The Gardena tap adapter for a soft effervescent jet is ideally suited for connecting the Gardena system to a tap with a pearl head, for example in the kitchen and bathroom.



ARTIKELNO	INTERNAL THREAD	OUTSIDE THREAD	MATERIAL
85.08.170	M22	26.5 mm (G 3/4")	metal

## GARDENA EXTENSION JOINT, PLASTIC

With this Gardena extension joint you can easily extend your hose. Can also be used to connect hoses with different diameters, eg from 19 mm (3/4") to 13 mm (1/2").



ARTIKELNO	CONNECTION	MATERIAL
85.08.200	Gardena/Gardena	plastic

## GARDENA HOSE CONNECTOR, PLASTIC

The Gardena hose connector allows a quick and comfortable connection to the hose. By simply pulling, the hose can be disconnected.

**Power Grip:** Specially shaped union nut for a problem-free installation and very strong hose connection, with ribs made of soft plastic for comfortable use. The rubber ring protects the hose coupling against damage.

**Water Stop:** If the connected watering accessory is disconnected, eg a nozzle or sprinkler, the water supply stops automatically; when an accessory is connected, the water flows again. So you don't have to walk to the tap when changing accessories.



ARTIKELNO	HOSE CONNECTION	TYPE	MATERIAL
85.08.215	13 mm (1/2") - 15 mm (5/8")	without waterstop	plastic
85.08.216	19 mm (3/4")	without waterstop	plastic
85.08.225	13 mm (1/2") - 15 mm (5/8")	with waterstop	plastic
85.08.226	19 mm (3/4")	with waterstop	plastic

## GARDENA HOSE CONNECTOR PREMIUM, METAL / PLASTIC

The Gardena Premium hose connector in high-quality metal/plastic design ensures a quick, convenient connection and replacement of an irrigation product at the end of the hose.

**Power Grip:** Specially shaped union nut for a problem-free installation and very strong hose connection, with ribs made of soft plastic for comfortable use. The rubber ring protects the hose coupling against damage.

**Water Stop:** If the connected watering accessory is disconnected, eg a nozzle or sprinkler, the water supply stops automatically; when an accessory is connected, the water flows again. So you don't have to walk to the tap when changing accessories.



ARTIKELNO	HOSE CONNECTION	TYPE	MATERIAL
85.08.240	13 mm (1/2") - 15 mm (5/8")	with waterstop	metal / plastic
85.08.245	19 mm (3/4")	with waterstop	metal / plastic



## GARDENA HINGED TAP CONNECTOR, PLASTIC

The Gardena hinged tap connector can rotate and pivot, this prevents the hose from twisting or kinking at the tap. The water can flow unimpeded and the hose will not be damaged. Also ideal for use on a hose trolley.

ARTIKELNO	INTERNAL THREAD	MATERIAL
<b>85.08.250</b>	21.0 mm (G 1/2"), 26.5 mm (G 3/4"), 33.3mm (G 1")	plastic



## GARDENA WATER DISTRIBUTOR, PLASTIC

With the Gardena water distributor you can use multiple connections at the same time at one tap. The connections are continuously adjustable and lockable.

ARTIKELNO	INTERNAL THREAD	TYPE	MATERIAL
<b>85.08.260</b>	26.5 mm (G 3/4"), 33.3mm (G 1")	2 connections	plastic
<b>85.08.265</b>	26.5 mm (G 3/4"), 33.3mm (G 1")	4 connections	plastic



## GARDENA CLEANING NOZZLE

Whether you want to clean or water, with the Gardena cleaning nozzle you can adjust the desired water jet steplessly, from a hard jet to a fine spray mist.

Thanks to the soft plastic components, the cleaning nozzles lie pleasant and non-slip in the hand. The water delivery can be closed.

ARTIKELNO	DESCRIPTION	WATER JET	WATER DISPENSING CLOSABLE	MATERIAL
<b>85.08.400</b>	Gardena Prof cleaning nozzle	stepless adjustable (hard jet / fine mist)	yes	plastic / brass
<b>85.08.405</b>	Gardena cleaning nozzle, soft grip	stepless adjustable (hard jet / fine mist)	yes	plastic
<b>85.08.410</b>	Gardena Classic cleaning nozzle, soft grip	stepless adjustable (hard jet / fine mist), lockable	yes	plastic



## GARDENA CLEANING NOZZLE, PARTS

ARTIKELNO	DESCRIPTION	DIAMETER	NUMBER PER PACKAGE	MATERIAL
<b>85.08.415</b>	O-ring for Gardena cleaning nozzle	9 mm	5	rubber

### GARDENA POWER DRILL PUMP, SELF-PRIMING

Self-priming Gardena drilling machine pump for pumping clean liquids.

Supplied complete with Gardena connections.

Not suitable for toxic / corrosive, highly flammable or explosive substances such as petrol, kerosene, etc.

- Colour : black
- Pump type : impeller pump
- Impeller type : impeller
- Direction of rotation: clockwise rotation
- Materials : impeller : rubber
- : impeller housing : plastic
- : pump housing : plastic
- : pump shaft : stainless steel AISI 316
- Liquids : maximum temperature 40 °C continuously, behaving like clean water.
  
- No head : 1,700 l/h with 13mm (1/2") hose
- : 2,400 l/h with 19mm (3/4") hose
- Discharge head : 30 meters
- Suction head : 3 meters
- Particle size : zero
- Connections : Gardena (3/4" male thread)
- Shaft diameter : 8 mm
- Dimensions : l x w x h = 163 x 75 x 64 mm
- Weight : 0.2 kg
- Max speed : 2400 rpm
- Dry run time : maximum 12 seconds



ARTIKELNO	DESCRIPTION
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85.08.500	Gardena power drill pump right-hand rotation 3/4"
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### GARDENA WALL-MOUNTED HOSE BOX ROLL-UP AUTOMATIC

The Gardena wall-mounted hose box roll-up automatic makes watering especially easy and convenient.

The hose box does the cranking for you, so your hands stay clean.

The practical hose box is mounted on the wall and can be swiveled 180°.

The hose can be conveniently withdrawn with little effort and stopped at short intervals of maximum 50 cm.

The quality hose of 13 mm (1/2") ensures a high water flow and optimal cleaning nozzle operation.

With a short tug on the hose, the lock is released and the hose is automatically retracted into the box by the roll-up without you having to do anything else.

An integrated steel spring that is perfectly suited for the hose length provides even, powerful retraction.

The integrated hose guide prevents twisting and tangling of the hose.

After use, the connection hose can easily be attached to the drip stop to prevent water from running out.

Nozzles and washing brushes can be hung on the wall holder so that they are always within reach.

The hose box can easily be removed from the holder for storage with the ergonomically shaped handle.

The wall-mounted hose box is fully equipped with:

- 15, 25 or 35 meter quality hose
- 1.5 meter long connection hose
- steplessly adjustable cleaning nozzle (art. no. 85.08.405)
- three tap connectors (art. no. 85.08.012, 85.08.019, 85.08.025)
- hose connector (art. no. 85.08.215)
- hose connector with water stop (art. no. 85.08.225)
- wall bracket with screws, wall plugs and assembly instructions



ARTIKELNO	HOSE LENGTH	HOSE DIAMETER	DIMENSIONS (LXWXH)	WEIGHT
85.08.615	15 m	13 mm (1/2")	47.7 x 21.2 x 39.5 cm	7 kg
85.08.625	25 m	13 mm (1/2")	59.3 x 25 x 54.2 cm	12 kg
85.08.635	35 m	13 mm (1/2")	59.3 x 25 x 54.2 cm	15 kg

## HOSE ACCESSORIES



### HOSE CONNECTOR PIPE

ARTIKELNO	HOSE ADAPTOR	MATERIAL
85.10.212	1/2"	plastic
85.10.219	3/4"	plastic
85.10.225	1"	plastic
85.10.310	3/8"	brass
85.10.312	1/2"	brass
85.10.319	3/4"	brass
85.10.325	1"	brass
85.10.332	1 1/4"	brass
85.10.338	1 1/2"	brass

### NOZZLE, ADJUSTABLE

A water curtain is obligatory for the ES-TRIN.



ARTIKELNO	CONNECTION	MATERIAL	MODEL
85.11.016	3/4" adaptor	plastic	
85.11.017	1" adaptor	plastic	
85.11.019	3/4" adaptor	brass	+ handle
85.11.025	1" adaptor	brass	+ handle
85.11.032	1" EXT	plastic	short model
85.11.035	2" NA66	plastic	
85.11.040	2" NA66		water curtain 12/9, robust model C-quality
85.11.170	2" NA66		water curtain 12/9, robust model A-quality

### FIRE EXTINGUISHING NOZZLE

Simple but effective, for fitting to a 2" pipe.



ARTIKELNO	DESCRIPTION	INTERNAL THREAD
85.11.181	Fire extinguishing nozzle	2"

### FIRE HOSE CABINET

Meets requirements of Shipping Inspectorate and ADN.  
Empty, without contents.

colour : fire engine red (RAL 3000)  
material : glass fibre reinforced polyester, thickness 3 mm, smooth finish on outside, stainless steel 304 hinges and lock  
dimensions : h x w x d = 645 x 545 x 160 mm  
with space for : 20 m flat hose + nozzle

ARTIKELNO	DESCRIPTION
85.11.220	Fire hose cabinet



## HOSE ADAPTOR, STRAIGHT WITH HEXAGON, PLASTIC

material : plastic



ARTIKELNO OUTSIDE THREAD AND HOSE ADAPTOR

85.11.512	1/2"
85.11.519	3/4"
85.11.525	1"
85.11.532	1 1/4"
85.11.538	1 1/2"
85.11.550	2"

## HOSE ADAPTOR, REDUCING WITH HEXAGON

material : brass



ARTIKELNO OUTSIDE THREAD HOSE ADAPTOR

85.11.915	1/4"	3/8" - 10 mm
85.11.920	3/8"	1/2" - 13 mm
85.11.925	1/2"	3/4" - 20 mm
85.11.930	3/4"	1" - 25 mm
85.11.935	1"	1.1/4" - 30 mm
85.11.940	1 1/4"	1.1/2" - 40 mm
85.11.945	1 1/2"	2" - 50 mm
85.11.950	2"	2.1/2" - 60 mm

## HOSE ADAPTOR, STRAIGHT WITHOUT HEXAGON

material : brass



ARTIKELNO OUTSIDE THREAD AND HOSE ADAPTOR

85.12.012	1/2"
85.12.019	3/4"
85.12.025	1"
85.12.032	1 1/4"
85.12.038	1 1/2"
85.12.050	2"

## HOSE ADAPTOR, REDUCING WITH/WITHOUT HEXAGON

material : brass



ARTIKELNO OUTSIDE THREAD HOSE ADAPTOR DESCRIPTION

85.12.109	1/2"	3/8" - 10 mm	with hexagon
85.12.112	3/4"	1/2" - 13 mm	with hexagon
85.12.119	1"	3/4" - 20 mm	with hexagon
85.12.125	1.1/4"	1" - 25 mm	without hexagon
85.12.132	1.1/2"	1.1/4" - 30 mm	without hexagon





## HOSE ADAPTOR, STRAIGHT WITH HEXAGON

material : brass

ARTIKELNO	OUTSIDE THREAD AND HOSE ADAPTOR
85.12.206	1/4"
85.12.209	3/8"
85.12.212	1/2"
85.12.219	3/4"
85.12.225	1"
85.12.232	1 1/4"
85.12.238	1 1/2"
85.12.250	2"
85.12.263	2 1/2"
85.12.275	3"
85.12.299	4"



## HOSE ADAPTOR, STRAIGHT WITH FEMALE THREAD, FLAT SEAL.

material : brass

ARTIKELNO	INTERNAL THREAD AND HOSE ADAPTOR
85.12.312	1/2"
85.12.319	3/4"
85.12.325	1"
85.12.332	1 1/4"
85.12.338	1 1/2"
85.12.350	2"



## HOSE ADAPTOR, REDUCING WITH FEMALE THREAD, FLAT SEAL

material : brass

ARTIKELNO	INTERNAL THREAD	HOSE ADAPTOR
85.12.409	1/2"	3/8"
85.12.412	3/4"	1/2"
85.12.419	1"	3/4"
85.12.425	1 1/4"	1"
85.12.432	1 1/2"	1 1/4"



## NIPPLE, STRAIGHT

material : brass

ARTIKELNO	2 X OUTSIDE THREAD
85.12.506	1/4"
85.12.509	3/8"
85.12.512	1/2"
85.12.519	3/4"
85.12.525	1"
85.12.532	1 1/4"
85.12.538	1 1/2"
85.12.550	2"
85.12.563	2 1/2"

## NIPPLE, REDUCING

material : brass



ARTIKELNO	EXTERNAL THREAD IS CONICAL	EXTERNAL THREAD IS NOT CONICAL
85.12.605	1/8"	1/4"
85.12.606	1/4"	3/8"
85.12.609	3/8"	1/2"
85.12.612	1/2"	3/4"
85.12.619	3/4"	1"
85.12.625	1"	1 1/4"
85.12.632	1 1/4"	1 1/2"
85.12.639	1 1/2"	2"
85.12.650	2"	2 1/2"
85.12.651	2"	3"

## NIPPLE, REDUCING SOCKET

material : brass



ARTIKELNO	EXTERNAL THREAD IS CONICAL	INTERNAL THREAD IS NOT CONICAL
85.12.706	3/8"	1/4"
85.12.709	1/2"	3/8"
85.12.712	3/4"	1/2"
85.12.719	1"	3/4"
85.12.725	1 1/4"	1"
85.12.732	1 1/2"	1 1/4"

## HOSE ADAPTOR, INTERNAL THREAD

material : brass



ARTIKELNO	INTERNAL THREAD AND HOSE ADAPTOR
85.13.910	3/8"
85.13.912	1/2"
85.13.919	3/4"
85.13.925	1"
85.13.932	1 1/4"
85.13.938	1 1/2"
85.13.950	2"

## THROUGH-HULL FITTING

Has rounded top, turned neck and external thread, comes with ring and hexagonal nut.

material : brass



ARTIKELNO	OUTSIDE THREAD	THREAD LENGTH
85.14.506	1/4"	20 mm
85.14.509	3/8"	50 mm
85.14.512	1/2"	60 mm
85.14.519	3/4"	65 mm
85.14.525	1"	70 mm
85.14.532	1 1/4"	80 mm
85.14.538	1 1/2"	90 mm
85.14.550	2"	100 mm



## GEKA, SUCTION QUICK COUPLING

Lug distance 40 mm.

ARTIKELNO	HOSE ADAPTOR
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85.15.009	3/8"
85.15.012	1/2"
85.15.019	3/4"
85.15.025	1"
85.15.032	1 1/4"
85.15.038	1 1/2"



## GEKA, CONNECTOR WITH INTERNAL THREAD

Lug distance 40 mm.

ARTIKELNO	INTERNAL THREAD
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85.15.109	3/8"
85.15.112	1/2"
85.15.119	3/4"
85.15.125	1"
85.15.132	1 1/4"
85.15.138	1 1/2"



## GEKA, CONNECTOR WITH EXTERNAL THREAD

Lug distance 40 mm.

ARTIKELNO	OUTSIDE THREAD
-----------	----------------

85.15.209	3/8"
85.15.212	1/2"
85.15.219	3/4"
85.15.225	1"
85.15.232	1 1/4"
85.15.238	1 1/2"



## GEKA, CAP - BLANKING PLATE

Lug distance 40 mm.

ARTIKELNO	DESCRIPTION
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85.15.305	Geka cap - blanking plate
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## GEKA, RUBBER RING

ARTIKELNO	DESCRIPTION
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85.15.310	Geka rubber ring
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## GEKA, SUCTION COUPLING, ADJUSTABLE

Suction-pressure coupling.

The connection of the coupling can be turned tighter because of the ring. Ideal for suction and/or discharge at higher pressure. Lug distance 40 mm.



ARTIKELNO	HOSE ADAPTOR
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85.15.512	1/2"
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85.15.519	3/4"
-----------	------

85.15.525	1"
-----------	----

85.15.532	1 1/4"
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## GEKA, RUBBER RING, FOR ADJUSTABLE MODEL

ARTIKELNO	DESCRIPTION
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85.15.550	Geka rubber ring, for adjustable model
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## GEKA, 3-WAY FITTING

Lug distance 40 mm.

ARTIKELNO	DESCRIPTION
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85.15.553	Geka 3-way fitting
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## GEKA, NOZZLE

Lug distance 40 mm.

ARTIKELNO	NOZZLE OPENING
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85.15.561	1/2"
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85.15.562	3/4"
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85.15.563	1"
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## BUNKER COUPLING, BRASS, DIN EN 14420-6

All bunker companies having been working with this type for years to their complete satisfaction.  
A durable, reliable and affordable coupling.  
A "must" for every vessel.

Complies with DIN EN 14420-6 (Tankwagen Kupplung).

**MB** = Mutter Blindkappe (cap, female part)  
**VK** = Vater Kupplung (coupling, male part)  
**VB** = Vater Blindstopfen (plug, male part)  
**MK** = Mutter Kupplung (coupling, female part)  
**DG** = Dreh Gelenk (threaded nipple)

50 = 2" (50 mm)  
80 = 3" (80 mm)

**IG** = Innen Gewinde (internal thread)  
**AG** = Aussen Gewinde (external thread)



## BUNKER COUPLING, KEY

Hook spanner with hinge.

ARTIKELNO	DESCRIPTION	MATERIAL
85.16.001	Key for bunker coupling	nickel plated steel



## BUNKER COUPLING, CHAIN

For cap or plug (50, 80 or 100 series).  
Also suitable for Storz and KamLok.

ARTIKELNO	DESCRIPTION	LENGTH	MATERIAL
85.16.013	chain	300 mm (K 300)	brass with stainless steel 316 hooks
85.16.014	chain	300 mm (K 300 SS)	stainless steel

## BUNKER CAP (FEMALE), DIN EN 14420-6



ARTIKELNO	TYPE	MATERIAL
85.16.105	MB 50 AL	aluminium
85.16.115	MB 50	brass
85.16.116	MB 50 SS	316 stainless steel
85.16.125	MB 80 AL	aluminium
85.16.135	MB 80	brass
85.16.136	MB 80 SS	316 stainless steel
85.16.149	MB 100 AL	aluminium
85.16.151	MB 100 SS	316 stainless steel

## BUNKER COUPLING (MALE), DIN EN 14420-6

ARTIKELNO	TYPE	INTERNAL THREAD	MATERIAL
<b>85.16.214</b>	VK 50-1.1/2	1 1/2"	brass
<b>85.16.215</b>	VK 50	2"	brass
<b>85.16.216</b>	VK 50-2.1/2	2 1/2"	brass
<b>85.16.218</b>	VK 50 SS	2"	316 stainless steel
<b>85.16.317</b>	VK 80	3"	brass
<b>85.16.318</b>	VK 80 SS	3"	316 stainless steel
<b>85.16.328</b>	VK 100	4"	brass
<b>85.16.329</b>	VK 100 SS	4"	316 stainless steel



## BUNKER PLUG (MALE), DIN EN 14420-6



ARTIKELNO	TYPE	MATERIAL
<b>85.16.402</b>	VB 50 P	plastic
<b>85.16.405</b>	VB 50 AL	aluminium
<b>85.16.415</b>	VB 50	brass
<b>85.16.416</b>	VB 50 SS	316 stainless steel
<b>85.16.425</b>	VB 80 AL	aluminium
<b>85.16.435</b>	VB 80	brass
<b>85.16.436</b>	VB 80 SS	316 stainless steel
<b>85.16.449</b>	VB 100 AL	aluminium
<b>85.16.451</b>	VB 100 SS	316 stainless steel

## BUNKER COUPLING, PARTS (FEMALE)



ARTIKELNO	TYPE	THREAD	MATERIAL
85.16.715	TWK 50-2 IG	inner part 2" INT	brass
85.16.716	TWK 50-1.1/2 AG	inner part 1.1/2" EXT	brass
85.16.717	TWK 50-2 AG	inner part 2" EXT	brass
85.16.718	TWM 50	outer ring + lever 2"	brass
85.16.719	TWK 50-2 IG SS	inner part 2" INT	316 stainless steel
85.16.720	TWM 50 SS	outer ring + lever 2"	316 stainless steel
85.16.725	TWK 80	inner part 3" INT	brass
85.16.729	TWM 80	outer ring + lever 3"	brass
85.16.730	TWK 80 SS	inner part 3" INT	316 stainless steel
85.16.731	TWM 80 SS	outer ring + lever 3"	316 stainless steel
85.16.741	MK 100	complete (4" INT + lever)	brass
85.16.742	MK 100 SS	complete (4" INT + lever)	316 stainless steel

## BUNKER COUPLING, SEALING RING TYPE 50

ARTIKELNO	TYPE	TYPE COUPLING	MATERIAL	COLOUR	DIMENSIONS	MODEL
<b>85.16.801</b>	GSD 50	TWM 50	Perbunan	black	61.5 x 49 x 4.8 mm	groove
<b>85.16.802</b>	GSD 50 HY	TWM 50 SS	Hypalon	green	61.5 x 49 x 4.8 mm	groove
<b>85.16.811</b>	TWD 50	MB 50	Perbunan	black	61.5 x 49 x 4.8 mm	flat
<b>85.16.812</b>	TWD 50 HY	MB 50 SS	Hypalon	green	61.5 x 49 x 4.8 mm	flat
<b>85.16.821</b>	VD 48/39	VK 50-1.1/2 / TWK 50-1.1/2	Polyurethane	blue	48.0 x 39 x 2.0 mm	flat
<b>85.16.822</b>	VD 60/49	VK50-2 / TWK 50-2	Polyurethane	blue	60.0 x 49 x 2.0 mm	flat
<b>85.16.823</b>	TD 60/49	VK/ TWK 50 SS	Teflon	white	60.0 x 49 x 2.0 mm	flat
<b>85.16.829</b>	VD 76/63	VK 50-2.1/2	Polyurethane	blue	76.0 x 63 x 2.5 mm	flat



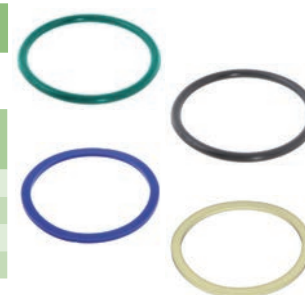
## BUNKER COUPLING, SEALING RING TYPE 80

ARTIKELNO	TYPE	TYPE COUPLING	MATERIAL	COLOUR	DIMENSIONS	MODEL
<b>85.16.831</b>	GSD 80	TWM 80	Perbunan	black	92.0 x 77 x 6.0 mm	groove
<b>85.16.832</b>	GSD 80 HY	TWM 80 SS	Hypalon	green	92.0 x 77 x 6.0 mm	groove
<b>85.16.835</b>	TWD 80	MB 80	Perbunan	black	92.0 x 77 x 6.0 mm	flat
<b>85.16.836</b>	TWD 80 HY	MB 80 SS	Hypalon	green	92.0 x 77 x 6.0 mm	flat
<b>85.16.839</b>	TD 88/77	VK/ TWK 80 SS	Teflon	white	88.0 x 77 x 3.0 mm	flat
<b>85.16.840</b>	VD 88/77	VK 80 / TWK 80	Polyurethane	blue	88.0 x 77 x 3.0 mm	flat



## BUNKER COUPLING, SEALING RING TYPE 100

ARTIKELNO	TYPE	TYPE COUPLING	MATERIAL	COLOUR	DIMENSIONS	MODEL
<b>85.16.841</b>	TWO 100 HY	MB / MK 100 SS	Hypalon	green	114 x 100 x 7.0 mm	O-ring
<b>85.16.842</b>	TWO 100	MB / MK 100	Perbunan	black	114 x 100 x 7.0 mm	O-ring
<b>85.16.843</b>	VD 114/100	VK / MK 100	Polyurethane	blue	114 x 100 x 3.0 mm	flat
<b>85.16.8431</b>	TD 114/100	VK / MK 100 SS	Teflon	white	114 x 100 x 3.0 mm	flat





## HOSE JACKET CLAMPS CONNECTION, INTERNAL THREAD

Brass hose coupling with aluminium jacket clamps.

ARTIKELNO	TYPE	INTERNAL THREAD	STEM
85.16.844	MC 38	1 1/2"	1 1/2"
85.16.845	MC 50	2"	2"



## HOSE JACKET CLAMPS CONNECTION, EXTERNAL THREAD

Brass hose coupling with aluminium jacket clamps.

ARTIKELNO	TYPE	OUTSIDE THREAD	STEM
85.16.864	VC 38	1 1/2"	1 1/2"
85.16.865	VC 50	2"	2"
85.16.868	VC 75	3"	2.1/2"
85.16.869	VC 75	3"	3"



## THREADED COUPLING FOR BUNKER HOSE

For fitting between hose and nozzle so that if the hose twists, there is no stress on the nozzle. Brass, very easy to turn and successful design unchanged for years.

ARTIKELNO	TYPE	INTERNAL THREAD	OUTSIDE THREAD
85.16.872	DG 50 Ms NBR AG	x	2"
85.16.876	DG 40 Ms NBR IG/AG	1 1/2"	1 1/2"
85.16.877	DG 50 Ms NBR IG/AG	2"	2"
85.16.881	DS 2.2	x	2" - 1.1/2"



## SEPARATE HOSE JACKET CLAMPS

ARTIKELNO	TYPE	INSIDE DIAMETER HOSE (INCH)	INSIDE DIAMETER HOSE (MM)	WALL THICKNESS HOSE
85.16.882	SC 19	3/4"	19 mm	6.0 mm
85.16.883	SC 25	1"	25 mm	6.0 mm
85.16.884	SC 32	1 1/4"	32 mm	6.0 mm
85.16.885	SC 38	1 1/2"	38 mm	6.5 mm
85.16.886	SC 50	2"	50 mm	8.0 mm
85.16.888	SC 75	3"	75 mm	8.0 mm
85.16.889	SC 100	4"	100 mm	8.0 mm

## FILLING PIPE

With brass VK 50 coupling and aluminium pipe.



ARTIKELNO	TYPE	INCH	OUTSIDE DIAMETER	INSIDE DIAMETER	LENGTH	DESCRIPTION
85.16.903	ZR 19	3/4"	24 mm	19 mm	230 mm	
85.16.904	ZR 32	1.1/4"	38 mm	32 mm	180 mm	
85.16.905	ZR 32 flex	1.1/4"	44 mm	32 mm	1,000 mm	flexible plastic pipe
85.16.906	ZR 38	1.1/2"	44 mm	38 mm	180 mm	short
85.16.907	ZR 38-330	1.1/2"	44 mm	38 mm	330 mm	long
85.16.910	ZR 50	2"	56 mm	50 mm	230 mm	short
85.16.911	ZR 550-330	2"	56 mm	50 mm	330 mm	long
85.16.912	ZRB 25	1"	35 mm	25 mm	210 mm	curved 60°

## FUEL NOZZLE, 60 DEGREE ELBOW

VK 50 x MK 50

ARTIKELNO	TYPE	DESCRIPTION
85.16.961	KR 50	60 degree elbow for fuel nozzle



## BUNKER COUPLING, REDUCING

ARTIKELNO	TYPE	DESCRIPTION
85.17.150	VK 50 x MK 80	Reducing bunker coupling



## SOCKET NIPPLE, REDUCING

Short socket nipple with lugs and 1 sealing ring.  
For bunker coupling.

ARTIKELNO	TYPE	INTERNAL THREAD	OUTSIDE THREAD
85.17.200	RS 2 x 3	2"	3"
85.17.250	RS 2.5 x 2	2 1/2"	2"
85.17.300	RS 3 x 2	3"	2"





## REDUCING NIPPLE

ARTIKELNO	TYPE	2 X OUTSIDE THREAD
<b>85.17.430</b>	RN 3 x 2	3" - 2"
<b>85.17.440</b>	RN 4 x 3	4" - 3"



## FUEL NOZZLE

Lightweight version

material : aluminium  
liquids : NOT petrol

ARTIKELNO	CAPACITANCE	INTERNAL THREAD	OUTSIDE DIAMETER NOZZLE
<b>85.18.500</b>	100 lpm / 6 m <sup>3</sup> per hour	1"	25.3 mm



## FUEL NOZZLE, AUTOMATIC

Shuts off automatically when tank is full.  
Has threaded coupling on hose side.  
Various parts are clad in plastic to prevent damage.

material : aluminium and plastic  
liquids : petrol, gas oil etc.

ARTIKELNO	CAPACITANCE	INTERNAL THREAD	OUTSIDE DIAMETER NOZZLE
<b>85.18.505</b>	50 lpm / 3 m <sup>3</sup> per hour	3/4"	20 mm
<b>85.18.509</b>	90 lpm / 5.4 m <sup>3</sup> per hour	1"	27 mm
<b>85.18.512</b>	120 lpm / 7.2 m <sup>3</sup> per hour	1"	30 mm



## FUEL NOZZLE, ELAFLEX

Professional model.  
Has threaded coupling on hose side.

material : brass  
liquids : gas oil

ARTIKELNO	TYPE	CAPACITANCE	OUTSIDE THREAD	OUTSIDE DIAMETER NOZZLE
<b>85.18.632</b>	ZVA 32.4	200 lpm / 12 m <sup>3</sup> per hour	1.1/2"	39 mm
<b>85.18.640</b>	ZV 400.1	450 lpm / 27 m <sup>3</sup> per hour	1.1/2"	MK50
<b>85.18.650</b>	ZV 500.2	750 lpm / 45 m <sup>3</sup> per hour	2"	MK50



## STORZ, COUPLING, ALUMINIUM

ARTIKELNO	KA DISTANCE	HOSE ADAPTOR
85.20.310	NA 31 D	1/2"
85.20.311	NA 31 D	3/4"
85.20.312	NA 31 D	1"
85.20.441	NA 44	3/4"
85.20.442	NA 44	1"
85.20.443	NA 44	1 1/4"
85.20.522	NA 52	1"
85.20.523	NA 52	1 1/4"
85.20.524	NA 52	1 1/2"
85.20.660	NA 66 C	(curved stem 50 degrees) 1"
85.20.661	NA 66 C	3/4"
85.20.662	NA 66 C	1"
85.20.663	NA 66 C	1 1/4"
85.20.664	NA 66 C	1 1/2"
85.20.665	NA 66 C	(50 mm) 2"
85.20.666	NA 66 C	(52 mm) 2"
85.20.814	NA 81	1 1/2"
85.20.815	NA 81	2"
85.20.816	NA 81	2 1/2"
85.20.817	NA 81	3"
85.20.895	NA 89 B	2"
85.20.896	NA 89 B	2 1/2"
85.20.897	NA 89 B	3"



## STORZ, COUPLING, INTERNAL THREAD, ALUMINIUM

ARTIKELNO	KA DISTANCE	INTERNAL THREAD
85.21.311	NA 31 D	3/4"
85.21.312	NA 31 D	1"
85.21.442	NA 44	1"
85.21.443	NA 44	1 1/4"
85.21.522	NA 52	1"
85.21.523	NA 52	1 1/4"
85.21.524	NA 52	1 1/2"
85.21.525	NA 52	2"
85.21.661	NA 66 C	3/4"
85.21.662	NA 66 C	1"
85.21.663	NA 66 C	1 1/4"
85.21.664	NA 66 C	1 1/2"
85.21.665	NA 66 C	2"
85.21.666	NA 66 C	2 1/2"
85.21.815	NA 81	2"
85.21.816	NA 81	2 1/2"
85.21.817	NA 81	3"
85.21.895	NA 89 B	2"
85.21.896	NA 89 B	2 1/2"
85.21.897	NA 89 B	3"





## STORZ, COUPLING, EXTERNAL THREAD, ALUMINIUM

ARTIKELNO	KA DISTANCE	OUTSIDE THREAD
85.22.311	NA 31 D	3/4"
85.22.312	NA 31 D	1"
85.22.442	NA 44	1"
85.22.443	NA 44	1 1/4"
85.22.523	NA 52	1 1/4"
85.22.524	NA 52	1 1/2"
85.22.525	NA 52	2"
85.22.662	NA 66 C	1"
85.22.663	NA 66 C	1 1/4"
85.22.664	NA 66 C	1 1/2"
85.22.665	NA 66 C	2"
85.22.666	NA 66 C	2 1/2"
85.22.815	NA 81	2"
85.22.816	NA 81	2 1/2"
85.22.817	NA 81	3"
85.22.895	NA 89 B	2"
85.22.896	NA 89 B	2 1/2"
85.22.897	NA 89 B	3"



## STORZ, BLANK CAP, ALUMINIUM

With galvanised steel chain.

ARTIKELNO	KA DISTANCE
85.23.310	NA 31 D
85.23.440	NA 44
85.23.520	NA 52
85.23.660	NA 66 C
85.23.810	NA 81
85.23.890	NA 89 B

## STORZ, SEALING RING

Suitable for suction and discharge purposes.

perbunan : oil and petrol resistant  
 viton : resistant to most chemicals

ARTIKELNO	KA DISTANCE	INSIDE DIAMETER	OUTSIDE DIAMETER	MATERIAL	COLOUR
<b>85.24.310</b>	NA 31 D	18 mm	29 mm	Perbunan	black
<b>85.24.440</b>	NA 44	25 mm	42 mm	Perbunan	black
<b>85.24.520</b>	NA 52	32 mm	49 mm	Perbunan	black
<b>85.24.660</b>	NA 66 C	47 mm	64 mm	Perbunan	black
<b>85.24.661</b>	NA 66 C	47 mm	64 mm	Perbunan	white
<b>85.24.810</b>	NA 81	60 mm	79 mm	Perbunan	black
<b>85.24.890</b>	NA 89 B	67 mm	87 mm	Perbunan	black
<b>85.24.910</b>	NA 105	80 mm	103 mm	Perbunan	black
<b>85.24.930</b>	NA 133	102 mm	130 mm	Perbunan	black
<b>85.24.931</b>	NA 31 D	18 mm	29 mm	Viton	green
<b>85.24.952</b>	NA 52	32 mm	49 mm	Viton	green
<b>85.24.966</b>	NA 66 C	47 mm	64 mm	Viton	green
<b>85.24.989</b>	NA 89 B	67 mm	87 mm	Viton	green
<b>85.24.999</b>	NA133	102 mm	130 mm	Viton	green



## STORZ, SPANNER

For all sizes.

ARTIKELNO	KA DISTANCE	MATERIAL
<b>85.25.315</b>	66 - 89 - 115 - 133	cast iron
<b>85.25.335</b>	66 - 81 - 89 - 115	steel



# HOSE CONNECTIONS

## KAMLOK QUICK COUPLING, ALUMINIUM OR STAINLESS STEEL

This coupling is used widely on bunker boats and road tankers.  
The female part has a rubber ring and two closing levers.  
Male part has a locking groove.

housing : aluminium or stainless steel  
claws : stainless steel  
levers : stainless steel  
rings : spring steel with cadmium coating  
sealing ring : NBR rubber



## KAMLOK QUICK COUPLING, HOSE STEM, ALUMINIUM

ARTIKELNO	FEMALE OR MALE PART	STEM	WORKING PRESSURE IN BAR
85.26.106	F part C	1/2"	16
85.26.107	F part C	3/4"	16
85.26.110	F part C	1"	16
85.26.112	F part C	1.1/4"	16
85.26.115	F part C	1.1/2"	16
85.26.120	F part C	2"	16
85.26.125	F part C	2.1/2"	10
85.26.130	F part C	3"	8
85.26.140	F part C	(Ulex submersible pump) 4"	7
85.26.160	F part C	6"	5
85.26.206	M part E	1/2"	16
85.26.207	M part E	3/4"	16
85.26.210	M part E	1"	16
85.26.212	M part E	1.1/4"	16
85.26.215	M part E	1.1/2"	16
85.26.220	M part E	2"	16
85.26.225	M part E	2.1/2"	10
85.26.230	M part E	3"	8
85.26.240	M part E	4"	7
85.26.260	M part E	6"	5



## KAMLOK QUICK COUPLING, INTERNAL THREAD, ALUMINIUM

ARTIKELNO	FEMALE OR MALE PART	INTERNAL THREAD	WORKING PRESSURE IN BAR
85.26.306	F part D	1/2"	16
85.26.307	F part D	3/4"	16
85.26.310	F part D	1"	16
85.26.312	F part D	1.1/4"	16
85.26.315	F part D	1.1/2"	16
85.26.320	F part D	2"	16
85.26.325	F part D	2.1/2"	10
85.26.330	F part D	3"	8
85.26.340	F part D	4"	7
85.26.360	F part D	6"	5
85.26.406	M part A	1/2"	16
85.26.407	M part A	3/4"	16
85.26.410	M part A	1"	16
85.26.412	M part A	1.1/4"	16
85.26.415	M part A	1.1/2"	16
85.26.420	M part A	2"	16
85.26.425	M part A	2.1/2"	10
85.26.430	M part A	3"	8
85.26.440	M part A	4"	7
85.26.460	M part A	6"	5

## KAMLOK QUICK COUPLING, EXTERNAL THREAD, ALUMINIUM

ARTIKELNO	FEMALE OR MALE PART	OUTSIDE THREAD	WORKING PRESSURE IN BAR
85.26.506	F part B	1/2"	16
85.26.507	F part B	3/4"	16
85.26.510	F part B	1"	16
85.26.512	F part B	1.1/4"	16
85.26.515	F part B	1.1/2"	16
85.26.520	F part B	2"	16
85.26.525	F part B	2.1/2"	10
85.26.530	F part B	3"	8
85.26.540	F part B	4"	7
85.26.560	F part B	6"	5
85.26.606	M part F	1/2"	16
85.26.607	M part F	3/4"	16
85.26.610	M part F	1"	16
85.26.612	M part F	1.1/4"	16
85.26.615	M part F	1.1/2"	16
85.26.620	M part F	2"	16
85.26.625	M part F	2.1/2"	10
85.26.630	M part F	3"	8
85.26.640	M part F	(Ulex submersible pump) 4"	7
85.26.660	M part F	6"	5



## KAMLOK QUICK COUPLING, BLANK CAP, ALUMINIUM

ARTIKELNO	FEMALE OR MALE PART	CAP	WORKING PRESSURE IN BAR
85.26.706	F part DC	1/2"	16
85.26.707	F part DC	3/4"	16
85.26.710	F part DC	1"	16
85.26.712	F part DC	1.1/4"	16
85.26.715	F part DC	1.1/2"	16
85.26.720	F part DC	2"	16
85.26.725	F part DC	2.1/2"	10
85.26.730	F part DC	3"	8
85.26.740	F part DC	4"	7
85.26.760	F part DC	6"	5



## KAMLOK QUICK COUPLING, BLANK PLUG, ALUMINIUM

ARTIKELNO	FEMALE OR MALE PART	PLUG	WORKING PRESSURE IN BAR
85.26.806	M part DP	1/2"	16
85.26.807	M part DP	3/4"	16
85.26.810	M part DP	1"	16
85.26.812	M part DP	1.1/4"	16
85.26.815	M part DP	1.1/2"	16
85.26.820	M part DP	2"	16
85.26.825	M part DP	2.1/2"	10
85.26.830	M part DP	3"	8
85.26.840	M part DP	4"	7
85.26.860	M part DP	6"	5



# HOSE CONNECTIONS



## KAMLOK QUICK COUPLING, HOSE STEM, STAINLESS STEEL

ARTIKELNO	FEMALE OR MALE PART	STEM	WORKING PRESSURE IN BAR
85.27.106	F part C	1/2"	16
85.27.107	F part C	3/4"	16
85.27.110	F part C	1"	16
85.27.112	F part C	1.1/4"	16
85.27.115	F part C	1.1/2"	16
85.27.120	F part C	2"	16
85.27.125	F part C	2.1/2"	10
85.27.130	F part C	3"	10
85.27.140	F part C	(Ulex submersible pump) 4"	8
85.27.160	F part C	6"	5
85.27.206	M part E	1/2"	16
85.27.207	M part E	3/4"	16
85.27.210	M part E	1"	16
85.27.212	M part E	1.1/4"	16
85.27.215	M part E	1.1/2"	16
85.27.220	M part E	2"	16
85.27.225	M part E	2.1/2"	10
85.27.230	M part E	3"	10
85.27.240	M part E	4"	8
85.27.260	M part E	6"	5



## KAMLOK QUICK COUPLING, INTERNAL THREAD, STAINLESS STEEL

ARTIKELNO	FEMALE OR MALE PART	INTERNAL THREAD	WORKING PRESSURE IN BAR
85.27.306	F part D	1/2"	16
85.27.307	F part D	3/4"	16
85.27.310	F part D	1"	16
85.27.312	F part D	1.1/4"	16
85.27.315	F part D	1.1/2"	16
85.27.320	F part D	2"	16
85.27.325	F part D	2.1/2"	10
85.27.330	F part D	3"	10
85.27.340	F part D	4"	8
85.27.360	F part D	6"	5
85.27.406	M part A	1/2"	16
85.27.407	M part A	3/4"	16
85.27.410	M part A	1"	16
85.27.412	M part A	1.1/4"	16
85.27.415	M part A	1.1/2"	16
85.27.420	M part A	2"	16
85.27.425	M part A	2.1/2"	10
85.27.430	M part A	3"	10
85.27.440	M part A	4"	8
85.27.460	M part A	6"	5

## KAMLOK QUICK COUPLING, EXTERNAL THREAD, STAINLESS STEEL

ARTIKELNO	FEMALE OR MALE PART	OUTSIDE THREAD	WORKING PRESSURE IN BAR
85.27.506	F part B	1/2"	16
85.27.507	F part B	3/4"	16
85.27.510	F part B	1"	16
85.27.512	F part B	1.1/4"	16
85.27.515	F part B	1.1/2"	16
85.27.520	F part B	2"	16
85.27.525	F part B	2.1/2"	10
85.27.530	F part B	3"	10
85.27.540	F part B	4"	8
85.27.560	F part B	6"	5
85.27.606	M part F	1/2"	16
85.27.607	M part F	3/4"	16
85.27.610	M part F	1"	16
85.27.612	M part F	1.1/4"	16
85.27.615	M part F	1.1/2"	16
85.27.620	M part F	2"	16
85.27.625	M part F	2.1/2"	10
85.27.630	M part F	3"	10
85.27.640	M part F	(Ulex submersible pump) 4"	8
85.27.660	M part F	6"	5



## KAMLOK QUICK COUPLING, BLANK CAP, STAINLESS STEEL

ARTIKELNO	FEMALE OR MALE PART	CAP	WORKING PRESSURE IN BAR
85.27.706	F part DC	1/2"	16
85.27.707	F part DC	3/4"	16
85.27.710	F part DC	1"	16
85.27.712	F part DC	1.1/4"	16
85.27.715	F part DC	1.1/2"	16
85.27.720	F part DC	2"	16
85.27.725	F part DC	2.1/2"	10
85.27.730	F part DC	3"	10
85.27.740	F part DC	4"	8
85.27.760	F part DC	6"	5



## KAMLOK QUICK COUPLING, BLANK PLUG, STAINLESS STEEL

ARTIKELNO	FEMALE OR MALE PART	PLUG	WORKING PRESSURE IN BAR
85.27.806	M part DP	1/2"	16
85.27.807	M part DP	3/4"	16
85.27.810	M part DP	1"	16
85.27.812	M part DP	1.1/4"	16
85.27.815	M part DP	1.1/2"	16
85.27.820	M part DP	2"	16
85.27.825	M part DP	2.1/2"	10
85.27.830	M part DP	3"	10
85.27.840	M part DP	4"	8
85.27.860	M part DP	6"	5





## KAMLOK, SEALING RING, NBR RUBBER

ARTIKELNO	SIZE	OUTSIDE DIAMETER	INSIDE DIAMETER	THICKNESS	MATERIAL
85.33.107	1/2"	25 mm	17 mm	4 mm	NBR
85.33.109	3/4"	35 mm	22 mm	5 mm	NBR
85.33.110	1"	40 mm	27 mm	6 mm	NBR
85.33.112	1.1/4"	49 mm	35 mm	6 mm	NBR
85.33.115	1.1/2"	55 mm	41 mm	6 mm	NBR
85.33.120	2"	67 mm	51 mm	6 mm	NBR
85.33.125	2.1/2"	79 mm	60 mm	6 mm	NBR
85.33.130	3"	95 mm	76 mm	6 mm	NBR
85.33.140	4"	124 mm	101 mm	6 mm	NBR
85.33.160	6"	180 mm	153 mm	6 mm	NBR



## KAMLOK, SEALING RING, VITON

ARTIKELNO	SIZE	OUTSIDE DIAMETER	INSIDE DIAMETER	THICKNESS	MATERIAL
85.33.307	1/2"	25 mm	17 mm	4 mm	viton
85.33.309	3/4"	35 mm	22 mm	5 mm	viton
85.33.310	1"	40 mm	27 mm	6 mm	viton
85.33.312	1.1/4"	49 mm	35 mm	6 mm	viton
85.33.315	1.1/2"	55 mm	41 mm	6 mm	viton
85.33.320	2"	67 mm	51 mm	6 mm	viton
85.33.325	2.1/2"	79 mm	60 mm	6 mm	viton
85.33.330	3"	95 mm	76 mm	6 mm	viton
85.33.340	4"	124 mm	101 mm	6 mm	viton
85.33.360	6"	180 mm	153 mm	6 mm	viton



## KAMLOK, SEALING RING, PTFE (TEFLON)/NBR RUBBER

Envelope gasket with Teflon (PTFE) outside and NBR-rubber inside.

ARTIKELNO	SIZE	OUTSIDE DIAMETER	INSIDE DIAMETER	THICKNESS	MATERIAL
85.33.407	1/2"	25 mm	17 mm	4 mm	Teflon / NBR
85.33.409	3/4"	35 mm	22 mm	5 mm	Teflon / NBR
85.33.410	1"	40 mm	27 mm	6 mm	Teflon / NBR
85.33.412	1.1/4"	49 mm	35 mm	6 mm	Teflon / NBR
85.33.415	1.1/2"	55 mm	41 mm	6 mm	Teflon / NBR
85.33.420	2"	67 mm	51 mm	6 mm	Teflon / NBR
85.33.425	2.1/2"	79 mm	60 mm	6 mm	Teflon / NBR
85.33.430	3"	95 mm	76 mm	6 mm	Teflon / NBR
85.33.440	4"	124 mm	101 mm	6 mm	Teflon / NBR



## KAMLOK, CHAIN

ARTIKELNO	DESCRIPTION	LENGTH	MATERIAL
<b>85.16.013</b>	chain	300 mm (K 300)	brass with stainless steel 316 hooks
<b>85.16.014</b>	chain	300 mm (K 300 SS)	stainless steel



## KAMLOK, PARTS

ARTIKELNO	DESCRIPTION
<b>85.33.501</b>	kamlok separate stainless steel retaining pin 1/2" to 6"
<b>85.33.502</b>	kamlok separate stainless steel washer 1/2" to 2 1/2"
<b>85.33.503</b>	kamlok separate stainless steel washer 3" to 6"



## KAMLOK, LEVER SET

comprises : 1 lever, 1 ring and 1 closure pin

ARTIKELNO	SIZE
<b>85.33.509</b>	1/2" - 3/4"
<b>85.33.510</b>	1"
<b>85.33.512</b>	1.1/4" - 2.1/2"
<b>85.33.530</b>	3" - 5"
<b>85.33.560</b>	6"



# SUCTION STRAINERS AND VALVES



## LOW SUCTION STRAINER AND MARINE VALVE

ARTIKELNO	TYPE	THREAD	WIDTH DIAMETER	OUTSIDE DIAMETER	MINIMUM WATER HEIGHT	MATERIAL	MATERIAL SEAL
85.35.150	low suction strainer	2" external thread	8 mm	100 mm	10 mm	stainless steel 304	
85.35.155	marine valve with spring	2" internal thread	8 mm	100 mm	10 mm	stainless steel 304 / brass	NBR
85.35.156	marine valve with hinge	2" internal thread	8 mm	100 mm	10 mm	stainless steel 304 / brass	NBR



## FOOT VALVE

Suction strainer with spring valve.

ARTIKELNO	INTERNAL THREAD	WIDTH DIAMETER	OUTSIDE DIAMETER	MINIMUM WATER HEIGHT	MATERIAL	MATERIAL SEAL	WORKING PRESSURE IN BAR
85.35.412	1/2"	2 mm	38 mm	30 mm	brass	NBR	10
85.35.419	3/4"	2 mm	45 mm	35 mm	brass	NBR	10
85.35.425	1"	3 mm	50 mm	40 mm	brass	NBR	10
85.35.432	1.1/4"	4 mm	60 mm	50 mm	brass	NBR	8
85.35.438	1.1/2"	4 mm	70 mm	55 mm	brass	NBR	8
85.35.450	2"	4 mm	80 mm	65 mm	brass	NBR	8
85.35.463	2.1/2"	5 mm	105 mm	70 mm	brass	NBR	6
85.35.475	3"	6 mm	120 mm	100 mm	brass	NBR	6
85.35.499	4"	6 mm	145 mm	108 mm	brass	NBR	6



## FILTER

To be used with spring action non-return valve (85.36.309 to 85.36.375) or for other purposes.  
Is used in shower tray (submersible pump reservoir) as coarse filter.

ARTIKELNO	OUTSIDE THREAD	MATERIAL
85.35.609	3/8"	stainless steel 304
85.35.612	1/2"	stainless steel 304
85.35.619	3/4"	stainless steel 304
85.35.625	1"	stainless steel 304
85.35.632	1.1/4"	stainless steel 304
85.35.638	1.1/2"	stainless steel 304
85.35.650	2"	stainless steel 304

## FILTER, Y

Filter for installation in pipes with stainless steel 304 mesh filter.

ARTIKELNO	2 X INTERNAL THREAD	MATERIAL	MICRON	WORKING PRESSURE IN BAR
85.35.809	3/8"	brass	500	20
85.35.812	1/2"	brass	500	20
85.35.819	3/4"	brass	500	20
85.35.825	1"	brass	500	20
85.35.832	1.1/4"	brass	500	20
85.35.838	1.1/2"	brass	500	20
85.35.850	2"	brass	500	20



## NON-RETURN VALVE WITH HINGE

For horizontal and vertical use.

Resistant to hot and cold water, oil, petrol, kerosene, glycerine, acetylene and compressed air.

ARTIKELNO	2 X INTERNAL THREAD	MATERIAL	MATERIAL SEAL	OPENING PRESSURE IN BAR	MAX. TEMPERATURE	WORKING PRESSURE IN BAR
85.36.009	3/8"	brass	NBR	0.5	90 °C	10
85.36.012	1/2"	brass	NBR	0.5	90 °C	10
85.36.019	3/4"	brass	NBR	0.5	90 °C	10
85.36.025	1"	brass	NBR	0.5	90 °C	10
85.36.032	1.1/4"	brass	NBR	0.5	90 °C	10
85.36.038	1.1/2"	brass	NBR	0.5	90 °C	10
85.36.050	2"	brass	NBR	0.5	90 °C	10
85.36.063	2.1/2"	brass	NBR	0.5	90 °C	10
85.36.075	3"	brass	NBR	0.5	90 °C	10



## NON-RETURN VALVE WITH SPRING

For horizontal and vertical use.

Resistant to hot and cold water, oil, petrol, kerosene, glycerine, acetylene and compressed air.

ARTIKELNO	2 X INTERNAL THREAD	MATERIAL	MATERIAL SEAL	MATERIAL VALVE SEAT	MATERIAL SPRING	MAX. TEMPERATURE	WORKING PRESSURE IN BAR
85.36.309	3/8"	brass	NBR	Teflon	stainless steel 304	110 °C	10
85.36.312	1/2"	brass	NBR	Teflon	stainless steel 304	110 °C	10
85.36.319	3/4"	brass	NBR	Teflon	stainless steel 304	110 °C	10
85.36.325	1"	brass	NBR	Teflon	stainless steel 304	110 °C	10
85.36.332	1.1/4"	brass	NBR	Teflon	stainless steel 304	110 °C	10
85.36.338	1.1/2"	brass	NBR	Teflon	stainless steel 304	110 °C	10
85.36.350	2"	brass	NBR	Teflon	stainless steel 304	110 °C	10
85.36.363	2.1/2"	brass	NBR	Teflon	stainless steel 304	110 °C	8
85.36.375	3"	brass	NBR	Teflon	stainless steel 304	110 °C	8





## GATE VALVE, BRASS

Brass gate valve with cast iron hand wheel, spindle does not rise.

operating pressure : 10 bar with steam  
: 16 bar with water, oil or gas  
standard : DIN 259, BS 21 and Uni 338

ARTIKELNO	2 X INTERNAL THREAD	INSTALLED LENGTH	MATERIAL	MATERIAL SEAL
85.41.012	1/2"	39 mm	brass	Teflon
85.41.019	3/4"	42 mm	brass	Teflon
85.41.025	1"	47 mm	brass	Teflon
85.41.032	1.1/4"	52 mm	brass	Teflon
85.41.038	1.1/2"	56 mm	brass	Teflon
85.41.050	2"	63 mm	brass	Teflon
85.41.063	2.1/2"	79 mm	brass	Teflon
85.41.075	3"	84 mm	brass	Teflon
85.41.099	4"	100 mm	brass	Teflon



## GATE VALVE, BRONZE

Bronze gate valve with stainless steel hand wheel, spindle does not rise.

operating pressure : 10 bar with steam  
: 16 bar with water, oil or gas  
standard : DIN 259, BS 21 and Uni 338

ARTIKELNO	2 X INTERNAL THREAD	INSTALLED LENGTH	MATERIAL	MATERIAL SEAL
85.41.112	1/2"	39 mm	bronze	Teflon
85.41.119	3/4"	42 mm	bronze	Teflon
85.41.125	1"	47 mm	bronze	Teflon
85.41.132	1.1/4"	52 mm	bronze	Teflon
85.41.138	1.1/2"	56 mm	bronze	Teflon
85.41.150	2"	63 mm	bronze	Teflon
85.41.163	2.1/2"	79 mm	bronze	Teflon
85.41.175	3"	84 mm	bronze	Teflon
85.41.199	4"	100 mm	bronze	Teflon



## GATE VALVE, SEPARATE WHEEL

ARTIKELNO	SIZE	DIAMETER	DIMENSIONS CONNECTING SQUARE
85.41.212	1/2"	45 mm	6.5 mm
85.41.219	3/4"	50 mm	6.5 mm
85.41.225	1"	54 mm	6.5 mm
85.41.232	1.1/4"	59 mm	7.1 mm
85.41.238	1.1/2"	70 mm	8.6 mm
85.41.250	2"	79 mm	9.1 mm
85.41.263	2.1/2"	101 mm	10.0 mm
85.41.275	3"	100 mm	10.2 mm
85.41.299	4"	120 mm	12.0 mm

## FIRE HYDRANT

material : brass  
 connections : inlet on underside : 2" external thread  
 : outlet on side : 2" external thread (at right angles 30°)

ARTIKELNO	DESCRIPTION
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<b>85.42.350</b>	Fire valve
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<b>85.42.401</b>	Coupling with rotatable nut (2" INT x EXT)
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<b>85.42.420</b>	Hand wheel for fire hydrant
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## HYDRANT PIPE, DN50

Has 2 valves with NA 66 (C) connection.  
 Also has 2 handles.

material : aluminium  
 length : 103 cm  
 weight : 6.6 kg

ARTIKELNO	DESCRIPTION
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<b>85.42.502</b>	Hydrant pipe DN50
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<b>85.42.509</b>	Separate packing ring
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## HYDRANT KEY

Transverse key with tip for opening drain cover.

material : galvanized steel  
 type : DIN 3223 C  
 connection : 32 x 32 x 32 mm conical  
 length : 107 cm  
 width : 43 cm  
 weight : 5.6 kg

ARTIKELNO	DESCRIPTION
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<b>85.42.901</b>	Hydrant key
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# VALVES



## BALL VALVE, VLDL, BRASS

Industrial quality.  
Fully opening with solid ball.  
Steel handle with PVC cladding.  
Suitable for water, oil and gas.

ARTIKELNO	2 X INTERNAL THREAD	INSTALLED LENGTH	MATERIAL	MATERIAL SEAL	WORKING PRESSURE IN BAR	MAX. TEMPERATURE
85.43.006	1/4"	40.5 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.009	3/8"	40.5 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.012	1/2"	48.5 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.019	3/4"	54.5 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.025	1"	66.0 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.032	1.1/4"	76.0 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.038	1.1/2"	88.0 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.050	2"	98.5 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.063	2.1/2"	132.0 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.075	3"	154.0 mm	brass, nickel-plated	Teflon	25	120 °C
85.43.099	4"	179.0 mm	brass, nickel-plated	Teflon	25	120 °C



## BALL VALVE, VLDL, STAINLESS STEEL 316

Industrial quality.  
Fully opening with solid ball.  
Stainless steel handle with PVC cladding.  
Suitable for water, oil and gas.

ARTIKELNO	2 X INTERNAL THREAD	INSTALLED LENGTH	MATERIAL	MATERIAL SEAL	WORKING PRESSURE IN BAR	MAX. TEMPERATURE
85.44.006	1/4"	50 mm	Stainless steel 316	Teflon	64	120 °C
85.44.009	3/8"	54 mm	Stainless steel 316	Teflon	64	120 °C
85.44.012	1/2"	57 mm	Stainless steel 316	Teflon	64	120 °C
85.44.019	3/4"	68 mm	Stainless steel 316	Teflon	64	120 °C
85.44.025	1"	80 mm	Stainless steel 316	Teflon	64	120 °C
85.44.032	1.1/4"	91 mm	Stainless steel 316	Teflon	64	120 °C
85.44.038	1.1/2"	103 mm	Stainless steel 316	Teflon	64	120 °C
85.44.050	2"	124 mm	Stainless steel 316	Teflon	64	120 °C
85.44.063	2.1/2"	160 mm	Stainless steel 316	Teflon	64	120 °C
85.44.075	3"	185 mm	Stainless steel 316	Teflon	64	120 °C
85.44.099	4"	225 mm	Stainless steel 316	Teflon	64	120 °C

## BALL VALVE, 3-WAY

Provided with T1 boring (L boring available on request).  
Fully opening with solid ball.  
Aluminium handle.  
Suitable for water, oil and gas.



ARTIKELNO	3 X INTERNAL THREAD	INSTALLED LENGTH	MATERIAL	MATERIAL SEAL	WORKING PRESSURE IN BAR
85.45.006	1/4"	78 x 60 mm	brass, nickel-plated	Teflon	16
85.45.009	3/8"	50 x 40 mm	brass, nickel-plated	Teflon	16
85.45.012	1/2"	77 x 60 mm	brass, nickel-plated	Teflon	16
85.45.019	3/4"	70 x 55 mm	brass, nickel-plated	Teflon	16
85.45.025	1"	80 x 70 mm	brass, nickel-plated	Teflon	16
85.45.032	1.1/4"	105 x 81 mm	brass, nickel-plated	Teflon	16
85.45.038	1.1/2"	110 x 100 mm	brass, nickel-plated	Teflon	16
85.45.050	2"	130 x 110 mm	brass, nickel-plated	Teflon	16

		L-Boring	T-Boring
Positie	90°		
	0°		
ken-merk		L	T1

## EMERGENCY SHUT-OFF VALVE

For shutting off gas oil pipes in the engine room in case of fire and emergency situations.  
Aluminium handle.



ARTIKELNO	2 X INTERNAL THREAD	INTERNAL INSTALLED LENGTH	EXTERNAL LENGTH	MATERIAL	MATERIAL SEAL	WORKING PRESSURE IN BAR	MAX. TEMPERATURE
85.48.009	3/8"	22 mm	44 mm	bronze	Teflon	16	90 °C
85.48.012	1/2"	20 mm	46 mm	bronze	Teflon	16	90 °C
85.48.019	3/4"	23 mm	51 mm	bronze	Teflon	16	90 °C
85.48.025	1"	25 mm	57 mm	bronze	Teflon	16	90 °C
85.48.032	1.1/4"	27 mm	61 mm	bronze	Teflon	16	90 °C
85.48.038	1.1/2"	29 mm	67 mm	bronze	Teflon	16	90 °C
85.48.050	2"	37 mm	77 mm	bronze	Teflon	16	90 °C
85.48.063	2.1/2"	46 mm	86 mm	bronze	Teflon	16	90 °C
85.48.075	3"	49 mm	91 mm	bronze	Teflon	13	90 °C
85.48.099	4"	54 mm	102 mm	bronze	Teflon	10	90 °C

## DRUM TAP, DRAIN VALVE

ARTIKELNO	DESCRIPTION	OUTSIDE THREAD	MATERIAL
85.51.119	Drum tap	3/4"	PVC
85.51.150	Drum tap	2"	PVC
85.51.219	Drum tap, self-closing	3/4"	galvanized steel



# DECK FILLERS



## DECK FILLER, COMPLETE

Pipe thread.

ARTIKELNO	THREAD	TYPE	MATERIAL
85.55.425	1"	groove	brass
85.55.438	1 1/2"	groove	brass
85.55.450	2"	groove	brass
85.55.463	2 1/2"	2 holes	bronze
85.55.475	3"	2 holes	bronze
85.55.499	4"	2 holes	bronze
85.55.500	6"	2 holes	brass



## DECK FILLER, SEPARATE SCREW PLUG

Pipe thread.

ARTIKELNO	THREAD	TYPE	MATERIAL
85.55.525	1"	groove	brass
85.55.538	1 1/2"	groove	brass
85.55.550	2"	groove	brass
85.55.563	2 1/2"	2 holes	bronze
85.55.575	3"	2 holes	bronze
85.55.599	4"	2 holes	bronze



## DECK FILLER CAP, KEY FOR GROOVED DECK FILLER CAP

ARTIKELNO	DESCRIPTION	MATERIAL
85.55.602	Key for grooved deck filler cap	stainless steel 316



## DECK FILLER CAP, KEY FOR 2.5" TILL 4"

ARTIKELNO	DESCRIPTION	MATERIAL
85.55.610	Key for deck filler 2.5" - 4"	stainless steel 316



## DECK FILLER CAP, KEY FOR 6"

ARTIKELNO	DESCRIPTION	MATERIAL	DISTANCE BETWEEN PINS	DIMENSIONS	WEIGHT
85.55.615	Key for deck filler 6"	brass	70 mm	300 x 20 x 11 mm	640 gr



## PIPE CAP WITH HEXAGON

ARTIKELNO	INTERNAL THREAD	MATERIAL
85.56.425	1"	brass
85.56.432	1.1/4"	brass
85.56.438	1.1/2"	brass
85.56.450	2"	brass
85.56.463	2.1/2"	brass



## PIPE CAP / OIL FILLER CAP / FILL LEVEL CAP / TANK CAP

Lockable version with brass chain.

ARTIKELNO	PIPE CONNECTION INTERNAL THREAD	CAP INTERNAL THREAD	DIAMETER HOLE FOR LOCK	MATERIAL
85.56.725	1"	1.1/4"	6 mm	brass
85.56.750	2"	2"	10 mm	brass
85.56.751	2"	2.1/2"	11 mm	brass
85.56.838	1.1/2"	1.1/2"	8 mm	brass
85.56.850	2"	2"	8 mm	brass
85.56.863	2.1/2"	2.1/2"	8 mm	brass
85.56.875	3"	3"	10 mm	brass



# FLAME ARRESTOR GRIDS



## FLAME ARRESTOR GRID, INTERNAL THREAD

housing : brass GMs 65  
 grid : single new silver grid  
 opening : approx. 40% open / approx. 60% closed

ARTIKELNO	INTERNAL THREAD	WIDTH DIAMETER
85.57.119	3/4"	19 mm
85.57.125	1"	25 mm
85.57.132	1 1/4"	32 mm
85.57.138	1 1/2"	38 mm
85.57.150	2"	48 mm
85.57.163	2 1/2"	63 mm
85.57.175	3"	74 mm
85.57.199	4"	99 mm
85.57.248	6"	148 mm



## FLAME ARRESTOR GRID, OUTSIDE THREAD

housing : brass GMs 65  
 grid : single new silver grid  
 opening : approx. 40% open / approx. 60% closed

ARTIKELNO	OUTSIDE THREAD	WIDTH DIAMETER
85.57.319	3/4"	15 mm
85.57.325	1"	20 mm
85.57.332	1 1/4"	27 mm
85.57.338	1 1/2"	34 mm
85.57.350	2"	46 mm
85.57.363	2 1/2"	60 mm
85.57.375	3"	70 mm
85.57.399	4"	90 mm



## FLAME ARRESTOR GRID, REDUCING

housing : brass GMs 65  
 grid : single new silver grid  
 opening : approx. 40% open / approx. 60% closed

ARTIKELNO	INTERNAL THREAD	WIDTH DIAMETER
85.57.525	1"	64 mm
85.57.532	1 1/4"	64 mm
85.57.538	1 1/2"	73 mm
85.57.550	2"	73 mm
85.57.563	2 1/2"	100 mm
85.57.575	3"	120 mm
85.57.599	4"	150 mm

## FLAME ARRESTOR GRID CERTIFIED, INTERNAL THREAD

Applies to demands of EN ISO 16852:2010 ATEX 94/9 EC, Explosion group IIB

housing : brass GMS 65  
 grid : single new silver grid  
 opening : approx. 40% open / approx. 60% closed

ARTIKELNO	INTERNAL THREAD	WIDTH DIAMETER
85.58.225	1"	25 mm
85.58.232	1.1/4"	32 mm
85.58.238	1.1/2"	38 mm
85.58.250	2"	48 mm
85.58.263	2.1/2"	63 mm
85.58.275	3"	74 mm
85.58.299	4"	99 mm
85.58.328	5"	128 mm
85.58.348	6"	148 mm



## FLAME ARRESTOR GRID CERTIFIED, EXTERNAL THREAD

Applies to demands of EN ISO 16852:2010 ATEX 94/9 EC, Explosion group IIB

housing : brass GMS 65  
 grid : single new silver grid  
 opening : approx. 40% open / approx. 60% closed

ARTIKELNO	OUTSIDE THREAD	WIDTH DIAMETER
85.58.425	1"	20 mm
85.58.432	1.1/4"	27 mm
85.58.438	1.1/2"	34 mm
85.58.450	2"	46 mm
85.58.463	2.1/2"	60 mm
85.58.475	3"	70 mm
85.58.499	4"	90 mm
85.58.528	5"	128 mm
85.58.548	6"	148 mm



## FLAME ARRESTOR GRID CERTIFIED, REDUCING

Applies to demands of EN ISO 16852:2010 ATEX 94/9 EC, Explosion group IIB

housing : brass GMS 65  
 grid : single new silver grid  
 opening : approx. 40% open / approx. 60% closed

ARTIKELNO	INTERNAL THREAD	WIDTH DIAMETER
85.58.625	1"	64 mm
85.58.632	1.1/4"	64 mm
85.58.638	1.1/2"	73 mm
85.58.650	2"	73 mm
85.58.663	2.1/2"	100 mm
85.58.675	3"	120 mm
85.58.699	4"	150 mm



## SITE GLASS ACCESSORIES



### SIGHT GLASS VALVE 12–13 MM FOR GAS OIL, DIESEL, WATER

For sight glass : 12-13 mm  
Fluids : gas oil, diesel, water

ARTIKELNO	DESCRIPTION	TYPE	MATERIAL	OUTSIDE THREAD	WORKING PRESSURE IN BAR
85.61.013	gate valve	plug	brass	1/2"	10
85.61.213	gate valve	drain valve	brass	1/2"	10
85.61.413	self-closing	plug	brass	1/2"	10
85.61.613	self-closing	drain valve	brass	1/2"	10
85.61.713	sight glass connector	for connecting two sight glasses	brass	1/2"	10
85.61.813	upper elbow	drilled through to the bend	brass	1/2"	10
85.61.814	lower elbow	+ fender for sight glass	brass	1/2"	10

### SIGHT GLASS VALVE 12–13 MM, PARTS



ARTIKELNO	DESCRIPTION	DIMENSIONS
85.61.901	separate hand wheel for sight glass valve	
85.61.905	separate shut-off plug	1/4" outside thread
85.61.910	separate drain valve	1/4" outside thread
85.61.915	separate nut for sight glass valve	30 mm
85.61.917	separate nut for sight glass elbow	27 mm
85.61.918	separate nut for valve spindle	22 mm
85.61.920	separate pressure ring for sight glass valve or elbow	
85.61.925	separate sight glass self-closing valve spring	
85.61.926	separate button for self-closing sight glass valve	
85.61.928	separate rubber shut-off bush for self-closing sight glass valve	

## SIGHT GLASS, 2 METRE LENGTH

ARTIKELNO	LENGTH	OUTSIDE DIAMETER	INSIDE DIAMETER	MATERIAL	WORKING PRESSURE IN BAR	MAX. TEMPERATURE
85.62.210	2 m	10 mm	7 mm	plexiglas	6.2	70 °C
85.62.212	2 m (for our sight glass valve)	12 mm	8 mm	plexiglas	6.7	70 °C
85.62.213	2 m (for our sight glass valve)	13 mm	9 mm	plexiglas	6.3	70 °C
85.62.215	2 m	15 mm	11 mm	plexiglas	5.6	70 °C
85.62.216	2 m	16 mm	12 mm	plexiglas	5.3	70 °C
85.62.220	2 m	20 mm	16 mm	plexiglas	4.3	70 °C



## SIGHT GLASS, 4 METRE LENGTH

ARTIKELNO	LENGTH	OUTSIDE DIAMETER	INSIDE DIAMETER	MATERIAL	WORKING PRESSURE IN BAR	MAX. TEMPERATURE
85.62.310	4 m	10 mm	7 mm	plexiglas	6.2	70 °C
85.62.312	4 m (for our sight glass valve)	12 mm	8 mm	plexiglas	6.7	70 °C
85.62.313	4 m (for our sight glass valve)	13 mm	9 mm	plexiglas	6.3	70 °C
85.62.315	4 m	15 mm	11 mm	plexiglas	5.6	70 °C
85.62.316	4 m	16 mm	12 mm	plexiglas	5.3	70 °C
85.62.320	4 m	20 mm	16 mm	plexiglas	4.3	70 °C



## SIGHT GLASS RUBBER

ARTIKELNO	SIGHT GLASS	INSIDE DIAMETER	OUTSIDE DIAMETER	HEIGHT	MATERIAL
85.62.710	10 mm	10 mm	16 mm	10.0 mm	NBR
85.62.712	(for our sight glass valve) 12 - 13 mm	12 mm	18 mm	8.5 mm	NBR
85.62.713	13 mm	13 mm	20 mm	10.0 mm	NBR
85.62.715	15 - 16 mm	15 mm	26 mm	10.0 mm	NBR
85.62.720	20 mm	20 mm	30 mm	15.0 mm	NBR



## CONVERSION TABLE FOR PIPE THREAD

GAS PIPE	DIAMETER IN MM MEASURED ON OUTSIDE	DIAMETER IN MM MEASURED ON INSIDE
1/8"	9.728	8.566
1/4"	13.57	11.445
3/8"	16.662	14.95
1/2"	20.955	18.631
5/8"	22.911	20.587
3/4"	26.441	24.117
1"	33.249	30.291
1.1/4"	41.91	38.952
1.1/2"	47.803	44.845
2"	59.614	56.656
2.1/2"	75.184	72.226
3"	87.884	84.926
4"	113.03	110.072
5"	138.43	135.5
6"	163.83	160.9



## LONG BEND 90°, NO. 1

ARTIKELNO	1 X INTERNAL THREAD AND 1 X EXTERNAL THREAD
86.00.106	1/4"
86.00.109	3/8"
86.00.112	1/2"
86.00.119	3/4"
86.00.125	1"
86.00.132	1 1/4"
86.00.138	1 1/2"
86.00.150	2"
86.00.163	2 1/2"
86.00.175	3"
86.00.199	4"



## LONG BEND 90°, NO. 2

ARTIKELNO	2 X INTERNAL THREAD
86.00.206	1/4"
86.00.209	3/8"
86.00.212	1/2"
86.00.219	3/4"
86.00.225	1"
86.00.232	1 1/4"
86.00.238	1 1/2"
86.00.250	2"
86.00.263	2 1/2"
86.00.275	3"
86.00.299	4"

## ELBOW 90°, NO. 90

ARTIKELNO	2 X INTERNAL THREAD
86.09.001	1/8"
86.09.002	1/4"
86.09.003	3/8"
86.09.004	1/2"
86.09.005	3/4"
86.09.006	1"
86.09.007	1 1/4"
86.09.008	1 1/2"
86.09.009	2"
86.09.010	2 1/2"
86.09.011	3"
86.09.012	4"



## ELBOW 90°, NO. 92

ARTIKELNO	INTERNAL THREAD	OUTSIDE THREAD
86.09.201	1/8"	1/8"
86.09.202	1/4"	1/4"
86.09.203	3/8"	3/8"
86.09.204	1/2"	1/2"
86.09.205	3/4"	3/4"
86.09.206	1"	1"
86.09.207	1.1/4"	1.1/4"
86.09.208	1.1/2"	1.1/2"
86.09.209	2"	2"
86.09.210	2.1/2"	2.1/2"
86.09.211	3"	3"
86.09.212	4"	4"
86.09.214	1/2"	3/8"
86.09.215	3/4"	3/8"
86.09.216	3/4"	1/2"
86.09.217	1"	3/4"
86.09.219	1 1/4"	1"



## T-PIECE 90°, NO. 130

ARTIKELNO	3 X INTERNAL THREAD
86.13.001	1/8"
86.13.002	1/4"
86.13.003	3/8"
86.13.004	1/2"
86.13.005	3/4"
86.13.006	1"
86.13.007	1 1/4"
86.13.008	1 1/2"
86.13.009	2"
86.13.010	2 1/2"
86.13.011	3"





## CROSS PIECE 90°, NO. 180

ARTIKELNO	4 X INTERNAL THREAD
86.18.001	1/4"
86.18.002	3/8"
86.18.003	1/2"
86.18.004	3/4"
86.18.005	1"
86.18.006	1 1/4"
86.18.007	1 1/2"
86.18.008	2"
86.18.009	2 1/2"
86.18.010	3"



## REDUCING SOCKET, NO. 240

ARTIKELNO	2 X INTERNAL THREAD
86.24.001	1/4" x 1/8"
86.24.002	3/8" x 1/8"
86.24.003	3/8" x 1/4"
86.24.005	1/2" x 1/4"
86.24.006	1/2" x 3/8"
86.24.007	3/4" x 1/4"
86.24.008	3/4" x 3/8"
86.24.009	3/4" x 1/2"
86.24.010	1" x 3/8"
86.24.011	1" x 1/2"
86.24.012	1" x 3/4"
86.24.013	1.1/4" x 3/8"
86.24.014	1.1/4" x 1/2"
86.24.015	1.1/4" x 3/4"
86.24.016	1.1/4" x 1"
86.24.017	1.1/2" x 1/2"
86.24.018	1.1/2" x 3/4"
86.24.019	1.1/2" x 1"
86.24.020	1.1/2" x 1.1/4"
86.24.021	2" x 1/2"
86.24.022	2" x 3/4"
86.24.023	2" x 1"
86.24.024	2" x 1.1/4"
86.24.025	2" x 1.1/2"
86.24.028	2.1/2" x 1.1/2"
86.24.029	2.1/2" x 2"
86.24.030	3" x 1.1/2"
86.24.031	3" x 2"
86.24.032	3" x 2.1/2"
86.24.035	4" x 3"



## REDUCING RING, NO. 241



ARTIKELNO	OUTSIDE THREAD	INTERNAL THREAD
86.24.101	1/4"	1/8"
86.24.102	3/8"	1/8"
86.24.103	3/8"	1/4"
86.24.104	1/2"	1/8"
86.24.105	1/2"	1/4"
86.24.106	1/2"	3/8"
86.24.108	3/4"	1/4"
86.24.109	3/4"	3/8"
86.24.110	3/4"	1/2"
86.24.111	1"	1/4"
86.24.112	1"	3/8"
86.24.113	1"	1/2"
86.24.114	1"	3/4"
86.24.115	1 1/4"	3/8"
86.24.116	1 1/4"	1/2"
86.24.117	1 1/4"	3/4"
86.24.118	1 1/4"	1"
86.24.119	1 1/2"	3/8"
86.24.120	1 1/2"	1/2"
86.24.121	1 1/2"	3/4"
86.24.122	1 1/2"	1"
86.24.123	1 1/2"	1 1/4"
86.24.124	2"	1/2"
86.24.125	2"	3/4"
86.24.126	2"	1"
86.24.127	2"	1 1/4"
86.24.128	2"	1 1/2"
86.24.129	2 1/2"	1"
86.24.130	2 1/2"	1 1/4"
86.24.131	2 1/2"	1 1/2"
86.24.132	2 1/2"	2"
86.24.133	3"	1"
86.24.134	3"	1 1/4"
86.24.135	3"	1 1/2"
86.24.136	3"	2"
86.24.137	3"	2 1/2"
86.24.139	4"	2 1/2"
86.24.140	4"	3"



## REDUCING NIPPLE, NO. 245

ARTIKELNO 2 X OUTSIDE THREAD

86.24.501 1/4" x 1/8"

86.24.502 3/8" x 1/8"

86.24.503 3/8" x 1/4"

86.24.504 1/2" x 1/4"

86.24.505 1/2" x 3/8"

86.24.507 3/4" x 3/8"

86.24.508 3/4" x 1/2"

86.24.511 1" x 1/2"

86.24.512 1" x 3/4"

86.24.513 1.1/4" x 1/2"

86.24.514 1.1/4" x 3/4"

86.24.515 1.1/4" x 1"

86.24.516 1.1/2" x 3/4"

86.24.517 1.1/2" x 1"

86.24.518 1.1/2" x 1.1/4"

86.24.519 2" x 1"

86.24.520 2" x 1.1/4"

86.24.521 2" x 1.1/2"

86.24.522 2.1/2" x 1.1/2"

86.24.523 2.1/2" x 2"

86.24.524 3" x 2"

86.24.525 3" x 2.1/2"

86.24.526 4" x 3"

## REDUCING SOCKET NIPPLE, NO. 246

ARTIKELNO INTERNAL THREAD OUTSIDE THREAD

86.24.601 1/4" 1/8"

86.24.602 3/8" 1/4"

86.24.603 1/2" 1/4"

86.24.604 1/2" 3/8"

86.24.605 3/4" 3/8"

86.24.606 3/4" 1/2"

86.24.608 1" 1/2"

86.24.609 1" 3/4"

86.24.611 1 1/4" 1/2"

86.24.612 1 1/4" 3/4"

86.24.613 1 1/4" 1"

86.24.615 1 1/2" 1"

86.24.616 1 1/2" 1 1/4"

86.24.617 2" 1"

86.24.618 2" 1 1/4"

86.24.619 2" 1 1/2"

86.24.620 2 1/2" 2"



## SOCKET, NO. 270

ARTIKELNO 2 X INTERNAL THREAD

86.27.001	1/8"
86.27.002	1/4"
86.27.003	3/8"
86.27.004	1/2"
86.27.005	3/4"
86.27.006	1"
86.27.007	1 1/4"
86.27.008	1 1/2"
86.27.009	2"
86.27.010	2 1/2"
86.27.011	3"
86.27.012	4"



## STRAIGHT NIPPLE, NO. 280

ARTIKELNO 2 X OUTSIDE THREAD

86.28.001	1/8"
86.28.002	1/4"
86.28.003	3/8"
86.28.004	1/2"
86.28.005	3/4"
86.28.006	1"
86.28.007	1 1/4"
86.28.008	1 1/2"
86.28.009	2"
86.28.010	2 1/2"
86.28.011	3"



## PLUG, NO. 290

With rim and square.

ARTIKELNO OUTSIDE THREAD

86.29.001	1/8"
86.29.002	1/4"
86.29.003	3/8"
86.29.004	1/2"
86.29.005	3/4"
86.29.006	1"
86.29.007	1 1/4"
86.29.008	1 1/2"
86.29.009	2"
86.29.010	2 1/2"
86.29.011	3"





## ROUND CAP, NO. 301

ARTIKELNO	INTERNAL THREAD
86.30.102	1/4"
86.30.103	3/8"
86.30.104	1/2"
86.30.105	3/4"
86.30.106	1"
86.30.107	1 1/4"
86.30.108	1 1/2"
86.30.109	2"
86.30.110	2 1/2"
86.30.111	3"
86.30.112	4"



## OVAL FLANGE, NO. 320

With 2 drilled holes.

ARTIKELNO	INTERNAL THREAD
86.32.104	1 1/4"
86.32.105	1 1/2"
86.32.106	2"



## CONICAL SEALING COUPLING, NO. 340

ARTIKELNO	2 X INTERNAL THREAD
86.34.001	1/4"
86.34.002	3/8"
86.34.003	1/2"
86.34.004	3/4"
86.34.005	1"
86.34.006	1 1/4"
86.34.007	1 1/2"
86.34.008	2"
86.34.009	2 1/2"
86.34.010	3"



## CONICAL SEALING COUPLING, NO. 341

ARTIKELNO	1 X CONICAL WITH INTERNAL THREAD AND GLAND WITH EXTERNAL THREAD
86.34.101	1/4"
86.34.102	3/8"
86.34.103	1/2"
86.34.104	3/4"
86.34.105	1"
86.34.106	1 1/4"
86.34.107	1 1/2"
86.34.108	2"
86.34.109	2 1/2"
86.34.110	3"

## PIPE NIPPLE, NO. 23



ARTIKELNO	LENGTH	2 X OUTSIDE THREAD
86.59.100	100 mm	1/8"
86.59.150	150 mm	1/8"
86.59.200	200 mm	1/8"
86.60.100	100 mm	1/4"
86.60.150	150 mm	1/4"
86.60.200	200 mm	1/4"
86.61.100	100 mm	3/8"
86.61.150	150 mm	3/8"
86.61.200	200 mm	3/8"
86.62.100	100 mm	1/2"
86.62.150	150 mm	1/2"
86.62.200	200 mm	1/2"
86.63.100	100 mm	3/4"
86.63.150	150 mm	3/4"
86.63.200	200 mm	3/4"
86.64.100	100 mm	1"
86.64.150	150 mm	1"
86.64.200	200 mm	1"
86.65.100	100 mm	1 1/4"
86.65.150	150 mm	1 1/4"
86.65.200	200 mm	1 1/4"
86.66.100	100 mm	1 1/2"
86.66.150	150 mm	1 1/2"
86.66.200	200 mm	1 1/2"
86.67.100	100 mm	2"
86.67.150	150 mm	2"
86.67.200	200 mm	2"
86.67.300	300 mm	2"
86.68.100	100 mm	2 1/2"
86.68.150	150 mm	2 1/2"
86.68.200	200 mm	2 1/2"
86.69.100	100 mm	3"
86.69.150	150 mm	3"
86.69.200	200 mm	3"
86.70.100	100 mm	4"
86.70.150	150 mm	4"
86.70.200	200 mm	4"



## FLANGE, INTERNAL THREAD

Complies with DIN 2566 PN16.

ARTIKELNO	INTERNAL THREAD	SIZE	OUTSIDE DIAMETER	THICKNESS	PITCH CIRCLE DIAMETER	BOLT HOLES
86.90.038	1 1/2"	DN 40	150 mm	16 mm	110 mm	4
86.90.050	2"	DN 50	165 mm	18 mm	125 mm	4
86.90.063	2 1/2"	DN 65	185 mm	18 mm	145 mm	4
86.90.075	3"	DN 80	200 mm	20 mm	160 mm	8
86.90.100	4"	DN 100	220 mm	20 mm	180 mm	8



## WELDING FLANGE

Complies with DIN 2576 PN16.

ARTIKELNO	SIZE	OUTSIDE DIAMETER	INSIDE DIAMETER	PITCH CIRCLE DIAMETER	BOLT HOLES
86.91.038	DN 40	150 mm	48.3 mm	110 mm	4
86.91.050	DN 50	165 mm	60.3 mm	125 mm	4
86.91.063	DN 65	185 mm	76.1 mm	145 mm	4
86.91.075	DN 80	200 mm	88.9 mm	160 mm	8
86.91.100	DN 100	220 mm	114.3 mm	180 mm	8



## WELDED BEND, 90 DEGREES

ARTIKELNO	SIZE	OUTSIDE DIAMETER	WALL THICKNESS
86.92.204	1/2"	21.3 mm	2.0 mm
86.92.205	3/4"	26.9 mm	2.3 mm
86.92.206	1"	33.7 mm	2.6 mm
86.92.207	1 1/4"	42.4 mm	2.6 mm
86.92.208	1 1/2"	48.3 mm	2.6 mm
86.92.209	2"	60.3 mm	2.9 mm
86.92.210	2 1/2"	76.1 mm	2.9 mm
86.92.211	3"	88.9 mm	3.2 mm
86.92.212	4"	114.3 mm	3.6 mm
86.92.213	5"	133.0 mm	4.0 mm
86.92.214	6"	159.0 mm	4.5 mm



## WELDED SOCKET

ARTIKELNO	2 X INTERNAL THREAD
86.92.401	1/8"
86.92.402	1/4"
86.92.403	3/8"
86.92.404	1/2"
86.92.405	3/4"
86.92.406	1"
86.92.407	1 1/4"
86.92.408	1 1/2"
86.92.409	2"
86.92.410	2 1/2"
86.92.411	3"
86.92.412	4"
86.92.413	5"
86.92.414	6"

## ELBOW 90°, BRASS, NO. 92

ARTIKELNO	1 X INTERNAL THREAD AND 1 X EXTERNAL THREAD
87.09.202	1/4"
87.09.203	3/8"
87.09.204	1/2"
87.09.205	3/4"
87.09.206	1"
87.09.207	1 1/4"
87.09.208	1 1/2"
87.09.209	2"



## REDUCING RING, BRASS, NO. 241

ARTIKELNO	OUTSIDE THREAD	INTERNAL THREAD
87.24.101	1/4"	1/8"
87.24.103	3/8"	1/4"
87.24.105	1/2"	1/4"



## REDUCING SOCKET NIPPLE, BRASS, NO. 246

ARTIKELNO	OUTSIDE THREAD	INTERNAL THREAD
87.24.601	1/8"	1/4"



# AIR QUICK COUPLINGS



## REDUCING VALVE

Including manometer.

type : D22  
 adjustable : from 1 to 10 bar  
 supply pressure : max. 40 bar

ARTIKELNO	2 X INTERNAL THREAD	CAPACITY IN LITRES PER MINUTE	CAPACITY IN LITRES PER HOUR	APPLICATION
87.70.106	1/4"	53 L	3,500 L	blue board
87.70.112	1/2"	200 L	12,000 L	1 scaling hammer
87.70.119	3/4"	366 L	22,000 L	2 scaling hammers

## QUICK COUPLING, AIR

material : brass, chromed  
 model : universal fit  
 fits : Orion : Swedish  
       : Din : German-Euro  
       : Cejn : German-Euro  
       : Atlas Copco : American  
       : PCL : British



ARTIKELNO	OUTSIDE THREAD	INTERNAL THREAD	HOSE ADAPTOR
87.70.505	1/4"	-	-
87.70.510	3/8"	-	-
87.70.515	-	1/4"	-
87.70.520	-	3/8"	-
87.70.525	-	-	5/16" (8 mm)
87.70.530	-	-	3/8" (10 mm)

## AIR INLET NIPPLE

model : Orion, Swedish  
 material : steel, galvanized



ARTIKELNO	OUTSIDE THREAD	INTERNAL THREAD	HOSE ADAPTOR
87.70.640	1/4"	-	-
87.70.645	3/8"	-	-
87.70.650	-	1/4"	-
87.70.655	-	3/8"	-
87.70.660	-	-	5/16" (8 mm)
87.70.665	-	-	3/8" (10 mm)

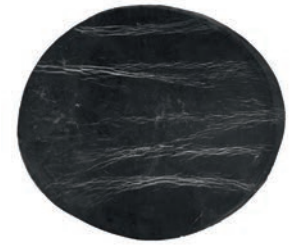


## MEMBRANE, CHROME LEATHER

Heavy duty chrome leather, specially treated so that strength and lifespan have increased significantly. The membrane has also become substantially more water repellent as a result. Is resistant to most chemicals.

A leather membrane must be used regularly to prevent it drying out. CANNOT withstand coffee and/or coffee fumes at all.

ARTIKELNO	DIAMETER
89.10.032	320 mm
89.10.034	340 mm
89.10.036	360 mm
89.10.038	380 mm
89.10.040	400 mm
89.10.042	420 mm
89.10.044	440 mm
89.10.048	480 mm



## MEMBRANE, RUBBER

Cannot dry out and therefore ideal for irregular use (in the case of regular use, leather is much more durable). Made from lightweight nitrile rubber, with 2 synthetic inlays.

ARTIKELNO	DIAMETER	THICKNESS
89.10.134	340 mm	5 mm
89.10.136	360 mm	5 mm
89.10.138	380 mm	5 mm
89.10.140	400 mm	5 mm
89.10.142	420 mm	5 mm
89.10.145	450 mm	5 mm
89.10.150	500 mm	5 mm



## RUBBER BALL FOR MEMBRANE PUMP

Round ball made from NBR rubber. Not floating, metal filled.

ARTIKELNO	DIAMETER	WEIGHT
89.10.508	82 mm	750 gr
89.10.509	90 mm	1,100 gr
89.10.510	96 mm	1,100 gr
89.10.512	125 mm	1,600 gr





## CUP SEAL

For use in grease guns and old fashioned hand pumps

material : prime quality leather  
 edge : approx. 15 to 20 mm  
 thickness : approx. 3 to 4 mm

ARTIKELNO	OUTSIDE DIAMETER
89.11.025	25 mm
89.11.030	30 mm
89.11.035	35 mm
89.11.040	40 mm
89.11.045	45 mm
89.11.050	50 mm
89.11.055	55 mm
89.11.060	60 mm
89.11.065	65 mm
89.11.070	70 mm
89.11.075	75 mm
89.11.080	80 mm
89.11.085	85 mm
89.11.090	90 mm
89.11.095	95 mm
89.11.100	100 mm
89.11.105	105 mm
89.11.110	110 mm
89.11.115	115 mm
89.11.130	130 mm

## PRESSURE SWITCH, CONDOR MDR1/6

Comes with 3 pole connection + earth.

application	: pressurized water systems etc.
connection	: 1/4" internal thread
factory setting	: 1.7 - 3.0 bar
max. switch off pressure	: 4.9 bar
min. switch on pressure	: 1.1 bar
maximum switching capacity	: 4.0 kW, 250 V
insulation class	: IP44

ARTIKELNO	DESCRIPTION
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<b>89.19.911</b>	Condor MDR1/6
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## PRESSURE SWITCH, CONDOR, RELIEF VALVE

Simple to install in every Condor pressure switch.

Necessary for equipment that starts up with a high start-up resistance, such as an air compressor.

ARTIKELNO	DESCRIPTION
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<b>89.19.999</b>	Relief valve for Condor MDR3
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<b>89.20.000</b>	Relief valve for Condor MDR5
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## PRESSURE SWITCH, CONDOR MDR5/5

Comes with 3 pole connection + earth.

application	: pressurized water systems etc.
connection	: 1/2" internal thread
factory setting	: 1.5 - 3.0 bar
max. switch off pressure	: 5.0 bar
min. switch on pressure	: 0.3 bar
maximum switching capacity	: 5.5 kW, 400 V
insulation class	: IP54

ARTIKELNO	DESCRIPTION
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<b>89.20.001</b>	Condor MDR5/5
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## PRESSURE SWITCH, CONDOR MDR5/11

Comes with 3 pole connection + earth.

application	: air compressors etc.
connection	: 1/2" internal thread
factory setting	: 6 - 9 bar
max. switch off pressure	: 11 bar
min. switch on pressure	: 6 bar
maximum switching capacity	: 5.5 kW, 400 V
insulation class	: IP54

ARTIKELNO	DESCRIPTION
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<b>89.20.003</b>	Condor MDR5/11
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## PRESSURE SWITCH, CONDOR MDR3/35

Comes with 3 pole connection + earth.

application	: start-up air alarm etc.
connection	: 1/2" internal thread
factory setting	: 32.0 - 35.0 bar
max. switch off pressure	: 35 bar
min. switch on pressure	: 10 bar
maximum switching capacity	: 5.5 kW, 400 V
insulation class	: IP54

ARTIKELNO	DESCRIPTION
89.20.004	Condor MDR3/35



## MANOMETER AND VACUUM GAUGE

Only for use on pressurized water systems, compressors or high pressure cleaners (unsuitable for hydraulic applications).

side connection	: 1/4" external thread
housing diameter	: 63 mm
materials	: lacquered metal casing plexiglas front

ARTIKELNO	PRESSURE RANGE IN BAR	DESCRIPTION
89.21.006	0 through 6	
89.21.010	0 through 10	
89.21.016	0 through 16	
89.21.250	0 through 250	glycerine filled. stainless steel housing and glass front
89.21.500	0 through -1	vacuum gauge



## FIVE-WAY PIECE

Has:	: 2 x 1" internal thread
	: 1 x 1" external thread
	: 1 x 1/4" internal thread
	: 1 x 1/4" external thread

ARTIKELNO	DESCRIPTION	MATERIAL
89.21.801	5-way piece	brass

## PRESSURIZED WATER SYSTEM VESSEL, WITH MEMBRANE

The quality of the materials used and the simple design ensure a long lifetime and hygienic operation.  
The back pressure of a pressurized water system vessel with membrane is approx. 0.2 bar lower than the pump's switch on pressure.

ARTIKELNO	CAPACITY	VESSEL MATERIAL	MODEL	DIMENSIONS (LXWXH)	MEMBRANE MATERIAL
<b>89.22.008</b>	8 L	welded steel	vertical	34 x 20 x 20 cm	butyl rubber
<b>89.22.020</b>	20 L	welded steel	horizontal	50 x 26 x 27 cm	butyl rubber
<b>89.22.060</b>	60 L	welded steel	horizontal	67 x 41 x 49 cm	butyl rubber
<b>89.22.320</b>	20 L	stainless steel 304	horizontal	49 x 25 x 27 cm	butyl rubber
<b>89.22.350</b>	50 L	stainless steel 304	horizontal	64 x 35 x 40 cm	butyl rubber
<b>89.22.399</b>	100 L	stainless steel 304	horizontal	78 x 45 x 50 cm	EPDM rubber



## PRESSURIZED WATER SYSTEM VESSEL, SEPARATE MEMBRANE

ARTIKELNO	CAPACITY	VESSEL MATERIAL	MODEL	MEMBRANE MATERIAL
<b>89.23.901</b>	8 L	welded steel	vertical	butyl rubber
<b>89.23.905</b>	20 L	welded steel	horizontal	butyl rubber
<b>89.23.910</b>	60 L	welded steel	horizontal	butyl rubber
<b>89.23.932</b>	20 L	stainless steel 304	horizontal	butyl rubber
<b>89.23.935</b>	50 L	stainless steel 304	horizontal	butyl rubber
<b>89.23.939</b>	100 L	stainless steel 304	horizontal	EPDM rubber



## PRESSURIZED WATER SYSTEM VESSEL, GALVANIZED

Pressure vessel, galvanized internally and externally, max. 4 bar operating pressure.  
All Speck vessels have TÜV mark!  
Operates without membrane.

ARTIKELNO	CAPACITY	VESSEL MATERIAL	MODEL	DIMENSIONS (LXWXH)	DESCRIPTION
<b>89.24.060</b>	60 L	galvanised	horizontal	84 x 31 x 45 cm	Speck 6 bar
<b>89.24.100</b>	100 L	galvanised	horizontal	100 x 40 x 46 cm	Speck 4 bar
<b>89.24.200</b>	200 L	galvanised	horizontal	115 x 50 x 57 cm	Speck 4 bar
<b>89.24.300</b>	300 L	galvanised	horizontal	148 x 55 x 66 cm	Speck 4 bar





## FILTER HOUSING, DRINKING WATER

Supplied without filter candle.

Installed length : approx. 130 mm  
 throughput : 3,500 litres per hour with empty housing  
 operating pressure : max. 10 (bursting pressure 20 bar)  
 temperature : -10 to +50 C  
 connection : 2 x 1" internal brass thread  
 material : opaque plastic top transparent plastic housing

ARTIKELNO	DESCRIPTION
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<b>89.40.105</b>	Drinking water filter housing
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## FILTER CANDLE, POLYPROPYLENE

Polypropylene filter candle of spirally wound threads with depth filtration thanks to the design of coarse to fine. Cannot be cleaned but is attractively priced.

ARTIKELNO	DESCRIPTION	MICRON	THROUGHPUT	LENGTH
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<b>89.40.120</b>	Filter candle, polypropylene	20 micron	max. 1,500 litres per hour	10"
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## FILTER CANDLE, STAINLESS STEEL MESH

Fine stainless steel mesh, easy to clean.

ARTIKELNO	DESCRIPTION	MICRON	THROUGHPUT	LENGTH
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<b>89.40.150</b>	Filter candle, stainless steel mesh	50 micron	max. 2,000 litres per hour	10"
<b>89.40.160</b>	Filter candle, stainless steel mesh	144 micron	max. 2,000 litres per hour	10"



## FILTER CANDLE, CARBON FILTER

Made from active carbon for removing odours and tastes so that the water has a neutral flavour. Must be replaced regularly, approx. every 6 months.

ARTIKELNO	DESCRIPTION	MICRON	THROUGHPUT	LENGTH
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<b>89.40.165</b>	Filter candle, carbon filter	144 micron	max. 600 litres per hour	10"
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## FILTER CANDLE, ACCESSORIES

ARTIKELNO	DESCRIPTION
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<b>89.40.195</b>	Wall bracket
<b>89.40.199</b>	Spanner (for disassembling filter housing)

## HADEX, DRINKING WATER DISINFECTANT

A safe, effective and easy to use product.

Hadex is especially intended for disinfecting drinking water tanks and piping systems, and for preserving drinking water in tanks.

Hadex is a liquid product, which disperses rapidly through the water to be treated.

The water treated with Hadex remains suitable for consumption, which prevents water being wasted and saves time.

Hadex is permitted in the Netherlands by the Ministry of Health, Welfare and Sport under permit number 9574N.

The Shipping Inspectorate has fully accepted Hadex.

### Normal dosage:

1 litre to 50 m<sup>3</sup> drinking water (1 : 50,000) (=20 ml Hadex in 1 m<sup>3</sup> water.)

This low dosage must be added regularly and it reduces and prevents germ growth and algae and slime formation. (Dosage complies with N.S.I. drinking water regulations)

Effective after 30 minutes.

### Extra dosage:

1 litre to 25 m<sup>3</sup> drinking water (1 : 25,000) (=40 ml. Hadex in 1 m<sup>3</sup> water).

This dosage is used if the drinking water is suspected of being poor quality and/or it contains suspended particles that can strongly promote the growth of bacteria.

Effective after 30 minutes.

### High dosage (shock treatment):

1 litre to 5 m<sup>3</sup> (1 : 5000) (200 ml Hadex in 1 m<sup>3</sup> water).

The high dosage is used to treat drinking water under epidemic conditions, i.e. if the water is or is suspected of being infected with bacteria.

Effective after 30 minutes.

The high dosage (shock treatment) must always be used for the first treatment in order to disinfect the drinking water, the tanks and the piping after new construction or repairs. Contact time approx. 6 hours.

### NOTE:

Read the Hadex data sheet for additional information and/or consult your supplier for the desired information. Check the condition of the tanks(s) and the quality of the drinking water at least once a year.



ARTIKELNO	CAPACITY	PACKAGING	NUMBER PER PACKAGE	DESCRIPTION
89.50.399	30 ml	drop bottle	12	for 1.250 litres (backpacker)
89.50.400	250 ml	drop bottle	12	for 12,500 litres (leisure)
89.50.401	1.0 L	bottle	6	for 50.000 litres
89.50.402	2.5 L	jerry can	2	for 125.000 litres
89.50.410	10.0 L	jerry can	1	for 500.000 litres
89.50.425	25.0 L	jerry can	1	for 1.250.000 litres



## HADEX, TEST KIT

Hadex drinking water test kit.

The Hadex test kit is a complete and handy colour-based system that is very easy to use to check the quantity of free active Hadex in your drinking water.

The test kit has a measuring range of 0-2 mg per litre.

Hadex test kit complete set:

- 1 test unit
- 1 colour card
- 2 10 ml test tubes (cuvettes)
- 1 stirrer
- 30 DP1 tablets, storage life 5 years
- 30 DP3 tablets, storage life 5 years
- 1 manual
- 1 storage box

ARTIKELNO	DESCRIPTION
<b>89.50.480</b>	Hadex test kit complete set

ARTIKELNO	DESCRIPTION
<b>89.50.485</b>	Box of 100 DP1 tablets
<b>89.50.486</b>	Box of 100 DP3 tablets

ARTIKELNO	DESCRIPTION
<b>89.50.490</b>	Hadex test strip jar (50 strips)



## LEVEL SWITCH, WITH FLOAT

This float switch can also be used the other way round by swapping one wire.  
For example for filling up a tank.

comes with : earthed plug  
type : microswitch with ball  
level : adjustable from a minimum of 15 cm to approx. 100 cm  
suitable for : all 220 volt pumps up to a maximum of 10 A  
temperature : maximum 60°C



ARTIKELNO	DESCRIPTION
<b>89.81.103</b>	3 metre cable
<b>89.81.105</b>	5 metre cable
<b>89.81.110</b>	10 metre cable

## LEVEL SWITCH, REKA

Switches from 5 mm.  
Electromagnetic level controller with no moving parts.  
LED on/off indication and water detection.  
Can be used horizontally and vertically.  
Also suitable for dirty water.  
Completely submersible.  
May not be used completely horizontally, minimum angle 23 degrees.

comes with : earthed plug with 10 metre cable  
type : electromagnetic  
level : horizontal : on at 3 cm, off at 0,5 cm  
: vertical : on at 13 cm, off at 4 cm  
temperature : maximum 50°C



ARTIKELNO	TYPE	VOLTAGE	DESCRIPTION
<b>89.81.151</b>	Reka 2,000 DC	12 / 24 volt	yellow colour, LEVEL IS DIFFERENT
<b>89.81.162</b>	Reka 2,000 ML	230 volt (max 10 Ah)	red colour, up to 1 hp
<b>89.81.173</b>	Reka 2,000 PH	400 volt	up to 5.45 hp

ARTIKELNO	TYPE	DESCRIPTION	MATERIAL
<b>89.81.199</b>	Reka 2,000 KT	bracket set for sensor	stainless steel



## LEVEL SWITCH, RULEMATIC SWITCH

Also ideal as bilge alarm switch.  
Easy to fit using a magnet, see articles 40.10.110 and 40.10.115 in this catalogue.

type : mercury switch  
level : switches on at a difference of 2 cm  
suitable for : DC pumps up to 32 volt and maximum 15 A

ARTIKELNO	DESCRIPTION
<b>89.81.200</b>	Rulematic switch



## LEVEL SWITCH, WITH ELECTRODES

No movement so no malfunctions!  
Level controller for conducting liquids.  
Unsuitable for foaming liquids (does not react or reacts too late).

type : reacts to resistance between electrodes  
level : adjustable from a minimum of 2 cm to approx. 30 cm  
: minimum level difference approx. 1 cm  
voltage : 223 V, 50 Hz  
control voltage : 15 V AC  
electrodes : 5 V  
suitable for : maximum 5 A, maximum 1 hp / 0.75 kW  
cable length : 5.0 metre low voltage cable for electrodes  
temperature : maximum 40°C

ARTIKELNO	DESCRIPTION
<b>89.81.620</b>	Level switch with electrodes

# Group 9

Submersible pumps  
Bilge, ballast and deck wash pumps  
Manual and drum pumps  
Water pump and high-pressure cleaner  
Mobile air compressor



## PUMPS, CLIENT ADVICE

<b>Pump type</b>	<p>What type of pump are you looking for?</p> <ul style="list-style-type: none"> <li>• Submersible pump</li> <li>• Dry well pump: self-priming</li> <li>• Dry well pump: non self-priming (standard priming)</li> <li>• Pressurized water system</li> </ul>
<b>Medium</b>	<p>What is going to be pumped?</p> <ul style="list-style-type: none"> <li>• Water</li> <li>• Water with sand</li> <li>• Water with oil (sludge)</li> <li>• Water with coarse components</li> <li>• Diesel</li> <li>• Petrol</li> <li>• Lubrication oil</li> </ul>
<b>Viscosity</b>	<p>What is the viscosity (thickness) of the medium? (particularly important to ask in case of pumping lubrication oil)</p>
<b>Voltage</b>	<p>How much voltage does the pump need to have? (12 V, 24 V, 230 V, 400 V)</p>
<b>Current</b>	<p>What kind of current should the pump operate on? (DC or AC)</p>
<b>Frequency</b>	<p>At what frequency should the pump operate? (50Hz or 60Hz)</p>
<b>Volume (capacity)</b>	<p>How much m<sup>3</sup> or liters per hour will have to be pumped?</p>
<b>Pressure (height)</b>	<p>To what height should the medium be pumped?          How many bar should the pump be able to deliver? (1 bar = 10 metre discharge height)          How many liters per hour must the pump be able to deliver at what height?</p>
<b>Draw off points</b>	<p>How many draw off points are there? (when using a pressurized water system)</p>
<b>Suction height</b>	<p>From which depth will the medium have to be suctioned?</p>
<b>Temperature</b>	<p>What is the constant temperature of the medium?          What is the temporary temperature of the medium and for how long?</p>
<b>Pipe diameter</b>	<p>What is the diameter of the suction pipe?          What is the diameter of the pressure pipe?</p>
<b>Protection class</b>	<p>Which IP protection class should the electric motor have?</p>

## PUMPS, SELLING TIPS

### SELLING TIP No. 1

Every electric motor must be connected by means of an MPS (Motor Protection Switch); we cannot give a guarantee without an MPS.

### SELLING TIP No. 2

**Pumps with a permanent position must be connected by an accredited installer.**

### SELLING TIP No. 3

**If you want to pump 5 m<sup>3</sup> per hour through a straight pipe (hose), please take the following minimum resistance into account:**

hose size	resistance per metre
1"	0.042 bar (10 m = 0.42 bar)
1.1/4"	0.013 bar (10 m = 0.13 bar)
1.1/2"	0.004 bar (10 m = 0.04 bar)

**If you want to pump 10 m<sup>3</sup> per hour through a straight pipe (hose), please take the following minimum resistance into account:**

hose size	resistance per metre
1"	0.15 bar (10 m = 1.5 bar)
1.1/4"	0.05 bar (10 m = 0.5 bar)
1.1/2"	0.015 bar (10 m = 0.15 bar)

### SELLING TIP No. 4

If you halve the pump speed:

- You only get 1/8 of the pressure
- You have only 1/2 the capacity
- You only need 1/4 of the power

### SELLING TIP No. 5

Cooling water pump: 1 litre per HP per minute.

### SELLING TIP No. 6

Prior to use each pump should be **FILLED** with fluid (apart from a few exceptions).

A Self Priming pump is a pump that can process air in the piping for a short period, before it actually starts to pump.

A regular suction pump is thus not an SP and is **ABSOLUTELY** not capable of doing this.

Only after this air has been processed, will the pump start to function well.

This suction period should not be too long, because the shaft seal and plastic impellers will become too warm/hot and may be damaged.

### SELLING TIP No. 7

Some pumps have to have a foot valve to reach suction height.

### SELLING TIP No. 8

Vortex impellers are more suitable for pumping waste, but require more capacity.

### SELLING TIP No. 9

The bigger the impeller, the higher the speed.

### SELLING TIP No. 10

A multistage pump has several impellers to build up pressure.

## SUBMERSIBLE PUMPS, TOP OUTLET

### PONDY

Submersible pump with top connection for boating and commercial shipping, can be used as bilge pump. Qualitatively high-grade pump for professional use, also with sea water.

type	: SK
colour	: white
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: brush motor
fuse	: none
shaft seal	: ceramic on carbon mechanical seal in oil bath
materials	: impeller : plastic
	: impeller housing : impact resistant plastic
	: motor housing : impact resistant plastic
	: pump shaft : stainless steel
liquids	: clean and slightly contaminated water and <b>sea water</b>
voltage	: 24 V DC

### PONDY SK-2524

no head	: 4,800 litres per hour
5 metres head	: 900 litres per hour
discharge head	: 6.0 metres maximum
pumps down to	: 10 mm
particle size	: 3 mm maximum
connections	: 1" hose connection and 1" external thread
dimensions	: diameter 164 mm, height 255 mm
weight	: 5.5 kg
amperage	: 8.5 A
shaft power	: 0.123 kW, 3000 rpm
cable	: 5 metre, without plug



ARTIKELNO	DESCRIPTION	VOLT
90.01.624	Pondy SK-2524	24 V

## ULEX ORANGE

The well-known submersible pump that can suck to mop-dry up to 3 mm, restarts quickly after running dry via means of the in-built air valve.

For inland shipping, roofers, tennis courts, ponds, cellars, etc.

type:	: GF
colour	: orange
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: ceramic carbon mechanical seal
materials	: impeller : plastic
	: impeller housing : plastic
	: motor housing : plastic
	: pump shaft : stainless steel
liquids	: clean and slightly contaminated water, no sand
voltage	: 230 V mains

## ULEX ORANGE 100

ASK ABOUT OUR SPECIAL BULK-BUY PRICE!



no head	: 6,000 litres per hour
1 metre head	: 4,800 litres per hour
2 metre head	: 3,600 litres per hour
3 metre head	: 2,400 litres per hour
4 metre head	: 1,200 litres per hour
discharge head	: 5,0 metres maximum
pumps down to	: 10 mm
particle size	: 2 mm maximum
connections	: 1" hose connection
dimensions	: diameter 144 mm, height 245 mm
weight	: 1.0 A
shaft power	: 0,1 kW, 0,13 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.03.110	Ulex Orange 100	230 V



## ULEX ORANGE 200

ASK ABOUT OUR SPECIAL BULK-BUY PRICE!



no head	: 10,200 litres per hour
3 metre head	: 7,800 litres per hour
5 metre head	: 4,800 litres per hour
discharge head	: 7.7 metres maximum
pumps down to	: 10 mm
particle size	: 2 mm maximum
connections	: 1.1/4" hose connection
dimensions	: diameter 159 mm, height 273 mm
weight	: 5.2 kg
amperage	: 2.0 A
shaft power	: 0,2 kW, 0,26 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.03.120	Ulex Orange 200	230 V





## ULEX ORANGE 370

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**



- no head : 12,600 litres per hour
- 5 metre head : 7,200 litres per hour
- discharge head : 9.0 metres maximum
- pumps down to : 10 mm
- particle size : 2 mm maximum
- connections : 1.1/2" hose connection
- dimensions : diameter 159 mm, height 300 mm
- weight : 6.5 kg
- amperage : 2.0 A
- shaft power : 0.37 kW, 0,5 hp, 2900 rpm
- cable : 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.03.137	Ulex Orange 370	230 V



## ULEX ORANGE 680

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**



- no head : 15,600 litres per hour
- 5 metre head : 9,000 litres per hour
- discharge head : 10.5 metres maximum
- pumps down to : 10 mm
- particle size : 2 mm maximum
- connections : 2" hose connection
- dimensions : diameter 159 mm, height 320 mm
- weight : 6.8 kg
- amperage : 2.0 A
- shaft power : 0.68 kW, 0,9 hp, 2900 rpm
- cable : 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.03.168	Ulex Orange 680	230 V



## CITY SPEED MOP

Submersible pump that extracts liquid down to 2 mm, starts again quickly after running dry.  
For inland shipping, roofers, tennis courts, ponds, cellars etc.

type	: Speed Mop
colour	: white with green
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: double ceramic carbon mechanical seal and lip seal, separated by oil chamber
submersion depth	: 3 metres
materials	: impeller : Noryl
	: impeller housing : plastic
	: motor housing : plastic
	: pump shaft : stainless steel EN 10088-3, 1.4104
liquids	: clean and slightly contaminated water, maximum temperature +40°C (+90°C for a maximum of 3 minutes)
voltage	: 230 V mains

## CITY SPEED MOP 30M

ASK ABOUT OUR SPECIAL BULK-BUY PRICE!

%

no head	: 7,200 litres per hour
at 5 meters	: 2,400 litres per hour
discharge head	: 7.0 meters maximum
pumps down to	: 2 mm
particle size	: 2.0 mm maximum
connections	: 1" hose connector and 1 1/4" outer thread
dimensions	: diameter 152 mm, height 240 mm
weight	: 4 kg
current	: 1.3 A
shaft power	: 0.25 kW, 0.33 hp, 2900 rpm
cable	: 10 meter neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.03.510	City Speed Mop 30M	230 V



## CITY SPEED MOP 50M

no head	: 9,000 litres per hour
5 metres head	: 4,800 litres per hour
discharge head	: 9.0 metres maximum
pumps down to	: 2 mm
particle size	: 2.0 mm maximum
connections	: 1.1/4" hose connection and 1.1/4" external thread
dimensions	: diameter 152 mm, height 270 mm
weight	: 5 kg
amperage	: 2.0 A
shaft power	: 0.37 kW, 0.5 hp, 2900 rpm
cable	: 10 metre neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.03.550	City Speed Mop 50M	230 V



## SIMER 5

The well-known submersible pump that pumps "mop-dry" down to 3 mm, re-starts after running dry thanks to built-in breather. For inland waterways, roofers, tennis courts, pools, basements, etc.

type	: OD6601G-05	
colour	: blue	
pump type	: completely submersible centrifugal pump	
impeller type	: open impeller	
motor type	: oil-filled motor	
fuse	: built-in thermal protection	
seal	: mechanical seal (ceramic on carbon)	
immersion depth	: 7 meters	
materials	impeller	: aluminium with epoxy coating
	impeller housing	: aluminium with epoxy coating
	motor housing	: epoxy-coated aluminium
	pump shaft	: stainless steel
liquids	: clean and slightly contaminated water, maximum temperature +60°C	
voltage	: 230 V AC	



## SIMER 5

no head	: 4,200 litres per hour
5 metres head	: 1,700 litres per hour
discharge head	: 6.0 metres maximum
pumps down to	: 2 mm
particle size	: 2.5 mm maximum
connections	: 1/2", 3/4", 1" hose connection and 1.1/4" internal thread
dimensions	: diameter 161 mm, height 267 mm
weight	: 5 kg
amperage	: 2.6 amp
shaft power	: 0.19 kW, 0.26 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.05.239	Simer 5	230 V

## PUDDLE BUDDY

Submersible pump that pumps "mop-dry" down to about 3-4 mm, re-starts after running dry thanks to built-in breather. For inland waterways, roofers, tennis courts, pools, basements, etc.

type	: Puddle Buddy
colour	: blue
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
type of motor	: oil-filled motor
fuse	: built-in thermal protection
seal	: mechanical seal (ceramic on carbon)
materials	: impeller : plastic
	: impeller housing : plastic
	: motor housing : plastic
	: pump shaft : stainless steel
liquids	: clean and slightly contaminated water
voltage	: 230 volts AC

## PUDDLE BUDDY

**ASK ABOUT OUR SPECIAL BULK-BUY PRICE!**

no head	: 7,200 litres per hour
at 5 meters	: 2,400 litres per hour
discharge head	: 7.0 meters maximum
pumps down to	: about 3-4 mm
particle size	: max. 2.0 mm
connections	: 1/2", 3/4", 1" hose connector and 1.1/4" inside thread
dimensions	: diameter 138 mm, height 260 mm
weight	: 5 kg
current	: 3.5 amp
shaft power	: 0.15 kW 0.20 hp
cable	: 10 meter neoprene H07-RN-F with earthed plug



ARTIKELNO	NUMBER	DESCRIPTION	VOLT
90.05.325	< 4 pieces	Puddle Buddy	230 V

# SUBMERSIBLE PUMPS, TOP OUTLET

## CITY SPEED

Small affordable submersible pump for many applications.  
For inland shipping, roofers, tennis courts, ponds, cellars etc.

type	: Speed
colour	: white with green or blue
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: double ceramic carbon mechanical seal and lip seal, separated by oil chamber
submersion depth	: 3 metres
materials	: impeller : Noryl
	: impeller housing : plastic
	: motor housing : plastic
	: pump shaft : stainless steel EN 10088-3, 1.4104
liquids	: clean and slightly contaminated water, maximum temperature +40°C (+90°C for a maximum of 3 minutes)
insulation class	: Class F, IP68
voltage	: 230 V mains



## CITY SPEED 30M

no head	: 9,600 litres per hour
5 metres head	: 3,000 litres per hour
discharge head	: 6.0 metres maximum
pumps down to	: 14 mm ( <b>only without float</b> )
particle size	: 10 mm, no sand or gravel
connections	: 1" hose connection and 1 1/4" external thread
dimensions	: diameter 152 mm, height 240 mm
weight	: 4.1 kg
current	: 1.3 A
shaft power	: 0.25 kW, 0.33 hp, 2900 rpm
cable	: 10 metre neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.07.330	City Speed 30M	230 V
90.07.331	City Speed 30MA + ball float	230 V



## CITY SPEED 50M

no head	: 13,200 litres per hour
5 metres head	: 6,350 litres per hour
discharge head	: 8.0 metres maximum
pumps down to	: 14 mm ( <b>only without float</b> )
particle size	: 10 mm, no sand or gravel
connections	: 1.1/4" hose connection and 1.1/4" external thread
dimensions	: diameter 152 mm, height 270 mm
weight	: 5.0 kg
amperage	: 2.0 A
shaft power	: 0.37 kW, 0.5 hp, 2900 rpm
cable	: 10 metre neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.07.350	City Speed 50M	230 V
90.07.351	City Speed 50MA + ball float	230 V



## CITY SPEED 70M

no head	: 15,600 litres per hour
5 metres head	: 10,200 litres per hour
discharge head	: 10.0 metres maximum
pumps down to	: 14 mm ( <b>only without float</b> )
particle size	: 10 mm, no sand or gravel
connections	: 1.1/4" hose connection and 1.1/4" external thread
dimensions	: diameter 152 mm, height 290 mm
weight	: 6.4 kg
amperage	: 3.2 A
shaft power	: 0.5 kW, 0.7 hp, 2900 rpm
cable	: 10 metre neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.07.370	City Speed 70M	230 V
90.07.371	City Speed 70MA + ball float	230 V



# SUBMERSIBLE PUMPS, TOP OUTLET



## CITY SPEED 100M

no head : 19,200 litres per hour  
 5 metres head : 13,680 litres per hour  
 10 metres head : 4,800 litres per hour  
 discharge head : 12.0 metres maximum  
 pumps down to : 30 mm (**only without float**)  
 particle size : 10 mm, no sand or gravel  
 connections : 1.1/2" hose connection and 1.1/2" external thread  
 dimensions : diameter 204 mm, height 335 mm  
 weight : 9.8 kg  
 amperage : 3.2 A  
 shaft power : 0.75 kW, 1.0 hp, 2900 rpm  
 cable : 10 metre neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.07.380	City Speed 100M	230 V
90.07.381	City Speed 100MA + ball float	230 V



## CITY SPEED 125M

no head : 24,000 litres per hour  
 5 metres head : 18,360 litres per hour  
 10 metres head : 14,000 litres per hour  
 discharge head : 14.0 metres maximum  
 pumps down to : 30 mm (**only without float**)  
 particle size : 10 mm, no sand or gravel  
 connections : 1.1/2" hose connection and 1.1/2" external thread  
 dimensions : diameter 204 mm, height 335 mm  
 weight : 10.8 kg  
 amperage : 3.2 A  
 shaft power : 0.92 kW, 1.25 hp, 2900 rpm  
 cable : 10 metre neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.07.390	City Speed 125M	230 V
90.07.391	City Speed 125MA + ball float	230 V



## CITY F1

Robust stainless steel tube pump very useful for shipping, construction and industry. The ideal bilge and ballast pump.

type	: F1
colour	: stainless steel
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor, IP68, Class F
fuse	: inbuilt thermal safeguard in 230 Volt version only
shaft seal	: ceramic carbon mechanical seal and with oil chamber and extra lip seal at motor side
submersion depth	: 10 metres maximum
materials	: impeller : stainless steel 304 : impeller housing : stainless steel 304 : motor housing : stainless steel 304 : pump shaft : stainless steel EN 10088-3, 1.4104
liquids	: slightly contaminated water and water with a somewhat higher acidity and at a continuous temperature of 50°C (+90°C for a maximum of 3 minutes)
voltage	: 230 volt mains

## CITY F1 30M

no head	: 10,800 litres per hour
at 2 metres	: 8,400 litres per hour
at 4 metres	: 5,040 litres per hour
5 metres	: 3,600 litres per hour
discharge head	: 7.5 metres maximum
pumps down to	: 14 mm ( <b>only without float</b> )
particle size	: 10 mm, no sand or gravel
connections	: 1.1/4" inner thread
dimensions	: diameter 147 mm, height 225 mm
weight	: 4.7 kg
amperage	: 1.3 A
shaft power	: 0.25 kW, 0.33 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug and plug connection at pump side

ARTIKELNO	DESCRIPTION	VOLT
90.09.203	City F1 30M	230 V
90.09.204	City F1 30MA + ball float	230 V



## SUBMERSIBLE PUMPS, TOP OUTLET



### CITY F1 50M

no head	: 14,400 litres per hour
at 2 metres	: 13,200 litres per hour
at 5 metres	: 8,400 litres per hour
at 8 metres	: 3,600 litres per hour
discharge head	: 10.0 metres maximum
pumps down to	: 14 mm ( <b>only without float</b> )
particle size	: 10 mm, no sand or gravel
connections	: 1.1/4" inner thread
dimensions	: diameter 147 mm, height 225 mm
weight	: 5.8 kg
amperage	: 2.0 A
shaft power	: 0.37 kW, 0.5 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug and plug connection at pump side

ARTIKELNO	DESCRIPTION	VOLT
90.09.205	City F1 50M	230 V
90.09.206	City F1 50MA + ball float	230 V



### CITY F1 70M

no head	: 14,400 litres per hour
at 5 metres	: 10,440 litres per hour
at 10 metres	: 3,120 litres per hour
discharge head	: 12.0 metres maximum
pumps down to	: 30 mm ( <b>only without float</b> )
particle size	: 10 mm, no sand or gravel
connections	: 1.1/4" inner thread
dimensions	: diameter 147 mm, height 285 mm
weight	: 7.2 kg
amperage	: 3.6 A
shaft power	: 0.55 kW, 0.75 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug and plug connection at pump side

ARTIKELNO	DESCRIPTION	VOLT
90.09.207	City F1 70M	230 V
90.09.208	City F1 70MA + ball float	230 V





## CITY F1 100M

no head	: 20,000 litres per hour
at 5 metres	: 16,800 litres per hour
at 10 metres	: 11,100 litres per hour
at 15 metres	: 5,760 litres per hour
discharge head	: 20.0 metres maximum
pumps down to	: 30 mm <b>(only without float)</b>
particle size	: 10 mm, no sand or gravel
connections	: 1.1/2" inner thread
dimensions	: diameter 215 mm, height 355 mm
weight	: 13.0 kg
amperage	: 2.0 A
shaft power	: 0.75 kW, 1.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug and plug connection at pump side

ARTIKELNO	DESCRIPTION	VOLT
90.09.210	City F1 100M	230 V
90.09.211	City F1 100MA + ball float	230 V



## CITY F1 150M

no head	: 21,000 litres per hour
at 5 metres	: 18,000 litres per hour
at 10 metres	: 14,880 litres per hour
at 15 metres	: 9,120 litres per hour
at 20 metres	: 3,6000 litres per hour
discharge head	: 23.0 metres maximum
pumps down to	: 30 mm <b>(only without float)</b>
particle size	: 10 mm, no sand or gravel
connections	: 1.1/2" inner thread
dimensions	: diameter 215 mm, height 355 mm
weight	: 14.0 kg
amperage	: 2.0 A
shaft power	: 1.1 kW, 1.5 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug and plug connection at pump side

ARTIKELNO	DESCRIPTION	VOLT
90.09.215	City F1 150M	230 V
90.09.216	City F1 150MA + ball float	230 V



# SUBMERSIBLE PUMPS, TOP OUTLET

## GRUNDFOS KP

Robust all stainless steel cylinder pump, very suitable for shipping, construction and industry. The ideal bilge and ballast pump.

type	: KP
colour	: stainless steel
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: spec. liquid filled motor
fuse	: inbuilt thermal safeguard only with 230 volt version
shaft seal	: NBR rubber lip seal
submersion depth	: 10 metres maximum
materials	: impeller : stainless steel 304
	: impeller housing : stainless steel 304
	: motor housing : stainless steel 304
	: pump shaft : steel
liquids	: slightly contaminated water and water with a somewhat higher acidity, and continuously at a temperature of 50°C
voltages	: 230 volt mains

## GRUNDFOS KP 150

no head	: 9,000 litres per hour
5 metres head	: 250 litres per hour
discharge head	: 5.2 metres maximum
pumps down to	: 14 mm, <b>(only without float)</b>
particle size	: 10 mm, no sand or gravel
connection	: 1.1/4" internal thread
dimensions	: diameter 149 mm, height 225 mm (diam + float : 220 mm)
weight	: 6.3 kg
amperage	: 1.3 A
shaft power	: 0,15 kW, 0,2 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug also plug connection on pump side
switch level	: with ball float : start 325 mm minimum
	: : stop 100 mm minimum
	: with vertical float : start 180 mm minimum
	: : stop 100 mm minimum

ARTIKELNO	DESCRIPTION	VOLT
90.10.112	Grundfos KP 150.1	230 V
90.10.115	Grundfos KP 150.AV1 + vertical float	230 V
90.10.120	Grundfos KP 150.A1 + ball float	230 V



## GRUNDFOS KP 250

no head	: 11,000 litres per hour
5 metres head	: 6,200 litres per hour
discharge head	: 7.5 metres maximum
pumps down to	: 14 mm, <b>(only without float)</b>
particle size	: 10 mm, no sand or gravel
connection	: 1.1/4" internal thread
dimensions	: diameter 149 mm, height 225 mm (diam + float : 220 mm)
weight	: 7.2 kg
amperage	: 2.3 A
shaft power	: 0.24 kW, 0.32 hp
cable	: 10 metre neoprene H07- RN- F with earthed plug also plug connection on pump side
switch level	: with ball float : start 325 mm minimum : stop 100 mm minimum
	: with vertical float : start 180 mm minimum : stop 100 mm minimum

ARTIKELNO	DESCRIPTION	VOLT
90.10.212	Grundfos KP 250.1	230 V
90.10.215	Grundfos KP 250.AV1 + vertical float	230 V
90.10.220	Grundfos KP 250.A1 + ball float	230 V



## GRUNDFOS KP 350

no head	: 13,680 litres per hour
5 metres head	: 9,000 litres per hour
discharge head	: 9.0 metres maximum
pumps down to	: 14 mm <b>(only without float)</b>
particle size	: 10 mm, no sand or gravel
connection	: 1.1/4" internal thread
dimensions	: diameter 149 mm, height 235 mm
weight	: 7.5 kg
amperage	: 4.0 A
shaft power	: 0.37 kW, 0.5 hp
cable	: 10 metre neoprene H07 RN F with earthed plug also plug connection at pump side
switch level	: with ball float : start 325 mm minimum : stop 110 mm minimum
	: with vertical float : start 180 mm : stop 110 mm

ARTIKELNO	DESCRIPTION	VOLT
90.10.312	Grundfos KP 350.1	230 V
90.10.315	Grundfos KP 350.AV1 + vertical float	230 V
90.10.320	Grundfos KP 350.A1 + ball float	230 V



## GRUNDFOS AP 12

Robust all stainless steel cylinder pump.  
Very suitable for shipping, construction and industry.  
The ideal bilge and ballast pump.

type	: AP12
colour	: stainless steel
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: oil filled motor (not toxic)
fuse	: inbuilt thermal safeguard only with 230 volt version
shaft seal	: carbon on ceramic mechanical seal NBR rubber lip seal
submersion depth	: 10 metres maximum
materials	: impeller : stainless steel 304
	: impeller housing : stainless steel 304
	: motor housing : stainless steel 304
	: pump shaft : stainless steel 304
liquids	: slightly contaminated water and water with a somewhat higher acidity, and continuously at a temperature of 55°C
voltages	: 230 volt mains
	: 400 volt three phase



## GRUNDFOS AP 12.40.04

no head	: 18,000 litres per hour
5 metres head	: 11,000 litres per hour
discharge head	: 9.5 metres maximum
pumps down to	: 30 mm
particle size	: 12 mm, no sand or gravel
connection	: 1.1/2" internal thread
dimensions	: diameter 216 mm, height 355 mm
weight	: 10.0 kg
amperage	: 230 V, 3.1 A
	: 400 V, 1.3 A
shaft power	: 0.7 kW, 0.9 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
90.14.041	Grundfos AP 12.40.04.1	230 V
90.14.043	Grundfos AP 12.40.04.3	400 V



## GRUNDFOS AP 12.40.06

no head	: 22,000 litres per hour
5 metres head	: 16,000 litres per hour
10 metres head	: 7,200 litres per hour
discharge head	: 12.7 metres maximum
pumps down to	: 30 mm
particle size	: 12 mm, no sand or gravel
connection	: 1.1/2" internal thread
dimensions	: diameter 216 mm, height 355 mm
weight	: 11.0 kg
amperage	: 230 V, 4.4 A
	: 400 V, 1.6 A
shaft power	: 0.94 kW, 1.25 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
90.14.061	Grundfos AP 12.40.06.1	230 V
90.14.063	Grundfos AP 12.40.06.3	400 V

## GRUNDFOS AP 12.40.08

no head	: 24,000 litres per hour
5 metres head	: 19,000 litres per hour
10 metres head	: 11,100 litres per hour
discharge head	: 14.4 metres maximum
pumps down to	: 30 mm
particle size	: 12 mm, no sand or gravel
connection	: 1.1/2" internal thread
dimensions	: diameter 216 mm, height 375 mm
weight	: 12.6 kg
amperage	: 230 V, 5.9 A
	: 400 V, 2.1 A
shaft power	: 1.27 kW, 1.7 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>90.14.081</b>	Grundfos AP 12.40.08.1	230 V
<b>90.14.083</b>	Grundfos AP 12.40.08.3	400 V

## GRUNDFOS AP 12.50.11

no head	: 36,000 litres per hour
5 metres head	: 28,800 litres per hour
10 metres head	: 18,700 litres per hour
15 metres head	: 6,500 litres per hour
discharge head	: 16.6 metres maximum
pumps down to	: 30 mm
particle size	: 12 mm, no sand or gravel
connection	: 2" internal thread
dimensions	: diameter 241 mm, height 390 mm
weight	: 15.1 kg
amperage	: 230 V, 8.0 A
	: 400 V, 3.0 A
shaft power	: 1.6 kW, 2.1 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>90.15.111</b>	Grundfos AP 12.50.11.1	230 V
<b>90.15.113</b>	Grundfos AP 12.50.11.3	400 V



# SUBMERSIBLE PUMPS, TOP OUTLET

## ROBO

Modern cylinder pump for inland shipping, seagoing shipping, fisheries, construction, industry and dewatering. Professional quality for a reasonable price.

type	: RS
colour	: stainless steel
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: oil filled motor
fuse	: inbuilt thermal safeguard
shaft seal	: 3 part, upper ceramic on carbon, separated by an oil chamber from a silicon carbide on silicon carbide seal with an extra lip seal on the impeller side
submersion depth	: 10 metres maximum
materials	: impeller : plastic : impeller housing : cast iron : motor housing : stainless steel : pump shaft : stainless steel
liquids	: contaminated water containing solids and high acidity, max. temperature 40°C
voltages	: 230 volt mains

## ROBO RS-400

no head	: 15,000 litres per hour
5 metres head	: 12,000 litres per hour
10 metres head	: 6,000 litres per hour
discharge head	: 12.0 metres maximum
pumps down to	: 45 mm
particle size	: 4 mm maximum
connection	: 2" hose connection and 2" internal thread
dimensions	: diameter 167 mm, height 370 mm
weight	: 13 kg
amperage	: 3.8 A
shaft power	: 0.37 kW, 0.50 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug



ARTIKELNO	DESCRIPTION	VOLT
90.20.542	Robo RS-400	230 V

## PONSTAR ALUMINIUM

Modern cylinder pump for inland shipping, seagoing shipping, fisheries, construction and industry. Professional quality for a competitive price.

type	: PX
colour	: black
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: 3 parts : upper ceramic on carbon, separated by an oil chamber from a silicon carbide on silicon carbide seal with a VR lip seal
submersion depth	: 5 metres maximum
materials	: impeller : NBR rubber with steel core
	: impeller housing : NBR rubber
	: motor housing : aluminium with ceramic coating
	: pump shaft : stainless steel
liquids	: contaminated water containing solids and high acidity, max. temperature 50°C
voltage	: 230 V mains

## PONSTAR PX 55022 ALUMINIUM

no head	: 15,600 litres per hour
5 metres head	: 10,500 litres per hour
discharge head	: 10.0 metres maximum
pumps down to	: 20 mm
particle size	: 6 mm maximum
connection	: 2" hose connection and 2" internal thread
dimensions	: diameter 180 mm, height 310 mm
weight	: 13.0 kg
amperage	: 3.2 A
shaft power	: 0.62 kW, 0.84 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.20.852	Ponstar PX 55022 aluminium	230 V



# SUBMERSIBLE PUMPS, TOP OUTLET

## PONSTAR SAND PBX

Modern cylinder pump for inland shipping, seagoing shipping, fisheries, construction, industry and dewatering. Professional quality for a great price.

**Suitable for sandy water.**

My run dry indefinitely, even has 2 air valves.

Each pump tested with water while running and checked for: volume, pressure and power consumption.

type	: PBX	
colour	: yellow	
pump type	: fully submersible centrifugal pump	
impeller type	: open or closed impeller	
motor type	: dry motor	
fuse	: built-in thermal fuse	
shaft seal	: 4 pcs	: upper part carbon ceramic with sealing lip, separated by an oil chamber from a silicon carbide seal on silicon carbide with a sealing lip
immersion depth	: 6 metres maximum	
materials	: impellor	: polyurethane
	: impeller housing	: steel with polyurethane coating
	: motor housing	: steel with epoxy coating
	: pump shaft	: Stainless steel
liquids	: contaminated water with solid components, max. temperature 40°C	
voltage	: 230 volt mains	



## PONSTAR SAND PBX, SEPERATE FLOAT SWITCH

Separate float switch for Ponstar Sand PBX-4 and PBX-7.

Easy self assembly!

ARTIKELNO	DESCRIPTION	VOLT
90.22.010	Ponstar Sand PBX, separate float switch	230 V



## PONSTAR SAND PBX 4

no head	: 18,600 litres per hour
5 metres head	: 10,500 litres per hour
discharge head	: 9.5 metres maximum
pumps down to	: 35 mm
impeller type	: open impeller
particle size	: 6 mm maximum
connection	: 2" external thread and 2" hose connection
dimensions	: diameter 190 mm, height 405 mm
weight	: 15.5 kg
amperage	: 3.6 A
shaft power	: 0.4 kW, 0.53 hp, 2800 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.22.204	Ponstar Sand PBX4-55022	230 V
90.22.205	Ponstar Sand PBX4-55022A + ball float	230 V



## PONSTAR SAND PBX 7

no head	: 19,200 litres per hour
5 metres head	: 13,500 litres per hour
10 metres head	: 6,500 litres per hour
discharge head	: 15.0 metres maximum
pumps down to	: 35 mm
impeller type	: open impeller
particle size	: 6 mm maximum
connection	: 2" external thread and 2" hose connection
dimensions	: diameter 190 mm, height 405 mm
weight	: 16.5 kg
amperage	: 6.5 A
shaft power	: 0.75 kW, 1.0 hp, 2800 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.22.207</b>	Ponstar Sand PBX7-55022	230 V
<b>90.22.208</b>	Ponstar Sand PBX7-55022A + ball float	230 V



# SUBMERSIBLE PUMPS, TOP OUTLET

## FLYGT READY

Modern cylinder pump for inland shipping, seagoing shipping, fisheries, construction and industry. Professional quality for a reasonable price.

type	: Ready
colour	: orange, stainless steel and black
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: 2 part, the upper seal is ceramic on carbon, the lower seal is silicon carbide on silicon carbide, separated by an oil chamber
submersion depth	: 5 metres maximum
materials	: impeller : polyurethane : impeller housing : polyurethane : motor housing : stainless steel : pump shaft : stainless steel ST 60-2
liquids	: contaminated water containing solids and high acidity of pH 5-8, max. temperature 35°C
voltages	: 230 V mains : 400 V three phase



## FLYGT READY 4

no head	: 15,500 litres per hour
5 metres head	: 10,800 litres per hour
10 metres head	: 1,200 litres per hour
discharge head	: 10.2 metres maximum
pumps down to	: 25 mm
particle size	: 7 mm maximum
connection	: 2" external thread
dimensions	: diameter 184 mm, height 438 mm
weight	: 10 kg, without cable
amperage	: 2.4 A
shaft power	: 0.4 kW, 0.53 hp, 2700 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.24.042	Flygt Ready 4	230 V



## FLYGT READY 8

no head	: 18,700 litres per hour
5 metres head	: 16,200 litres per hour
10 metres head	: 10,800 litres per hour
discharge head	: 14.5 metres maximum
pumps down to	: 25 mm
particle size	: 7 mm maximum
connection	: 2" external thread
dimensions	: diameter 184 mm, height 438 mm
weight	: 12 kg, without cable
amperage	: 4 A
shaft power	: 0.75 kW, 1.0 hp, 2800 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
90.24.082	Flygt Ready 8	230 V

## ULEX KS EN KL

Robust cylinder pump for inland shipping, seagoing shipping, fisheries, construction, industry and dewatering. Also available in large capacities, which are suitable for salvaging vessels. Professional quality for a reasonable price.

type	: KS and KL
colour	: stainless steel with black
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: oil filled motor
fuse	: NO inbuilt thermal safeguard
guarantee	: no guarantee without MSS
shaft seal	: lip seal and ceramic on carbon mechanical seal in oil chamber
submersion depth	: 10 metres maximum
materials	: impeller : bronze
	: impeller housing : cast iron
	: motor housing : stainless steel 304
	: pump shaft : stainless steel 304
liquids	: contaminated water containing solids and high acidity, max. temperature 40°C
voltages	: 230 V mains
	: 400 V three phase

## ULEX KS-112N / KS-132N

no head	: 24,000 litres per hour
5 metres	: 20,000 litres per hour
10 metres	: 9,000 litres per hour
discharge head	: 12,0 metres maximum
pumps down to	: 55 mm
particle size	: 6 mm maximum
connection	: 2" internal thread
dimensions	: diameter 175 mm, height 465 mm
weight	: 230 V, 23.0 kg
	: 400 V, 19.0 kg
amperage	: KS 112N 230 V, 5,2 A
	: KS 132N 400 V, 2.1 A
shaft power	: 0,75 kW, 1.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F, without plug



ARTIKELNO	DESCRIPTION	VOLT
<b>90.30.112</b>	Ulex KS-112N	230 V
<b>90.30.113</b>	Ulex KS-112N + MSS	230 V
<b>90.30.132</b>	Ulex KS-132N	400 V
<b>90.30.133</b>	Ulex KS-132N + MSS	400 V

## SUBMERSIBLE PUMPS, TOP OUTLET



### ULEX KS-212CN / KS-232CN

no head	: 54,000 litres per hour
5 metres	: 42,000 litres per hour
discharge head	: 9.75 metres maximum
pumps down to	: 55 mm
particle size	: 10 mm maximum
connection	: 4" internal thread
dimensions	: diameter 228 mm, height 610 mm (510 mm, 400 V)
weight	: 230 V, 41.0 kg
	: 400 V, 33.0 kg
amperage	: KS 212CN 230 V, 14,0 A
	: KS 232CN 400 V, 3,4 A
shaft power	: 1.5 kW, 2.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 Volt

ARTIKELNO	DESCRIPTION	VOLT
<b>90.30.212</b>	Ulex KS-212CN	230 V
<b>90.30.213</b>	Ulex KS-212CN + MSS	230 V
<b>90.30.232</b>	Ulex KS-232CN	400 V
<b>90.30.233</b>	Ulex KS-232CN + MSS	400 V



### ULEX KS-332A

no head	: 78,000 litres per hour
5 metres head	: 63,000 litres per hour
10 metres head	: 33,000 litres per hour
discharge head	: 14.0 metres maximum
pumps down to	: 55 mm
particle size	: 10 mm maximum
connection	: 4" internal thread
dimensions	: diameter 228 mm, height 530 mm
weight	: 42.0 kg
amperage	: 5.2 A
shaft power	: 2.2 kW, 3.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.30.332</b>	Ulex KS-332A	400 V
<b>90.30.333</b>	Ulex KS-332A + MSS	400 V

## ULEX KS-532A

no head	: 96,000 litres per hour
5 metres	: 93,000 litres per hour
10 metres	: 60,000 litres per hour
15 metres	: 25,000 litres per hour
discharge head	: 16.0 metres maximum
pumps down to	: 55 mm
particle size	: 10 mm maximum
connection	: 4" internal thread
dimensions	: diameter 232 mm, height 560 mm
weight	: 49.0 kg
amperage	: 8.5 A
shaft power	: 3.7 kW, 5.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.30.532</b>	Ulex KS-532A - 50HZ	400 V
<b>90.30.533</b>	Ulex KS-532A - 50HZ + MSS	400 V
<b>90.30.534</b>	Ulex KS-532A - 60HZ	440 V
<b>90.30.535</b>	Ulex KS-532A - 60HZ + MSS	440 V



## ULEX KS-732

no head	: 198,000 litres per hour
5 metres head	: 132,000 litres per hour
discharge head	: 10.0 metres maximum
pumps down to	: 105 mm
particle size	: 15 mm maximum
connection	: 6" internal thread
dimensions	: diameter 335 mm, height 750 mm
weight	: 107.0 kg
amperage	: 10.0 A
shaft power	: 5.5 kW, 7.5 hp, 1500 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.30.732</b>	Ulex KS-732	400 V
<b>90.30.733</b>	Ulex KS-732 + MSS	400 V



## ULEX KL-1032

no head	: 444,000 litres per hour
5 metres head	: 300,000 litres per hour
discharge head	: 9.0 metres maximum
pumps down to	: 105 mm
particle size	: 15 mm maximum
connection	: 270 mm hose connection with flange, easy to convert to another size
dimensions	: diameter 422 mm, height 1035 mm
weight	: 165.0 kg
amperage	: 16.5 A
shaft power	: 7.5 kW, 10.0 hp, 1500 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.31.903</b>	Ulex KL-1032	400 V
<b>90.31.904</b>	Ulex KL-1032 + MSS	400 V





## ULEX KL-1532

no head : 540,000 litres per hour  
 5 metres head : 432,000 litres per hour  
 discharge head : 10/0 metres maximum  
 pumps down to : 105 mm  
 particle size : 15 mm maximum  
 connection : 315 mm hose connection with flange, easy to convert to another size  
 dimensions : diameter 422 mm, height 1065 mm  
 weight : 191.0 kg  
 amperage : 25.0 A  
 shaft power : 11.0 kW, 15.0 hp, 1500 rpm  
 cable : 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
90.31.953	Ulex KL-1532	400 V



## ULEX KL-2032

no head : 600,000 litres per hour  
 5 metres head : 492,000 litres per hour  
 10 metres head : 90.000 litres per hour  
 discharge head : 12,0 metres maximum  
 pumps down to : 105 mm  
 particle size : 15 mm maximum  
 connection : 320 mm hose connection with flange, easy to convert to another size  
 dimensions : diameter 450 mm, height 1100 mm  
 weight : 195.0 kg  
 amperage : 30.8 A  
 shaft power : 15.0 kW, 20.0 hp, 1500 rpm  
 cable : 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
90.31.973	Ulex KL-2032	400 V

## ULEX KT

Robust cylinder pump for inland shipping, seagoing shipping, fisheries, construction, industry and dewatering. Also available in large capacities, suitable for salvaging vessels. Professional quality for a reasonable price.

type	: KT
colour	: Stainless steel with black
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: oil filled motor
fuse	: NO inbuilt thermal safeguard
guarantee	: no guarantee without MSS
shaft seal	: lip seal and ceramic on carbon mechanical seal in oil chamber
submersion depth	: 10 metres maximum
materials	: impeller : hardened steel
	: impeller housing : cast iron
	: motor housing : stainless steel 304
	: pump shaft : stainless steel 304
liquids	: contaminated water containing solids and high acidity, max. temperature 40°C
voltages	: 230 volt mains
	: 400 volt three phase

## ULEX KT-212N / KT-232N

no head	: 27,600 litres per hour
5 metres	: 23,400 litres per hour
10 metres	: 17,400 litres per hour
15 metres	: 10,500 litres per hour
20 metres	: 2,400 litres per hour
discharge head	: 21.0 metres maximum
pumps down to	: 55 mm
particle size	: 10 mm maximum
connection	: 2" internal thread
dimensions	: diameter 228 mm, height 650 mm (550 mm, 400 V)
weight	: 230 V, 41.0 kg
	: 400 V, 37.0 kg
amperage	: KS 212N 230 V, 14.0 A
	: KS 232N 400 V, 3.4 A
shaft power	: 1.5 kW, 2.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.33.212</b>	Ulex KT-212N	230 V
<b>90.33.213</b>	Ulex KT-212N + MSS	230 V
<b>90.33.232</b>	Ulex KT-232N	400 V
<b>90.33.233</b>	Ulex KT-232N + MSS	400 V



## SUBMERSIBLE PUMPS, TOP OUTLET



### ULEX KT-332H

no head	: 27,600 litres per hour
5 metres	: 24,000 litres per hour
10 metres	: 18,600 litres per hour
15 metres	: 12,000 litres per hour
20 metres	: 4,000 litres per hour
discharge head	: 22.0 metres maximum
pumps down to	: 55 mm
particle size	: 10 mm maximum
connection	: 2" internal thread
dimensions	: diameter 228 mm, height 570 mm
weight	: 47.0 kg
amperage	: 5.2 A
shaft power	: 2.2 kW, 3.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.33.332</b>	Ulex KT-332H	400 V
<b>90.33.333</b>	Ulex KT-332H + MSS	400 V



### ULEX KT-532H

no head	: 36,000 litres per hour
5 metres	: 33,000 litres per hour
10 metres	: 25,500 litres per hour
15 metres	: 18,000 litres per hour
20 metres	: 11,000 litres per hour
25 metres	: 3,000 litres per hour
discharge head	: 27.0 metres maximum
pumps down to	: 55 mm
particle size	: 10 mm maximum
connection	: 2" internal thread
dimensions	: diameter 232 mm, height 605 mm
weight	: 49.0 kg
amperage	: 8.5 A
shaft power	: 3.7 kW, 5.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.33.532</b>	Ulex KT-532H - 50HZ	400 V
<b>90.33.533</b>	Ulex KT-532H - 50HZ + MSS	400 V
<b>90.33.534</b>	Ulex KT-532H - 60HZ	440 V
<b>90.33.535</b>	Ulex KT-532H - 60HZ + MSS	440 V



## ULEX KT-732H

no head	: 54,000 litres per hour
5 metres	: 51,000 litres per hour
10 metres	: 40,000 litres per hour
15 metres	: 27,600 litres per hour
20 metres	: 28,000 litres per hour
25 metres	: 6,000 litres per hour
discharge head	: 27.0 metres maximum
pumps down to	: 105 mm
particle size	: 15 mm maximum
connection	: 3" internal thread
dimensions	: diameter 272 mm, height 720 mm
weight	: 77.0 kg
amperage	: 10.0 A
shaft power	: 5.5 kW, 7.33 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.33.732</b>	Ulex KT-732H	400 V
<b>90.33.733</b>	Ulex KT-732H + MSS	400 V



## ULEX KT-1032H

no head	: 72,000 litres per hour
5 metres	: 69,000 litres per hour
10 metres	: 67,500 litres per hour
15 metres	: 58,500 litres per hour
20 metres	: 49,500 litres per hour
25 metres	: 35,400 litres per hour
30 metres	: 21,000 litres per hour
discharge head	: 35.0 metres maximum
pumps down to	: 105 mm
particle size	: 15 mm maximum
connection	: 4" internal thread
dimensions	: diameter 272 mm, height 700 mm
weight	: 91.0 kg
amperage	: 17.0 A
shaft power	: 7.5 kW, 10.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>90.33.903</b>	Ulex KT-1032H	400 V
<b>90.33.904</b>	Ulex KT-1032H + MSS	400 V





## ULEX KT-1532H

no head	: 96,000 litres per hour
5 metres	: 90,000 litres per hour
10 metres	: 84,000 litres per hour
15 metres	: 75,000 litres per hour
20 metres	: 63,000 litres per hour
25 metres	: 51,000 litres per hour
30 metres	: 39,000 litres per hour
35 metres	: 15,500 litres per hour
discharge head	: 38.0 metres maximum
pumps down to	: 200 mm
particle size	: 22 mm maximum
connection	: 4" internal thread
dimensions	: diameter 335 mm, height 785 mm
weight	: 129.0 kg
amperage	: 26.0 A
shaft power	: 11.0 kW, 15.0 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
90.33.953	Ulex KT-1532H	400 V

## TMC

Robust bilge pump for inland shipping and water sports.  
Is oil resistant.

type : 03602/03603/06601  
 colour : white/blue and yellow/black  
 pump type : completely submersible centrifugal pump  
 impeller type : open impeller  
 motor type : brush motor  
 fuse : NOT inbuilt  
 shaft seal : ceramic on carbon mechanical seal with lip seal  
 materials : impeller : plastic  
                   : impeller housing : plastic  
                   : motor housing : plastic  
                   : pump shaft : Stainless steel  
 liquids : slightly contaminated water and sea water  
 voltages : 12 V DC  
               : 24 V DC

## TMC-03602

no head : 5,300 litres per hour  
 discharge head : 2.7 metres maximum  
 pumps down to : 10 mm  
 particle size : zero  
 connection : 1" hose connection  
 dimensions : diameter 121/145 mm, height 165 mm  
 weight : 0.9 kg  
 amperage : 12 V, 7.0 A  
               : 24 V, 3.0 A  
 cable : 1 metre without plug

ARTIKELNO	DESCRIPTION	VOLT
91.05.112	TMC-03602	12 V
91.05.124	TMC-03602	24 V



## TMC-03603

no head : 6,600 litres per hour  
 discharge head : 4.1 metres maximum  
 pumps down to : 10 mm  
 particle size : zero  
 connection : 1" hose connection  
 dimensions : diameter 121/145 mm, height 165 mm  
 weight : 0.9 kg  
 amperage : 12 V, 10.0 A  
               : 24 V, 5.0 A  
 cable : 1 metre without plug

ARTIKELNO	DESCRIPTION	VOLT
91.05.312	TMC-03603	12 V
91.05.324	TMC-03603	24 V





## TMC-06601

no head : 7,500 litres per hour  
 discharge head : 4.6 metres maximum  
 pumps down to : 10 mm  
 particle size : zero  
 connection : 1.1/4" hose connection  
 dimensions : diameter 132/166 mm, height 195 mm  
 weight : 0.9 kg  
 amperage : 12 V, 20.0 A  
           : 24 V, 8.0 A  
 cable : 1 metre without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>91.05.512</b>	TMC-06601	12 V
<b>91.05.524</b>	TMC-06601	24 V

## RULE

Well-known American submersible or-bilge pump for boating or commercial shipping. Pump has anti airlock.

colour	: white with red
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: brush motor
fuse	: NOT inbuilt
shaft seal	: Teflon lip seal
materials	: impeller : nylon fibreglas
	: impeller housing : acetal resin
	: motor housing : acetal resin
	: pump shaft : stainless steel
liquids	: clean and slightly contaminated water and sea water
voltages	: 12 V DC
	: 24 V DC

## RULE 1500

no head	: 5,800 litres per hour
3.5 metres head	: 1,750 litres per hour
discharge head	: 3.75 metres maximum
pumps down to	: 10 mm
particle size	: 3 mm maximum
connection	: 1" hose connection
dimensions	: diameter 125 mm, height 153 mm
weight	: 0.9 kg
amperage	: 12 V : 5.0 A
	: 24 V : 3.5 A
shaft power	: 55 watt
cable	: 0.7 metre without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>91.09.151</b>	Rule 1500	12 V
<b>91.09.152</b>	Rule 1500	24 V



## RULE 2000

no head	: 7,500 litres per hour
5 metres head	: 350 litres per hour
discharge head	: 5.5 metres maximum
pumps down to	: 10 mm
particle size	: 3 mm maximum
connection	: 1" hose connection
dimensions	: diameter 125 mm, height 153 mm
weight	: 1.1 kg
amperage	: 12 V, 8.4 A
	: 24 V, 6.0 A
shaft power	: 100 watt
cable	: 0.7 metre without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>91.09.201</b>	Rule 2000	12 V
<b>91.09.202</b>	Rule 2000	24 V



# SUBMERSIBLE PUMPS, SIDE OUTLET

## ULEX SC

Affordable submersible pump.  
Very suitable for construction and industry.

type	: SC
colour	: orange
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: double carbon on ceramic mechanical seal separated by oil chamber and NBR rubber lip seal
submersion depth	: 5 metres maximum
materials	: impeller : cast iron
	: impeller housing : cast iron
	: motor housing : cast iron
	: pump shaft : stainless steel 304
liquids	: contaminated water
voltages	: 230 V mains



## ULEX SC-0312

no head	: 12,000 litres per hour
5 metres head	: 5,400 litres per hour
discharge head	: 8.0 metres maximum
pumps down to	: 40 mm
particle size	: 7 mm
connection	: 1.1/2" internal thread and 1.1/2" hose adaptor
dimensions	: diameter 255 mm, height 350 mm
weight	: 15 kg
amperage	: 3,0 A
shaft power	: 0.25 kW, 0.33 hp, 3000 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
91.20.312	Ulex SC-0312	230 V



## ULEX SC-0512

no head	: 15,000 litres per hour
5 metres head	: 9,600 litres per hour
discharge head	: 11.0 metres maximum
pumps down to	: 40 mm
particle size	: 7 mm
connection	: 2" internal thread and 2" hose adaptor
dimensions	: diameter 255 mm, height 410 mm
weight	: 18 kg
amperage	: 4,0 A
shaft power	: 0.375 kW, 0.5 hp, 3000 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
91.20.512	Ulex SC-0512	230 V

## ULEX SC-112A

no head	: 20,400 litres per hour
5 metres head	: 16,200 litres per hour
10 metres head	: 11,400 litres per hour
15 metres head	: 4,800 litres per hour
discharge head	: 18.0 metres maximum
pumps down to	: 40 mm
particle size	: 7 mm
connection	: 2" internal thread and 2" hose adaptor
dimensions	: diameter 255 mm, height 430 mm
weight	: 26 kg
amperage	: 6.4 A
shaft power	: 0.75 kW, 1.0 hp, 3000 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
91.20.912	Ulex SC-112A	230 V



# SUBMERSIBLE PUMPS, SIDE OUTLET

## ZENIT SERIE APE

High pressure submersible pump.  
Very suitable for seagoing shipping.

type	: APE
colour	: black
pump type	: completely submersible centrifugal pump
impeller type	: open impeller
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: double carbon on ceramic mechanical seal separated by oil chamber and NBR rubber lip seal
submersion depth	: 20 metres maximum
materials	: impeller : cast iron
	: impeller housing : cast iron
	: motor housing : cast iron
	: pump shaft : Stainless steel 304
liquids	: contaminated water
voltages	: 230 V mains
	: 400 V 3 phase



## ZENIT APE 200/2/G50H AOC

no head	: 32.400 litres per hour
5 metres head	: 31.800 litres per hour
10 metres head	: 27.000 litres per hour
15 metres head	: 21.000 litres per hour
20 meters head	: 13.200 litres per hour
discharge head	: 24.9 metres maximum
pumps down to	: 75 mm
particle size	: 7 mm
connection	: 2" internal thread and
dimensions	: diameter 285 mm (without knee), height 410 mm
weight	: 18 kg
amperage	: 230 V 10.6 A
	: 400 V 3.8 A
shaft power	: 1.7 kW, 2.26 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug, also with 230 Volt. Separate 230 Volt condensor needs to be installed in the cabinet.

ARTIKELNO	DESCRIPTION	VOLT
<b>91.22.531</b>	Zenit APE 200/2/G50H AOCM 50 Hz	230 V
<b>91.22.533</b>	Zenit APE 200/2/G50H AOCT 50 Hz	400 V
<b>91.22.631</b>	Zenit APE 200/2/G50H AOCM 60 Hz	230 V
<b>91.22.633</b>	Zenit APE 200/2/G50H AOCT 60 Hz	400 V



## CITY SPEED VORTEX

Small affordable submersible pump for many applications.  
For inland shipping, roofers, tennis courts, ponds, cellars etc.  
Can cope with contaminants up to a maximum diameter of 20 mm if they are not too hard.

type	: Speed
colour	: white with green
pump type	: completely submersible centrifugal pump
impeller type	: recessed open impeller (vortex)
motor type	: dry motor
fuse	: inbuilt thermal safeguard
shaft seal	: double ceramic carbon mechanical seal and lip seal, separated by oil chamber
submersion depth	: 3 metres
materials	: impeller : Noryl
	: impeller housing : plastic
	: motor housing : plastic
	: pump shaft : stainless steel EN 10088-3, 1.4104
liquids	: clean and slightly contaminated water, maximum temperature +40°C (+90°C for a maximum of 3 minutes)
voltage	: 230 volt mains

## CITY SPEED VORTEX 50M

no head	: 10,800 litres per hour
5 metres head	: 4,500 litres per hour
discharge head	: 7.0 metres maximum
pumps down to	: 25 mm
particle size	: 25 mm, no sand or gravel
connections	: 1.1/4" hose connection and 1.1/4" external thread
dimensions	: diameter 152 mm, height 290 mm
weight	: 6.8 kg
amperage	: 2.0 A
shaft power	: 0.37 kW, 0.5 hp, 2900 rpm
cable	: 10 metre neoprene H05-RN-F with earthed plug

ARTIKELNO	DESCRIPTION	VOLT
91.29.650	City Speed Vortex 50M	230 V
91.29.651	City Speed Vortex 50MA + ball float	230 V



## GRUNDFOS AP35 AND AP50

Robust all stainless steel cylinder pump (with top connection).  
Very suitable for shipping, construction and industry.  
The ideal bilge and ballast pump.

type	: AP35 - AP50	
colour	: stainless steel	
pump type	: completely submersible centrifugal pump	
impeller type	: recessed open impeller (vortex)	
motor type	: oil filled motor	
fuse	: inbuilt thermal safeguard only with 230 volt version	
shaft seal	: carbon on ceramic mechanical seal NBR rubber lip seal	
submersion depth	: 10 metres maximum	
materials	: impeller	: stainless steel 304
	: impeller housing	: stainless steel 304
	: motor housing	: stainless steel 304
	: pump shaft	: stainless steel 304
liquids	: slightly contaminated water and water with a somewhat higher acidity, and continuously at a temperature of 55°C	
voltages	: 230 V mains	
	: 400 V three phase	



## GRUNDFOS AP 35.40.06

no head	: 18,700 litres per hour
5 metres head	: 10,800 litres per hour
discharge head	: 9.8 metres maximum
pumps down to	: 40 mm
particle size	: 35 mm, no sand or gravel
connection	: 1.1/2" internal thread
dimensions	: diameter 216 mm, height 395 mm
weight	: 11.4 kg
amperage	: 230 V, 4.4 A
	: 400 V, 1.6 A
shaft power	: 0.94 kW, 1.25 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>91.44.061</b>	Grundfos AP 35.40.06.1V	230 V
<b>91.44.063</b>	Grundfos AP 35.40.06.3V	400 V

## GRUNDFOS AP 35.40.08

no head	: 23,400 litres per hour
5 metres head	: 15,800 litres per hour
10 metres head	: 4,500 litres per hour
discharge head	: 11.4 metres maximum
pumps down to	: 40 mm
particle size	: 35 mm, no sand or gravel
connection	: 1.1/2" internal thread
dimensions	: diameter 216 mm, height 425 mm
weight	: 12.7 kg
amperage	: 230 V, 5.9 A
	: 400 V, 2.1 A
shaft power	: 1.27 kW, 1.7 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>91.44.081</b>	Grundfos AP 35.40.08.1V	230 V
<b>91.44.083</b>	Grundfos AP 35.40.08.3V	400 V



## GRUNDFOS AP 50.50.08

no head	: 30,000 litres per hour
5 metres head	: 15,100 litres per hour
discharge head	: 9.1 metres maximum
pumps down to	: 55 mm
particle size	: 50 mm, no sand or gravel
connection	: 2" internal thread
dimensions	: diameter 241 mm, height 460 mm
weight	: 15.1 kg
amperage	: 230 V, 4.4 A
	: 400 V, 1.6 A
shaft power	: 0.94 kW, 1.25 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>91.45.081</b>	Grundfos AP 50.50.08.1V	230 V
<b>91.45.083</b>	Grundfos AP 50.50.08.3V	400 V



## GRUNDFOS AP 50.50.11

no head	: 33,800 litres per hour
5 metres head	: 22,700 litres per hour
10 metres head	: 7,500 litres per hour
discharge head	: 11.8 metres maximum
pumps down to	: 55 mm
particle size	: 50 mm, no sand or gravel
connection	: 2" internal thread
dimensions	: diameter 241 mm, height 460 mm
weight	: 15.1 kg
amperage	: 230 V, 8.0 A
	: 400 V, 3.0 A
shaft power	: 1.6 kW, 2.1 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug, without plug for 400 volt, also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>91.45.111</b>	Grundfos AP 50.50.11.1V	230 V
<b>91.45.113</b>	Grundfos AP 50.50.11.3V	400 V



## CITY PATROL

Robust pump for removing cargo residues from holds, for sewage, for pumping out dirty water tanks or as a ballast pump.

type	: PATROL
colour	: grey
pump type	: completely submersible centrifugal pump
impeller type	: single-channel impeller
motor type	: dry motor
submersion depth	: 10 metres
fuse	: inbuilt thermal safeguard for 230 volt, for 400 volt a motor safeguarding switch in the cable is necessary
shaft seal	: oil chamber with 2 shaft seals, the lower is a silicon carbide and Widia mechanical seal and a lip seal on the motor side
materials	: impeller : cast steel
	: impeller housing : cast iron
	: motor housing : cast iron
	: pump shaft : stainless steel EN 10088-3 - 1.4057
liquids	: contaminated water containing solids and high acidity with a max. temperature 40°C for completely submersed pump
voltages	: 230 V mains
	: 400 V three phase



## CITY PATROL 15/50

no head	: 48,000 litres per hour
5 metres head	: 28,800 litres per hour
10 metres head	: 19,500 litres per hour
discharge head	: 14.0 metres maximum
pumps down to	: 55 mm maximum
particle size	: 50 mm maximum
connection	: 2.1/2" internal thread
dimensions	: diameter 347 mm, height 490 mm
weight	: 34.0 kg
amperage	: 10.5 A
shaft power	: 1.1 kW, 1.5 hp, 2850 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug for 230 volt, 5 metre without plug for 400 volt

ARTIKELNO	DESCRIPTION	VOLT
91.51.151	City Patrol 15/50M	230 V



## CITY PATROL 20/50

no head	: 54,000 litres per hour
5 metres head	: 39,000 litres per hour
10 metres head	: 27,000 litres per hour
15 metres head	: 10,000 litres per hour
discharge head	: 16.0 metres maximum
pumps down to	: 55 mm maximum
particle size	: 50 mm maximum
connection	: 2.1/2" internal thread
dimensions	: diameter 347 mm, height 490 mm
weight	: 35.7 kg
amperage	: 230 V, 10.5 A
	: 400 V, 4.3 A
shaft power	: 1.5 kW, 2.0 hp, 2850 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug for 230 volt, 5 metre without plug for 400 volt

ARTIKELNO	DESCRIPTION	VOLT
91.51.251	City Patrol 20/50M	230 V
91.51.253	City Patrol 20/50 + MSS	400 V

## CITY PATROL 30/50

no head	: 66,000 litres per hour
5 metres head	: 57,000 litres per hour
10 metres head	: 43,000 litres per hour
15 metres head	: 27,000 litres per hour
20 metres head	: 12,000 litres per hour
discharge head	: 22.0 metres maximum
pumps down to	: 55 mm maximum
particle size	: 50 mm maximum
connection	: 2.1/2" internal thread
dimensions	: diameter 347 mm, height 490 mm
weight	: 35.8 kg
amperage	: 5.7 A
shaft power	: 2.2 kW, 3.0 hp, 2850 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug for 230 volt, 5 metre without plug for 400 volt

ARTIKELNO	DESCRIPTION	VOLT
<b>91.51.353</b>	City Patrol 30/50 + MSS	400 V



## LOWARA DOMO

Stainless steel submersible pump for removing cargo residues from holds, for pumping sewage, for pumping out dirty water tanks. The advantage of this pump is the vortex impeller. There is less chance of plugging or jamming.

type	: DOMO
colour	: stainless steel
pump type	: completely submersible centrifugal pump
impeller type	: recessed impeller (vortex)
motor type	: dry motor
submersion depth	: 5 metres
fuse	: inbuilt thermal safeguard for 230 volt for 400 volt a motor safeguarding switch in the cable is necessary
shaft seal	: drive lube seal system, oil chamber with 2 shaft seals, the lower is a wear resistant silicon carbide on silicon carbide mechanical seal and a lip seal on the motor side, everything lubricated by the drive lube system
materials	: impeller : stainless steel 304 : impeller housing : stainless steel 304 : motor housing : stainless steel 304 : pump shaft : stainless steel 304
liquids	: contaminated water containing solids and high acidity with a max. temperature 40°C for completely submersed pump
voltages	: 230 V mains : 400 V three phase



## LOWARA DOMO 7VXSG / 7VXT

no head	: 15,600 litres per hour
5 metres head	: 8,400 litres per hour
discharge head	: 9.0 metres maximum
pumps down to	: 35 mm maximum
impeller	: stainless steel 304
particle size	: 35 mm maximum, no gravel
connection	: 1.1/2" internal thread
dimensions	: diameter 193 mm, height 386 mm
weight	: 9.5 kg
amperage	: 230 V, 3.3 A : 400 V, 1.3 A
shaft power	: 0.55 kW, 0.75 hp, 2850 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug for 230 volt, 5 metre without plug for 400 volt

ARTIKELNO	DESCRIPTION	VOLT
<b>91.64.071</b>	Lowara Domo 7VXSG	230 V
<b>91.64.073</b>	Lowara Domo 7VXT, no MSS, no guarantee	400 V

## LOWARA DOMO 10VXSG / 10VXT

no head	: 24,000 litres per hour
5 metres head	: 14,400 litres per hour
discharge head	: 7.7 metres maximum
pumps down to	: 50 mm maximum
impeller	: stainless steel 304
particle size	: 50 mm maximum, none grind
connection	: 2" internal thread
dimensions	: diameter 198 mm, height 453 mm
weight	: 12.0 kg
amperage	: 230 V, 5.2 A
	: 400 V, 2.1 A
shaft power	: 0.8 kW, 1.1 hp, 2850 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug for 230 volt, 5 metre without plug for 400 volt

ARTIKELNO	DESCRIPTION	VOLT
<b>91.64.101</b>	Lowara Domo 10VXSG	230 V
<b>91.64.103</b>	Lowara Domo 10VXT, no MSS, no guarantee	400 V



## LOWARA DOMO 15VXSG / 15VXT

no head	: 30,000 litres per hour
5 metres head	: 21,000 litres per hour
discharge head	: 9.0 metres maximum
pumps down to	: 50 mm maximum
impeller	: stainless steel 304
particle size	: 50 mm maximum, none grind
connection	: 2" internal thread
dimensions	: diameter 198 mm, height 453 mm
weight	: 12.0 kg
amperage	: 230 V, 6.1 A
	: 400 V, 2.5 A
shaft power	: 1.1 kW, 1.5 hp, 2850 rpm
cable	: 10 metre neoprene H07-RN-F with earthed plug for 230 volt, 5 metre without plug for 400 volt

ARTIKELNO	DESCRIPTION	VOLT
<b>91.64.151</b>	Lowara Domo 15VXSG	230 V
<b>91.64.153</b>	Lowara Domo 15VXT, no MSS, no guarantee	400 V



## LOWARA DOMO 20VXT

no head	: 33.600 litres per hour
5 metres head	: 28.800 litres per hour
10 metres head	: 9.600 litres per hour
discharge head	: 11.3 metres maximum
pumps down to	: 50 mm maximum
impeller	: stainless steel 304
particle size	: 50 mm maximum, no gravel
connection	: 2" internal thread
dimensions	: diameter 198 mm, height 453 mm
weight	: 14.4 kg
amperage	: 3.4 A
shaft power	: 1.5 kW, 2.0 hp, 2850 rpm
cable	: 5 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
<b>91.64.203</b>	Lowara Domo 20VXT, no MSS, no guarantee	400 V



## LOWARA DL-VORTEX

Submersible pump for removing cargo residues from holds, for pumping sewage, for pumping out dirty water tanks. The advantage of this pump is the vortex impeller. There is less chance of plugging or jamming.

type	: DL-VORTEX
colour	: blue and stainless steel
pump type	: completely submersible centrifugal pump
impeller type	: recessed impeller (vortex)
motor type	: oil bath motor
submersion depth	: 5 metres
fuse	: inbuilt thermal safeguard for 230 volt for 400 volt a motor safeguarding switch is installed in the cable
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron
	: impeller housing : cast iron
	: motor housing : stainless steel
	: pump shaft : stainless steel
liquids	: contaminated water containing solids and high acidity
voltages	: 230 V mains
	: 400 V three phase



## LOWARA MINI VORTEX

no head	: 18,000 litres per hour
5 metres head	: 9,600 litres per hour
discharge head	: 7.6 metres maximum
pumps down to	: 60 mm
particle size	: 40 mm maximum
connection	: 2" internal thread
dimensions	: diameter 278 mm, height 455 mm
weight	: 19 kg
amperage	: 5.0 A
shaft power	: 0.6 kW, 0.8 hp, 2850 rpm
cable	: 10 metre neoprene H07-RN-F and earthed plug

ARTIKELNO	DESCRIPTION	VOLT
91.65.072	Lowara mini Vortex	230 V



## LOWARA VORTEX

no head	: 31,800 litres per hour
5 metres head	: 23,400 litres per hour
discharge head	: 8.7 metres maximum
pumps down to	: 60 mm
particle size	: 45 mm maximum
connection	: 2" internal thread
dimensions	: diameter 278 mm, height 455 mm
weight	: 21 kg
amperage	: 3.2 A
shaft power	: 1.1 kW, 1.5 hp, 2850 rpm
cable	: 9 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
91.65.113	Lowara Vortex, no MSS, no guarantee	400 V
91.65.114	Lowara Vortex + MSS	400 V



## ZENIT SUBMERSIBLE PUMP, EXPLOSION FREE, ATEX

Submersible pump for pumping out bilge water on ADN vessels.

type	: DRG
colour	: grey
pump type	: completely submersible centrifugal pump
impeller type	: single-channel impeller
motor type	: dry motor
submersion depth	: 5 metres
fuse	: for 400 volt a motor safeguarding switch in the cable is necessary
shaft seal	: drive lube seal system, oil chamber with 2 shaft seals, both wear resistant silicon carbide on silicon carbide and extra lip seal at motor bearing
materials	: impeller : cast iron EN-GJL 250 : impeller housing : cast iron EN-GJL 250 : motor housing : cast iron EN-GJL 250 : pump shaft : Stainless steel AISI 431
liquids	: contaminated water containing solids, maximum temperature +40°C
insulation class	: IP68
voltages	: 230 V mains : 400 V three phase
<b>ATEX</b>	: <b>II 2G</b> : <b>Ex db IIB T4 Gb</b> : <b>Ex h IIB T4 Gb</b>

## ZENIT DRG 75/2/G40, ATEX

no head	: 21,600 litres per hour
5 metre head	: 15,600 litres per hour
10 metre head	: 2,000 litres per hour
discharge head	: 10.5 metres maximum
pumps down to	: 70 mm maximum
particle size	: 10 mm maximum
connection	: 1.1/2" internal thread
dimensions	: diameter 255 mm (incl. knee), height 488 mm
weight	: 24.0 kg
amperage	: 230 V, 4.2 A : 400 V, 1.4 A
shaft power	: 0.55 kW, 0.7 hp, 2900 rpm
cable	: 10 metre neoprene H07 RN F without plug, also with 230 Volt

**Separate 230 Volt condenser still needs to be installed in the cabinet outside the explosion zone, or special cabinet for explosion zone.**

ARTIKELNO	DESCRIPTION	VOLT
<b>91.69.421</b>	Zenit DRG 75/2/G40V, ATEX	230 V
<b>91.69.423</b>	Zenit DRG 75/2/G40V, ATEX	400 V





## ZENIT DRG 250/2/G65V, ATEX

no head	: 75,000 litres per hour
5 metres head	: 64,000 litres per hour
10 metres head	: 37,000 litres per hour
15 metres head	: 10,000 litres per hour
discharge head	: 18.0 metres maximum
pumps down to	: 70 mm maximum
particle size	: 30 mm maximum
connection	: 2.1/2" internal thread
dimensions	: diameter 327 mm (incl. knee), height 581 mm
weight	: 33.0 kg
amperage	: 3,7 A
shaft power	: 1.8 kW, 2.4 hp, 2900 rpm
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
91.69.463	Zenit DRG 250/2/G65V, ATEX	400 V



## ZENIT DRG 300/2/G65V, ATEX

no head	: 85,000 litres per hour
5 metres head	: 76,000 litres per hour
10 metres head	: 48,000 litres per hour
15 metres head	: 22,000 litres per hour
18 metres head	: 6,000 litres per hour
discharge head	: 20.0 metres maximum
pumps down to	: 70 mm maximum
particle size	: 35 mm maximum
connection	: 2.1/2" internal thread
dimensions	: diameter 327 mm (incl. knee), height 605 mm
weight	: 42.2 kg
amperage	: 4.6 A
shaft power	: 2.2 kW, 2.93 hp, 2900 rpm, IP68
cable	: 10 metre neoprene H07-RN-F without plug

ARTIKELNO	DESCRIPTION	VOLT
91.69.473	Zenit DRG 300/2/G65V, ATEX	400 V

## CITY HYDRO-NHB, NEW BUILD DECK WASH PUMP

Stainless steel submersible pump for use in well point dewatering or for other purposes where a high pressure is called for.  
**Can be used in shipping as a deck wash pump.**

type	: Hydro-NHB	
colour	: stainless steel	
pump type	: completely submersible centrifugal pump	
impeller type	: closed impeller	
motor type	: dry motor	
submersion depth	: 5 metres	
fuse	: inbuilt thermal safeguard at 230 volt for 400 volt a motor safeguarding switch in the cable is necessary	
shaft seal	: oil chamber with 2 shaft seals, the lower is a wear resistant silicon carbon on ceramic mechanical seal and a lip seal on the motor side	
materials	impeller	: Noryl
	impeller housing	: stainless steel 304
	motor housing	: stainless steel 304
	pump shaft	: stainless steel EN 10088-3, 1.4104
liquids	: clean water	
voltages	: 230 V mains	
	: 400 V three phase	

## CITY HYDRO-NHB 7

no head	: 7,200 litres per hour
10 metres head	: 7,200 litres per hour
15 metres head	: 6,480 litres per hour
20 metres head	: 5,760 litres per hour
25 metres head	: 4,800 litres per hour
30 metres head	: 3,720 litres per hour
35 metres head	: 2,400 litres per hour
discharge head	: 37.0 metres maximum
pumps down to	: 35 mm maximum
particle size	: 2.0 mm maximum
connection	: 1.1/4" internal thread
dimensions	: diameter 135 mm, height 519 mm
weight	: 14.8 kg
amperage	: 5.0 A
shaft power	: 0.55 kW, 0.75 hp, 2850 rpm
cable	: 20 metre neoprene H07-RN-F without plug.



ARTIKELNO	DESCRIPTION	VOLT
91.92.071	City Hydro-NHB 7M	230 V



## CITY HYDRO-NHB 10

no head	: 7,200 litres per hour
15 metres head	: 7,080 litres per hour
20 metres head	: 6,480 litres per hour
25 metres head	: 5,760 litres per hour
30 metres head	: 5,160 litres per hour
35 metres head	: 4,200 litres per hour
40 metres head	: 3,360 litres per hour
45 metres head	: 2,160 litres per hour
discharge head	: 48.0 metres maximum
pumps down to	: 35 mm maximum
particle size	: 2.0 mm maximum
connection	: 1.1/4" internal thread
dimensions	: diameter 135 mm, height 573 mm
weight	: 16.7 kg
amperage	: 6.2 A
shaft power	: 0.75 kW, 1.0 hp, 2850 rpm
cable	: 20 metre neoprene H07-RN-F without plug.

ARTIKELNO	DESCRIPTION	VOLT
91.92.101	City Hydro-NHB 10M	230 V



## CITY HYDRO-NHB 15

no head	: 7,200 litres per hour
25 metres head	: 7,080 litres per hour
30 metres head	: 6,720 litres per hour
35 metres head	: 6,300 litres per hour
40 metres head	: 5,400 litres per hour
45 metres head	: 4,560 litres per hour
50 metres head	: 3,120 litres per hour
55 metres head	: 1,800 litres per hour
discharge head	: 56.0 metres maximum
pumps down to	: 35 mm maximum
particle size	: 2.0 mm maximum
connection	: 1.1/4" internal thread
dimensions	: diameter 135 mm, height 621 mm
weight	: 230 V, 18.6 kg
	: 400 V, 17.5 kg
amperage	: 230 V, 7.2 A
	: 400 V, 2.8 A
shaft power	: 1.1 kW, 1.5 hp, 2850 rpm
cable	: 20 metre neoprene H07-RN-F without plug.

ARTIKELNO	DESCRIPTION	VOLT
91.92.151	City Hydro-NHB 15M	230 V
91.92.153	City Hydro-NHB 15	400 V

## CITY HYDRO-NHB 20

no head	: 7,200 litres per hour
35 metres head	: 7,020 litres per hour
40 metres head	: 6,480 litres per hour
45 metres head	: 5,880 litres per hour
50 metres head	: 5,940 litres per hour
55 metres head	: 4,440 litres per hour
60 metres head	: 3,780 litres per hour
65 metres head	: 2,640 litres per hour
70 metres head	: 1,560 litres per hour
discharge head	: 72.0 metres maximum
pumps down to	: 35 mm maximum
particle size	: 2.0 mm maximum
connection	: 1.1/4" internal thread
dimensions	: diameter 153 mm, height 543 mm
weight	: 22.8 kg
amperage	: 3.2 A
shaft power	: 1.5 kW, 2.0 hp, 2850 rpm
cable	: 20 metre neoprene H07-RN-F without plug



ARTIKELNO	DESCRIPTION	VOLT
91.92.203	City Hydro-NHB 20	400 V

## STORK KGEF, SELF-PRIMING

Well-known and well-made self-priming pump for dirty water. Can be used as a bilge, deck wash, dewatering, sprinkling and fire extinguishing pump.

type	: KGEF
colour	: blue
pump type	: self-priming centrifugal pump
impeller type	: open impeller or closed impeller
motor type	: short circuit motor for 400 volt : induction motor for 230 volt
fuse	: not inbuilt
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron (bronze)* : impeller : polyamide 11-3 and 11-4 : pump housing : cast iron (bronze)* : pump shaft : chromed steel
liquids	: contaminated liquids such as water, sea water, diesel, gas oil and fuel oil (maximum temperature +95°C)
voltages	: 400 V three phase and 1 pump 230 V mains

\* Available on request \* So too is complete Ni-resist

\* When starting up the pump always check the amperage on the electric motor's nameplate. Small differences between different motors are possible.



## STORK KGEF 11-3

no head	: 13,500 litres per hour
5 metres head	: 13,500 litres per hour
10 metres head	: 11,000 litres per hour
15 metres head	: 3,500 litres per hour
discharge head	: 15.5 metres maximum
suction head	: 8.4 metres maximum
impeller type	: open polyamide impeller
particle size	: 7.5 mm maximum
connections	: 1.1/4" internal thread
dimensions	: l x w x h = 412 x 190 x 255 mm
weight	: 24 kg
amperage	: 230 V, 5.5 A+ : 400 V, 1.8 A+
shaft power	: 0.75 kW, 1 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.05.112	Stork KGEF 11-3/A7	230 V
92.05.113	Stork KGEF 11-3	400 V



## STORK KGEF 11-4

no head	: 19,500 litres per hour
5 metres head	: 19,500 litres per hour
10 metres head	: 18,000 litres per hour
15 metres head	: 7,000 litres per hour
discharge head	: 17.5 metres maximum
suction head	: 8.4 metres maximum
impeller type	: open polyamide impeller
particle size	: 12 mm maximum
connections	: 1.1/2" internal thread
dimensions	: l x w x h = 429 x 190 x 290 mm
weight	: 27 kg
amperage	: 2.6 A+
shaft power	: 1.1 kW, 1.5 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.05.114	Stork KGEF 11-4	400 V

## STORK KGEF 12B-5

no head	: 25,000 litres per hour
5 metres head	: 25,000 litres per hour
10 metres head	: 24,000 litres per hour
15 metres head	: 16,000 litres per hour
20 metres head	: 4,000 litres per hour
discharge head	: 21.0 metres maximum
suction head	: 7.8 metres maximum
impeller type	: open cast iron impeller
particle size	: 10 mm maximum
connections	: 2" internal thread
dimensions	: lwxh = 484 x 225 x 350 mm
weight	: 43 kg
amperage	: 3.4 A+
shaft power	: 1.5 kW, 2 hp, 2850 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.05.124	Stork KGEF 12b-5	400 V

## STORK KGEF 12-5

no head	: 34,000 litres per hour
5 metres head	: 34,000 litres per hour
10 metres head	: 30,000 litres per hour
15 metres head	: 20,000 litres per hour
20 metres head	: 8,000 litres per hour
discharge head	: 22.0 metres maximum
suction head	: 7.8 metres maximum
impeller type	: open cast iron impeller
particle size	: 13 mm maximum
connections	: 2" internal thread
dimensions	: lwxh = 509 x 225 x 350 mm
weight	: 45 kg
amperage	: 4.7 A+
shaft power	: 2.2 kW, 3 hp



ARTIKELNO	DESCRIPTION	VOLT
92.05.125	Stork KGEF 12-5	400 V

## STORK KGEF 12-6

no head	: 50,000 litres per hour
5 metres head	: 50,000 litres per hour
10 metres head	: 50,000 litres per hour
15 metres head	: 32,000 litres per hour
20 metres head	: 12,000 litres per hour
discharge head	: 23.0 metres maximum
suction head	: 8.1 metres maximum
impeller type	: open cast iron impeller
particle size	: 20 mm maximum
connections	: 2.1/2" internal thread
dimensions	: lwxh = 588 x 225 x 360 mm
weight	: 75 kg
amperage	: 6.3 A+
shaft power	: 3.0 kW, 4 hp, 2850 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.05.126	Stork KGEF 12-6	400 V



## STORK KGEF 14-8

no head	: 83,000 litres per hour
5 metres head	: 83,000 litres per hour
10 metres head	: 78,000 litres per hour
15 metres head	: 58,000 litres per hour
20 metres head	: 27,000 litres per hour
discharge head	: 22.0 metres maximum
suction head	: 7.3 metres maximum
impeller type	: open cast iron impeller
particle size	: 24 mm maximum
connections	: 80 mm flange connection
dimensions	: lxxh = 596 x 255 x 375 mm
weight	: 86 kg
amperage	: 11.0 A+
shaft power	: 4.0 kW, 5.5 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.05.148	Stork KGEF 14-8	400 V



## STORK KGEF 15-6

no head	: 52,000 litres per hour
5 metres head	: 52,000 litres per hour
10 metres head	: 52,000 litres per hour
15 metres head	: 44,000 litres per hour
20 metres head	: 34,000 litres per hour
25 metres head	: 24,000 litres per hour
30 metres head	: 8,000 litres per hour
<b>discharge head</b>	<b>: 32.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.5 metres maximum
impeller type	: open cast iron impeller
particle size	: 11 mm maximum
connections	: 2.1/2" internal thread
dimensions	: lxxh = 583 x 247 x 380 mm
weight	: 80 kg
amperage	: 8.1 A+
shaft power	: 4.0 kW, 5.5 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.05.156	Stork KGEF 15-6	400 V



## STORK KGEF 16-3

no head	: 15,500 litres per hour
5 metres head	: 15,500 litres per hour
10 metres head	: 15,500 litres per hour
15 metres head	: 14,500 litres per hour
20 metres head	: 11,000 litres per hour
25 metres head	: 8,000 litres per hour
30 metres head	: 5,000 litres per hour
<b>discharge head</b>	<b>: 34.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.5 metres maximum
impeller type	: closed cast iron impeller
particle size	: 6 mm maximum
connections	: 1.1/4" internal thread
dimensions	: lxxh = 500 x 225 x 280 mm
weight	: 45 kg
amperage	: 4.7 A+
shaft power	: 2.2 kW, 3 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.05.163	Stork KGEF 16-3	400 V



## STORK KGEF 16-6

no head	: 58,000 litres per hour
5 metres head	: 58,000 litres per hour
10 metres head	: 58,000 litres per hour
15 metres head	: 58,000 litres per hour
20 metres head	: 50,000 litres per hour
25 metres head	: 40,000 litres per hour
30 metres head	: 30,000 litres per hour
35 metres head	: 17,000 litres per hour
<b>discharge head</b>	<b>: 37.5 metres maximum PRESSURE PUMP</b>
suction head	: 6.5 metres maximum
impeller type	: open cast iron impeller
particle size	: 12 mm maximum
connections	: 2.1/2" internal thread
dimensions	: lwxhxh = 626 x 247 x 380 mm
weight	: 107 kg
amperage	: 11.0 A+
shaft power	: 5.5 kW, 7.5 hp, 2850 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.05.166	Stork KGEF 16-6	400 V

## STORK KGEF 18-4

no head	: 18,000 litres per hour
5 metres head	: 18,000 litres per hour
10 metres head	: 18,000 litres per hour
15 metres head	: 18,000 litres per hour
20 metres head	: 18,000 litres per hour
25 metres head	: 15,500 litres per hour
30 metres head	: 12,500 litres per hour
35 metres head	: 9,000 litres per hour
40 metres head	: 3,500 litres per hour
<b>discharge head</b>	<b>: 40.5 metres maximum PRESSURE PUMP</b>
suction head	: 6.5 metres maximum
impeller type	: closed cast iron impeller
particle size	: 6.5 mm maximum
connections	: 1.1/2" internal thread
dimensions	: lwxhxh = 650 x 265 x 370 mm
weight	: 100 kg
amperage	: 4.7 A+
shaft power	: 4.0 kW, 5.5 hp, 2850 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.05.184	Stork KGEF 18-4	400 V



## STORK KGEF 20B-5

no head	: 27,500 litres per hour
5 metres head	: 27,500 litres per hour
10 metres head	: 27,500 litres per hour
15 metres head	: 27,500 litres per hour
20 metres head	: 27,500 litres per hour
25 metres head	: 26,000 litres per hour
30 metres head	: 24,000 litres per hour
35 metres head	: 22,500 litres per hour
40 metres head	: 19,000 litres per hour
45 metres head	: 16,000 litres per hour
50 metres head	: 9,000 litres per hour
<b>discharge head</b>	<b>: 52.0 metres maximum PRESSURE PUMP</b>
suction head	: 6.7 metres maximum
impeller type	: closed cast iron impeller
particle size	: 4 mm maximum
connections	: 2" internal thread
dimensions	: l x w x h = 730 x 320 x 460 mm
weight	: 135 kg
amperage	: 11.0 A+
shaft power	: 5.5 kW, 7.5 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.05.205	Stork KGEF 20b-5	400 V

## HEWA PUMPS (K&R, KUYL AND ROTTINGHUIS), SELF-PRIMING

Deck wash and bilge pump based on the original moulds of the former K&R SAE pump series.

Reliable pumps with impressive pressure and/or volume performance.

Affordable and reliable. Use as deck wash pump, for jet-washing holds, as a fire pump, for overhead irrigation, for ballast water, drainage and as a general service pump.

type	: HEWA
colour	: blue
type pump	: self-priming centrifugal pump
impeller type	: open impeller
type of motor	: squirrel-cage motor
fuse	: NOT built-in
insulation class	: IP55
seal	: carbon on SiC mechanical seal with viton
materials	: impeller : bronze
	: wear plate : bronze
	: pump housing : cast iron
	: pump shaft : Stainless steel A4
liquids	: clean and contaminated liquids with relatively coarse constituents, such as water, sea water, etc.
voltage	: 400 volt power current

### HEWA 50/040

no head	: 44,500 litres per hour
5 meters	: 40,500 litres per hour
10 meters	: 33,750 litres per hour
20 meters	: 16,500 litres per hour
25 meters	: 7,525 litres per hour
discharge head	: 28.0 meters maximum
suction head	: 8.0 meters
particle size	: 8 mm maximum
connections	: DIN flange 50
dimensions	: LxWxH 653 x 190 x 398 mm
weight	: 98 kg
current	: 8.0 amp
shaft power	: 4.0 kW, 5.3 hp, 2,900 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.07.611	HEWA 50/040	400 V

### HEWA 50/055

no head	: 55,000 litres per hours
at 5 meters	: 52,500 litres per hour
at 10 meters	: 48,000 litres per hour
at 15 meters	: 42,750 litres per hour
at 20 meters	: 36,000 litres per hour
at 25 meters	: 28,250 litres per hour
at 30 meters	: 19,500 litres per hour
at 35 meters	: 7,000 litres per hour
<b>discharge head</b>	<b>: at 36.0 meters maximum PRESSURE PUMP</b>
suction head	: 8.0 meters
particle size	: 8 mm maximum
connections	: DIN flange 50
dimensions	: LxWxH 653 x 190 x 398 mm
weight	: 100 kg
current	: 11.8 amp
shaft power	: 5.5 kW, 7.3 hp, 2,900 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.07.621	HEWA 50/055	400 V



## HEWA 50/075

no head	: 56,250 litres per hour
at 5 meters	: 56,000 litres per hour
at 10 meters	: 55,250 litres per hour
at 15 meters	: 55,000 litres per hour
at 20 meters	: 52,250 litres per hour
at 25 meters	: 46,000 litres per hour
at 30 meters	: 39,250 litres per hour
at 35 meters	: 31,000 litres per hour
at 40 meters	: 22,000 litres per hour
at 45 meters	: 3,000 litres per hour
<b>discharge head</b>	<b>: 46.0 meters maximum PRESSURE PUMP</b>
suction head	: 8.0 meters
particle size	: 8 mm maximum
connections	: DIN flange 50
dimensions	: LxWxH 673 x 215 x 418 mm
weight	: 120 kg
current	: 14.3 amp
shaft power	: 7.5 kW, 10.0 hp, 2,900 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.07.631	HEWA 50/075	400 V



## HEWA 80/110

no head	: 70,000 litres per hour
at 30 meters	: 70,000 litres per hour
at 35 meters	: 63,000 litres per hour
at 40 meters	: 52,500 litres per hour
at 45 meters	: 42,000 litres per hour
at 50 meters	: 28,000 litres per hour
<b>discharge head</b>	<b>: 54.0 meters maximum PRESSURE PUMP</b>
suction head	: 8.0 meters
particle size	: 8 mm maximum
connections	: DIN flange 80
dimensions	: LxWxH 785 x 215 x 455 mm
weight	: 166 kg
current	: 19.5 amp
shaft power	: 11.0 kW, 14.6 hp, 2,900 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.07.641	HEWA 80/110	400 V

## DESMI SERIE NSA, SELF-PRIMING

Well-known deck wash and bilge pump for commercial shipping.  
Meets all the requirements of the classification organizations and can be supplied with certificate.

type	: NSA
colour	: yellow
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: short circuit motor
fuse	: NOT inbuilt
shaft seal	: brass on carbon mechanical seal
materials	: impeller : bronze
	: wearing plate : bronze
	: pump housing : cast iron or bronze
	: pump shaft : SS
liquids	: clean and contaminated liquids with coarser particles, such as water, sea water, gas oil etc.
voltage	: 400 volt three phase

## DESMI NSA50-200/165

no head	: 41,000 litres per hour
15 metres head	: 39,000 litres per hour
20 metres head	: 31,000 litres per hour
25 metres head	: 20,000 litres per hour
<b>discharge head</b>	<b>: 30.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 4 mm maximum
connections	: flange 50 x 160 x pitch circle diam. 125 mm, 4 x M12 (is supplied without flange)
dimensions	: lxxh = 650 x 300 x 440 mm
weight	: 98 kg
amperage	: 8.8 A
shaft power	: 4.0 kW, 5.3 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	TYPE	VOLT
<b>92.08.540</b>	Desmi NSA50-200/165	cast iron	400/690 V
<b>92.08.541</b>	Desmi NSA50-200/165	bronze	400/690 V

## DESMI NSA50-200/185

no head	: 48,000 litres per hour
20 metres head	: 46,000 litres per hour
25 metres head	: 39,000 litres per hour
30 metres head	: 31,500 litres per hour
35 metres head	: 18,000 litres per hour
40 metres head	: 1,500 litres per hour
<b>discharge head</b>	<b>: 40.2 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 4 mm maximum
connections	: flange 50 x 160 x pitch circle diam. 125 mm, 4 x M12 (is supplied without flange)
dimensions	: lxxh = 650 x 300 x 440 mm
weight	: 98 kg
amperage	: 8.8 A
shaft power	: 5.5 kW, 7.3 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	TYPE	VOLT
<b>92.08.550</b>	Desmi NSA50-200/185	cast iron	400/690 V
<b>92.08.551</b>	Desmi NSA50-200/185	bronze	400/690 V



## DESMI NSA50-200/195

no head	: 52,000 litres per hour
20 metres head	: 52,000 litres per hour
25 metres head	: 46,000 litres per hour
30 metres head	: 40,000 litres per hour
35 metres head	: 32,000 litres per hour
40 metres head	: 20,000 litres per hour
40 metres head	: 4,000 litres per hour
<b>discharge head</b>	<b>: 45.3 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 4 mm maximum
connections	: flange 50 x 160 x pitch circle diam. 125 mm, 4 x M12 (is supplied without flange)
dimensions	: l x w x h = 700 x 300 x 440 mm
weight	: 121 kg
amperage	: 8.8 A
shaft power	: 7.5 kW, 10.0 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	TYPE	VOLT
92.08.570	Desmi NSA50-200/195	cast iron	400/690 V
92.08.571	Desmi NSA50-200/195	bronze	400/690 V



## DESMI NSA80-250/16-240

no head	: 78,000 litres per hour
10 metres head	: 78,000 litres per hour
15 metres head	: 54,000 litres per hour
discharge head	: 18.2 metres maximum
suction head	: 8.0 metres
particle size	: 4 mm maximum
connections	: flange 80 x 160 x pitch circle diam. 125 mm, 4 x M12 (is supplied without flange)
dimensions	: l x w x h = 690 x 375 x 505 mm
weight	: 116 kg
amperage	: 8.8 A
shaft power	: 4.0 kW, 5.3 hp, 1450 rpm

ARTIKELNO	DESCRIPTION	TYPE	VOLT
92.08.840	Desmi NSA80-250/16-240	cast iron	400/690 V



## DESMI NSA80-250/10-220

no head	: 69,000 litres per hour
30 metres head	: 69,000 litres per hour
35 metres head	: 60,000 litres per hour
40 metres head	: 51,000 litres per hour
45 metres head	: 42,000 litres per hour
50 metres head	: 24,000 litres per hour
<b>discharge head</b>	<b>: 52.5 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 4 mm maximum
connections	: flange 80 x 160 x pitch circle diam. 125 mm, 4 x M12 (is supplied without flange)
dimensions	: l x w x h = 800 x 375 x 505 mm
weight	: 178 kg
amperage	: 8.8 A
shaft power	: 11.0 kW, 14.6 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	TYPE	VOLT
92.08.890	Desmi NSA80-250/10-220	cast iron	400/690 V
92.08.891	Desmi NSA80-250/10-220	bronze	400/690 V

## VICTOR SERIES S, SELF-PRIMING

Well-known deck wash and bilge pump for commercial shipping.

type	: S
colour	: blue
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: short circuit motor
fuse	: NOT inbuilt
insulation class	: IP55
shaft seal	: SiC on ceramic mechanical seal with Viton, in oil bath
materials	: impeller : cast steel
	: wearing plate : cast steel
	: pump housing : cast iron
	: pump shaft : stainless steel
liquids	: clean and contaminated liquids with coarser particles, such as water, sea water, gas oil etc.
voltage	: 400 volt three phase

## VICTOR S40G31T

no head	: 22,500 litres per hour
at 5 meters	: 20,500 litres per hour
at 10 meters	: 13,500 litres per hour
at 15 meters	: 2,000 litres per hour
discharge head	: 16.0 meters maximum
suction head	: 8.0 meters
particle size	: Up to 20 mm
connections	: 1 1/2" inside thread or DIN40 flange
dimensions	: LxWxH 498 x 210 x 296 mm
weight	: 28 kg
current	: 2.3 A
shaft power	: 1.1 kW, 1.46 hp, 2,900 rpm



ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.040	Victor S40G31T	1.1/2" inside thread	400 V
92.09.041	Victor S40G31T+F	flange DN40	400 V

## VICTOR S45G31T

no head	: 24,000 litres per hour
10 metres head	: 22,500 litres per hour
15 metres head	: 17,500 litres per hour
20 metres head	: 14,500 litres per hour
25 metres head	: 10,000 litres per hour
30 metres head	: 5,000 litres per hour
discharge head	: <b>33.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 14 x 19 mm maximum
connections	: 1.1/2" internal thread, or flange DN40
dimensions	: lwxhxh = 514 x 242 x 312 mm
weight	: 47 kg
amperage	: 5.4 A
shaft power	: 2.2 kW, 2.93 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.045	Victor S45G31T	1.1/2" inside thread	400 V
92.09.046	Victor S45G31T+F	flange DN40	400 V



## VICTOR S60G31T

no head	: 45,000 litres per hour
10 metres head	: 42,500 litres per hour
15 metres head	: 37,500 litres per hour
20 metres head	: 30,000 litres per hour
25 metres head	: 23,000 litres per hour
30 metres head	: 13,000 litres per hour
<b>discharge head</b>	<b>: 32.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 17 mm maximum
connections	: 2" internal thread, or flange DN50
dimensions	: lxxh = 569 x 280 x 350 mm
weight	: 71 kg
amperage	: 8.4 A
shaft power	: 4.0 kW, 5.3 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.060	Victor S60G31T	2" inside thread	400 V
92.09.061	Victor S60G31T+F	flange DN50	400 V



## VICTOR S63G31T

no head	: 50,000 litres per hour
30 metres head	: 45,000 litres per hour
35 metres head	: 37,000 litres per hour
40 metres head	: 28,000 litres per hour
45 metres head	: 17,500 litres per hour
50 metres head	: 5,000 litres per hour
<b>discharge head</b>	<b>: 51.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 22 mm maximum
connections	: 2" internal thread, or flange DN50
dimensions	: lxxh = 594 x 290 x 355 mm
weight	: 77 kg
amperage	: 7.9 A
shaft power	: 7.5 kW, 10.0 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.063	Victor S63G31T	2" inside thread	400 V
92.09.064	Victor S63G31T+F	flange DN50	400 V



## VICTOR S68G31T

no head	: 60,000 litres per hour
30 metres head	: 56,000 litres per hour
35 metres head	: 52,000 litres per hour
40 metres head	: 46,000 litres per hour
45 metres head	: 40,000 litres per hour
50 metres head	: 30,000 litres per hour
55 metres head	: 20,000 litres per hour
60 metres head	: 10,000 litres per hour
<b>discharge head</b>	<b>: 62.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 25 mm maximum
connections	: 2" internal thread, or flange DN50
dimensions	: lxxh = 709 x 308 x 393 mm
weight	: 114 kg
amperage	: 20.2 A
shaft power	: 11.0 kW, 14.6 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.068	Victor S68G31T	2" inside thread	400 V
92.09.069	Victor S68G31T+F	flange DN50	400 V



## VICTOR S80G31T

no head	: 80,000 litres per hour
7 metres head	: 75,000 litres per hour
10 metres head	: 63,000 litres per hour
15 metres head	: 45,000 litres per hour
20 metres head	: 20,000 litres per hour
discharge head	: 20.0 metres maximum
suction head	: 8.0 metres
particle size	: 32 mm maximum
connections	: 3" internal thread, or flange DN80
dimensions	: lwxh = 653 x 293 x 433 mm
weight	: 84 kg
amperage	: 8.4 A
shaft power	: 4.0 kW, 5.3 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.080	Victor S80G31T	3" inside thread	400 V
92.09.081	Victor S80G31T+F	flange DN80	400 V

## VICTOR S83G31T

no head	: 85,000 litres per hour
5 metre head	: 85,000 litres per hour
10 metre head	: 85,000 litres per hour
15 metre head	: 80,000 litres per hour
20 metre head	: 70,000 litres per hour
25 metre head	: 57,000 litres per hour
30 metre head	: 40,000 litres per hour
35 metre head	: 20,000 litres per hour
<b>discharge head</b>	<b>: 38.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 27 mm maximum
connections	: 3" internal thread, or flange DN80
dimensions	: lwxh = 661 x 327 x 411 mm
weight	: 94 kg
amperage	: 13.7 A
shaft power	: 7.5 kW, 10.0 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.083	Victor S83G31T	3" inside thread	400/690 V
92.09.084	Victor S83G31T+F	flange DN80	400/690 V

## VICTOR S85G31T

no head	: 80,000 litres per hour
5 metres head	: 80,000 litres per hour
10 metres head	: 65,000 litres per hour
discharge head	: 15.0 metres maximum
suction head	: 8.0 metres
particle size	: 40 mm maximum
connections	: 3" internal thread, or flange DN80
dimensions	: lwxh = 661 x 327 x 411 mm
weight	: 117 kg
amperage	: 9.6 A
shaft power	: 4.0 kW, 5.3 hp, 1450 rpm



ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
92.09.085	Victor S85G31T	3" inside thread	400 V
92.09.086	Victor S85G31T+F	flange DN80	400 V



## VICTOR S88G31T

no head	: 100,000 litres per hour
35 metre head	: 97,000 litres per hour
40 metre head	: 70,000 litres per hour
45 metre head	: 55,000 litres per hour
50 metre head	: 32,000 litres per hour
<b>discharge head</b>	<b>: 52.0 metres maximum PRESSURE PUMP</b>
suction head	: 8.0 metres
particle size	: 35 mm maximum
connections	: 3" internal thread, or flange DN80
dimensions	: l x w x h = 819 x 468 x 367 mm
weight	: 140 kg
amperage	: 30.0 A
shaft power	: 15.0 kW, 20.4 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
<b>92.09.088</b>	Victor S88G31T	3" inside thread	400 V
<b>92.09.089</b>	Victor S88G31T+F	flange DN80	400 V



## VICTOR S105G31T

no head	: 135,000 litres per hour
5 metres head	: 135,000 litres per hour
10 metres head	: 105,000 litres per hour
discharge head	: 13.5 metres maximum
suction head	: 8.0 metres
particle size	: 45 mm maximum
connections	: 4" internal thread, or flange DN100
dimensions	: l x w x h = 723 x 354 x 471 mm
weight	: 128 kg
amperage	: 11.7 A
shaft power	: 5.5 kW, 7.3 hp, 1450 rpm

ARTIKELNO	DESCRIPTION	CONNECTION	VOLT
<b>92.09.105</b>	Victor S105G31T	4" inside thread	400 V
<b>92.09.106</b>	Victor S105G31T+F	flange DN100	400 V

## ALPHA PUMP, SELF-PRIMING WITH OPEN IMPELLER

Deck wash and bilge pumps for commercial shipping, large pleasure craft and coastal shipping. Can also be used for sprinkling, irrigation and dewatering, and as a cooling medium pump in industry.

type	: RA
colour	: blue
pump type	: self-priming centrifugal pump (1" model limited self-priming +/- 2 meters)
impeller type	: open impeller
motor type	: induction motor for 230 volt : short circuit motor for 400 volt
fuse	: inbuilt thermal safeguard only for the 230 volt motors
shaft seal	: ceramic on carbon mechanical seal with neoprene or Viton elastomers (for gas oil)
materials	: impeller : cast iron : pump housing : cast iron : pump shaft : stainless steel AISI 420
liquids	: contaminated water, sea water etc. maximum temperature 90°C
insulation class	: IP55
voltages	: 230 V mains : 400 V three phase

**ATEX** : II 2 G EEx d IIBB T5, T4, T3  
: Pump for cargo residues, for example petrol. Comes with explosion proof **and compression resistant motor** as well as a mechanical seal with Viton.

## ALPHA 1RA

no head	: 4,920 litres per hour
5 metres head	: 4,020 litres per hour
9 metres head	: 1,500 litres per hour
discharge head	: 9.5 metres maximum
suction head	: 2.0 metres
particle size	: 8 mm maximum
connections	: 1" internal thread
dimensions	: lwxh = 304 x 162 x 213 mm
weight	: 11 kg
amperage	: 230 V : 3.3 A : 400 V : 1.5 A
shaft power	: 0.44 kW, 0.6 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.010	Alpha O1RA-M-0.6 (limited self-priming +/- 2 meters)	230 V
92.11.020	Alpha O1RA-T-0.6 (limited self-priming +/- 2 meters)	400 V
92.11.022	Alpha O1RA-T-0.6 (limited self-priming +/- 2 meters), ATEX	400 V



## ALPHA O1½RA

no head	: 19,500 litres per hour
5 metres head	: 19,500 litres per hour
10 metres head	: 16,200 litres per hour
15 metres head	: 9,000 litres per hour
discharge head	: 19.0 metres maximum
suction head	: 7.0 metres
particle size	: 9 mm maximum
connections	: 1.1/2" internal thread
dimensions	: lwxh = 426 x 190 x 283 mm
weight	: 24 kg
amperage	: 230 V : 6.2 A : 400 V : 2.3 A
shaft power	: 0.75 kW, 1 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.030	Alpha O1½RA-M-1	230 V
92.11.040	Alpha O1½RA-T-1	400 V
92.11.042	Alpha O1½RA-T-1, ATEX	400 V





## ALPHA O2RAS

no head : 21,000 litres per hour  
 5 metres head : 21,000 litres per hour  
 10 metres head : 19,500 litres per hour  
 15 metres head : 12,000 litres per hour  
 discharge head : 18.0 metres maximum  
 suction head : 7.0 metres  
 particle size : 11 mm maximum  
 connections : 2" internal thread  
 dimensions : l x w x h = 432 x 190 x 288 mm  
 weight : 27 kg  
 amperage : 230 V : 7.7 A  
 : 400 V : 3.0 A  
 shaft power : 1.1 kW, 1.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.050	Alpha O2RAS-M-1.5	230 V
92.11.060	Alpha O2RAS-T-1.5	400 V
92.11.062	Alpha O2RAS-T-1.5, ATEX	400 V



## ALPHA O2RA

no head : 27,000 litres per hour  
 5 metres head : 27,000 litres per hour  
 10 metres head : 25,200 litres per hour  
 15 metres head : 15,900 litres per hour  
 discharge head : 19.0 metres maximum  
 suction head : 7.0 metres  
 particle size : 14 mm maximum  
 connections : 2" internal thread  
 dimensions : l x w x h = 474 x 205 x 321 mm  
 weight : 30 kg  
 amperage : 230 V : 9.5 A  
 : 400 V : 4.5 A  
 shaft power : 1.5 kW, 2 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.070	Alpha O2RA-M-2	230 V
92.11.080	Alpha O2RA-T-2	400 V
92.11.082	Alpha O2RA-T-2, ATEX	400 V



## ALPHA O2 1/2 RA-T

no head : 33,000 litres per hour  
 5 metres head : 33,000 litres per hour  
 10 metres head : 31,500 litres per hour  
 15 metres head : 21,300 litres per hour  
 discharge head : 18.5 metres maximum  
 suction head : 7.0 metres  
 particle size : 20 mm maximum  
 connections : 2.1/2" internal thread  
 dimensions : l x w x h = 502 x 205 x 321 mm  
 weight : 31 kg  
 amperage : 5.7 A  
 shaft power : 2.2 kW, 3 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.100	Alpha O2 1/2 RA-T-3	400 V
92.11.102	Alpha O2 1/2 RA-T-3, ATEX	400 V

## ALPHA 03RA/SG-T

no head	: 48,000 litres per hour
5 metres head	: 48,000 litres per hour
10 metres head	: 36,000 litres per hour
15 metres head	: 21,600 litres per hour
discharge head	: 19.0 metres maximum
suction head	: 7.0 metres
particle size	: 23 mm maximum
connections	: 3" internal thread
dimensions	: l x w x h = 502 x 205 x 321 mm
weight	: 32 kg
amperage	: 5.7 A
shaft power	: 2.2 kW, 3 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.125	Alpha 03RA/SG-T-3	400 V
92.11.126	Alpha 03RA/SG-T-3, ATEX	400 V



## ALPHA 03RA/S-T

no head	: 54,000 litres per hour
5 metres head	: 54,000 litres per hour
10 metres head	: 41,700 litres per hour
15 metres head	: 25,200 litres per hour
discharge head	: 20.0 metres maximum
suction head	: 7.0 metres
particle size	: 24 mm maximum
connections	: 3" internal thread
dimensions	: l x w x h = 535 x 205 x 306 mm
weight	: 35 kg
amperage	: 7.0 A
shaft power	: 3.0 kW, 4.0 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.130	Alpha 03RA/S-T-4	400 V



## ALPHA 03RAG-T

no head	: 66,000 litres per hour
15 metres head	: 66,000 litres per hour
20 metres head	: 45,000 litres per hour
24 metres head	: 15,600 litres per hour
discharge head	: 25.0 metres maximum
suction head	: 7.0 metres
particle size	: 19 mm maximum
connections	: 3" internal thread
dimensions	: l x w x h = 598 x 274 x 435 mm
weight	: 74 kg
amperage	: 9.0 A
shaft power	: 4 kW, 5.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.150	Alpha 03RAG-T-5.5	400 V
92.11.151	Alpha 03RAG-T-5.5, ATEX	400 V





## ALPHA O3RA-X-T

no head	: 43,500 litres per hour
10 metres head	: 43,500 litres per hour
15 metres head	: 33,000 litres per hour
20 metres head	: 22,800 litres per hour
25 metres head	: 13,500 litres per hour
discharge head	: 30.0 metres maximum
suction head	: 7.0 metres
particle size	: 11 mm maximum
connections	: 3" internal thread
dimensions	: lwxh = 585 x 240 x 385 mm
weight	: 90 kg
amperage	: 9.0 A
shaft power	: 4.0 kW, 5.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.160	Alpha O3RA-X-T-5.5	400 V



## ALPHA O3RA-T

no head	: 87,000 litres per hour
15 metres head	: 87,000 litres per hour
20 metres head	: 72,000 litres per hour
25 metres head	: 42,000 litres per hour
27 metres head	: 21,000 litres per hour
discharge head	: 28.0 metres maximum
suction head	: 7.0 metres
particle size	: 24 mm maximum
connections	: 3" internal thread
dimensions	: lwxh = 651 x 274 x 435 mm
weight	: 75 kg
amperage	: 400 V : 11.5 A
	: 400/690 V : 7.6 A
shaft power	: 5.5 kW, 7.5 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.11.180	Alpha O3RA-T-7.5	400 V
92.11.185	Alpha O3RA-T-7.5	400/690 V
92.11.186	Alpha O3RA-T-7.5, ATEX	400/690 V



## ALPHA O3RAZ-T

no head	: 58,200 litres per hour
10 metres head	: 58,200 litres per hour
15 metres head	: 52,200 litres per hour
20 metres head	: 46,200 litres per hour
25 metres head	: 39,000 litres per hour
30 metres head	: 28,200 litres per hour
35 metres head	: 21,500 litres per hour
<b>discharge head</b>	<b>: 37.5 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 14 mm maximum
connections	: 3" internal thread
dimensions	: lwxh = 585 x 270 x 385 mm
weight	: 90 kg
amperage	: 11.5 A
shaft power	: 5.5 kW, 7.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.190	Alpha O3RAZ-T-7.5	400 V

## ALPHA O3RAY-T

no head	: 75,000 litres per hour
10 metres head	: 75,000 litres per hour
15 metres head	: 67,500 litres per hour
20 metres head	: 60,000 litres per hour
25 metres head	: 51,600 litres per hour
30 metres head	: 42,000 litres per hour
35 metres head	: 30,600 litres per hour
40 metres head	: 12,000 litres per hour
<b>discharge head</b>	<b>: 42.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 23 mm maximum
connections	: 3" internal thread
dimensions	: lwxh = 715 x 258 x 384 mm
weight	: 90 kg
amperage	: 11.0 A
shaft power	: 9.5 kW, 12.5 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.11.230	Alpha O3RAY-T-12.5	400/690 V

## ALPHA ORA-AT-15

no head	: 58,200 litres per hour
40 metres head	: 58,200 litres per hour
45 metres head	: 49,500 litres per hour
50 metres head	: 43,500 litres per hour
55 metres head	: 22,500 litres per hour
60 metres head	: 6,000 litres per hour
<b>discharge head</b>	<b>: 61.5 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 12 mm maximum
connections	: 3" internal thread
dimensions	: lwxh = 840 x 350 x 421 mm
weight	: 145 kg
amperage	: 13.3 A
shaft power	: 11.0 kW, 15.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.11.237	Alpha ORA-AT-15	400/690 V

## ALPHA ORA-AT-20

no head	: 51,000 litres per hour
50 metres head	: 51,000 litres per hour
55 metres head	: 45,600 litres per hour
60 metres head	: 36,000 litres per hour
65 metres head	: 25,500 litres per hour
70 metres head	: 6,000 litres per hour
<b>discharge head</b>	<b>: 71.5 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 15 mm maximum
connections	: 3" internal thread
dimensions	: lwxh = 840 x 350 x 421 mm
weight	: 155 kg
amperage	: 18.5 A
shaft power	: 15.0 kW, 20.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.11.241	Alpha ORA-AT-20	400/690 V



## ALPHA ORA-AT-25

no head : 48,000 litres per hour  
 56 metres head : 48,000 litres per hour  
 60 metres head : 43,800 litres per hour,  
 65 metres head : 36,000 litres per hour  
 70 metres head : 24,000 litres per hour  
 75 metres head : 9,000 litres per hour  
**discharge head : 76.5 metres maximum PRESSURE PUMP**  
 suction head : 7.0 metres  
 particle size : 19 mm maximum  
 connections : 3" internal thread  
 dimensions : lwxh = 930 x 350 x 421 mm  
 weight : 179 kg  
 amperage : 20.7 A  
 shaft power : 18.5 kW, 25.0 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.11.245	Alpha ORA-AT-25	400/690 V



## ALPHA O4RAG-T

no head : 150,000 litres per hour,  
 12 metres head : 150,000 litres per hour  
 15 metres head : 144,000 litres per hour  
 20 metres head : 135,000 litres per hour  
 25 metres head : 109,000 litres per hour  
 30 metres head : 54,000 litres per hour  
**discharge head : 32.0 metres maximum PRESSURE PUMP**  
 suction head : 7.0 metres  
 particle size : 34 mm maximum  
 connections : 4" internal thread  
 dimensions : lwxh = 861 x 313 x 558 mm  
 weight : 145 kg  
 amperage : 13.0 A  
 shaft power : 11.0 kW, 15.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.11.250	Alpha O4RAG-T-15	400/690 V
92.11.251	Alpha O4RAG-T-15, ATEX	400/690 V



## ALPHA O4RA-T

no head : 171,000 litres per hour  
 12 metres head : 171,000 litres per hour  
 15 metres head : 165,000 litres per hour  
 20 metres head : 146,000 litres per hour  
 25 metres head : 114,000 litres per hour  
 30 metres head : 60,000 litres per hour  
**discharge head : 32.0 metres maximum PRESSURE PUMP**  
 suction head : 7.0 metres  
 particle size : 39 mm maximum  
 connections : 4" internal thread  
 dimensions : lwxh = 861 x 313 x 558 mm  
 weight : 146 kg  
 amperage : 17.3 A  
 shaft power : 15.0 kW, 20.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.11.260	Alpha O4RA-T-20	400/690 V
92.11.261	Alpha O4RA-T-20, ATEX	400/690 V



## ALPHA 06RA-T

no head	: 192,000 litres per hour
5 metres head	: 192,000 litres per hour
10 metres head	: 162,000 litres per hour
15 metres head	: 120,000 litres per hour
20 metres head	: 60,000 litres per hour
discharge head	: 22.0 metres maximum
suction head	: 7.0 metres
particle size	: 25 mm maximum
connections	: 6" internal thread or flange
dimensions	: lxxh = 1500 x 680 x 1070 mm (dimensions on frame)
weight	: 410 kg
amperage	: 13.2 A
shaft power	: 11.0 kW, 15.0 hp, 1500 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>92.11.280</b>	Alpha 06RA-T-15 on foundation plate	400/690 V

## ALPHA 08RA-T

no head	: 300,000 litres per hour
5 metres head	: 300,000 litres per hour
10 metres head	: 222,000 litres per hour
15 metres head	: 144,000 litres per hour
20 metres head	: 55,000 litres per hour
discharge head	: 22.0 metres maximum
suction head	: 7.0 metres
particle size	: 33 mm maximum
connections	: 8" flange
dimensions	: lxxh = 1500 x 680 x 1070 mm (dimensions on frame)
weight	: 490 kg
amperage	: 21.3 A
shaft power	: 18.5 kW, 25.0 hp, 1500 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>92.11.290</b>	Alpha 08RA-T-25 on foundation plate	400/690 V

## ALPHA PUMP, SELF-PRIMING WITH CLOSED IMPELLER

Deck wash and bilge pumps for commercial shipping, large pleasure craft and coastal shipping.  
Can also be used for sprinkling, irrigation and dewatering, and as a cooling medium pump in industry.

type	: RA
colour	: blue
pump type	: self-priming centrifugal pump
impeller type	: closed impeller
motor type	: induction motor for 230 volt : short circuit motor for 400 volt
fuse	: inbuilt thermal safeguard only for the 230 volt motors
shaft seal	: ceramic on carbon mechanical seal with neoprene or Viton elastomers (for gas oil)
materials	: impeller : cast iron : pump housing : cast iron : pump shaft : stainless steel AISI 420
liquids	: contaminated water, sea water etc. maximum temperature 90°C
insulation class	: IP55
voltages	: 230 V mains : 400 V three phase



## ALPHA ORAC-T-10

no head	: 37,800 litres per hour
20 metres head	: 37,800 litres per hour
25 metres head	: 36,000 litres per hour
30 metres head	: 34,200 litres per hour
35 metres head	: 32,400 litres per hour
40 metres head	: 30,000 litres per hour
45 metres head	: 27,300 litres per hour
50 metres head	: 22,800 litres per hour
55 metres head	: 18,000 litres per hour
60 metres head	: 9,000 litres per hour
<b>discharge head</b>	<b>: 62.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 4.0 mm maximum
connections	: discharge : 1.1/2" internal thread : suction : 2" internal thread
dimensions	: l x w x h = 740 x 325 x 421 mm
weight	: 105 kg
amperage	: 9.1 A
shaft power	: 7.5 kW, 10.0 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.12.310	Alpha ORAC-T-10	400/690 V

## ALPHA ORAC-T-15

no head	: 42,000 litres per hour
30 metres head	: 42,000 litres per hour
35 metres head	: 39,600 litres per hour
40 metres head	: 37,200 litres per hour
45 metres head	: 33,600 litres per hour
50 metres head	: 29,100 litres per hour
55 metres head	: 24,000 litres per hour
60 metres head	: 14,100 litres per hour
<b>discharge head</b>	<b>: 63.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 3.0 mm maximum
connections	: discharge : 2" internal thread
	: suction : 3" internal thread
dimensions	: lwxh = 840 x 350 x 421 mm
weight	: 135 kg
amperage	: 13.3 A
shaft power	: 11.0 kW, 15.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.12.515	Alpha ORAC-T-15	400/690 V

## ALPHA ORAC-T-20

no head	: 63,000 litres per hour
36 metres head	: 63,000 litres per hour
40 metres head	: 59,400 litres per hour
45 metres head	: 54,000 litres per hour
50 metres head	: 48,900 litres per hour
55 metres head	: 42,000 litres per hour
60 metres head	: 32,400 litres per hour
65 metres head	: 22,200 litres per hour
70 metres head	: 12,000 litres per hour
<b>discharge head</b>	<b>: 75.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 5.0 mm maximum
connections	: discharge : 2" internal thread
	: suction : 3" internal thread
dimensions	: lwxh = 840 x 350 x 421 mm
weight	: 145 kg
amperage	: 18.5 A
shaft power	: 15.0 kW, 20.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.12.520	Alpha ORAC-T-20	400/690 V



## ALPHA 03RAC-T-5.5

no head	: 42,000 litres per hour
14 metres head	: 42,000 litres per hour
15 metres head	: 40,800 litres per hour
20 metres head	: 35,400 litres per hour
25 metres head	: 30,000 litres per hour
30 metres head	: 20,400 litres per hour
<b>discharge head</b>	<b>: 35.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 6.0 mm maximum
connections	: 3" internal thread
dimensions	: lxwxh = 585 x 270 x 385 mm
weight	: 80 kg
amperage	: 5.2 A
shaft power	: 4.0 kW, 5.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.12.805	Alpha 03RAC-T-5.5	400/690 V



## ALPHA 03RA-D-T-7.5

no head	: 54,000 litres per hour
10 metres head	: 54,000 litres per hour
15 metres head	: 46,800 litres per hour
20 metres head	: 40,500 litres per hour
25 metres head	: 33,000 litres per hour
30 metres head	: 24,000 litres per hour
35 metres head	: 9,900 litres per hour
<b>discharge head</b>	<b>: 38.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 6.0 mm maximum
connections	: 3" internal thread
dimensions	: lxwxh = 585 x 270 x 385 mm
weight	: 85 kg
amperage	: 7.6 A
shaft power	: 5.5 kW, 7.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.12.807	Alpha 03RA-D-T-7.5	400/690 V

## ALPHA 03RA-E-T-10

no head	: 60,000 litres per hour
10 metres head	: 60,000 litres per hour
15 metres head	: 59,400 litres per hour
20 metres head	: 46,800 litres per hour
25 metres head	: 39,000 litres per hour
30 metres head	: 30,000 litres per hour
35 metres head	: 19,800 litres per hour
40 metres head	: 6,000 litres per hour
<b>discharge head</b>	<b>: 42.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 6.0 mm maximum
connections	: 3" internal thread
dimensions	: lwxh = 690 x 270 x 385 mm
weight	: 90 kg
amperage	: 11.0 A
shaft power	: 7.5 kW, 10.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.12.810	Alpha 03RA-E-T-10	400/690 V

## ALPHA 04RA-C-T-25

no head	: 120,000 litres per hour
32 metres head	: 120,000 litres per hour
35 metres head	: 105,000 litres per hour
40 metres head	: 75,000 litres per hour
45 metres head	: 48,000 litres per hour
<b>discharge head</b>	<b>: 46.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.0 metres
particle size	: 15.0 mm maximum
connections	: 4" internal thread
dimensions	: lwxh = 861 x 313 x 558 mm
weight	: 190 kg
amperage	: 24.0 A
shaft power	: 18.5 kW, 25.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.12.925	Alpha 04RA-C-T-25	400/690 V

## CEM BRONZE PUMP FOR SEAWATER, SELF-PRIMING

Deck wash and bilge pumps for commercial shipping, large pleasure craft and coastal shipping. Also suitable as a fire extinguishing pump and cooling medium pump for seagoing vessels.

type	: AM
colour	: bronze and white
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: short circuit motor
fuse	: NOT built-in
shaft seal	: ceramic on carbon mechanical seal with NBR elastomers
materials	: impeller : bronze
	: pump housing : bronze
	: pump shaft : stainless steel AISI 316
liquids	: slightly contaminated water, sea water etc. maximum temperature 70°C
insulation class	: IP55
voltages	: 400 V three phases



## CEM AM 40-4T

no head	: 27,000 litres per hour
10 metres head	: 22,800 litres per hour
15 metres head	: 18,000 litres per hour
20 metres head	: 13,800 litres per hour
25 metres head	: 6,000 litres per hour
discharge head	: 28.0 metres maximum
suction head	: 4.5 metres
particle size	: 4.5 mm maximum
connections	: discharge : DN40 flange with 1.1/2" internal thread
	: suction : DN50 flange with 2" internal thread
dimensions	: l x w x h = 523 x 206 x 240 mm
weight	: 40 kg
amperage	: 6.7 A
shaft power	: 3.0 kW, 4.0 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.15.044	CEM AM 40-4T	400 V



## CEM AM 50-7.5T

no head	: 48,000 litres per hour
15 metres head	: 48,000 litres per hour
20 metres head	: 42,000 litres per hour
25 metres head	: 33,000 litres per hour
30 metres head	: 27,000 litres per hour
35 metres head	: 15,000 litres per hour
<b>discharge head</b>	<b>: 36.0 metres maximum PRESSURE PUMP</b>
suction head	: 5.5 metres
particle size	: 8.0 mm maximum
connections	: discharge : DN50 flange with 2" internal thread
	: suction : DN65 flange with 2.1/2" internal thread
dimensions	: l x w x h = 567 x 236 x 288 mm
weight	: 63 kg
amperage	: 12.3 A
shaft power	: 5.5 kW, 7.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.15.075	CEM AM 50-7.5T	400 V

## CEM AM 65-15T

no head	: 84,000 litres per hour
25 metres head	: 81,000 litres per hour
30 metres head	: 66,000 litres per hour
35 metres head	: 54,000 litres per hour
40 metres head	: 40,000 litres per hour
45 metres head	: 22,500 litres per hour
<b>discharge head</b>	<b>: 48.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.5 metres
particle size	: 11.0 mm maximum
connections	: discharge : DN65 flange with 2.1/2" internal thread : suction : DN80 flange with 3" internal thread
dimensions	: l x w x h = 892 x 350 x 382 mm
weight	: 170 kg
amperage	: 400 V : 21.0 A : 690 V : 12.1 A
shaft power	: 11.0 kW, 15.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.15.150	CEM AM 65-15T	400/690 V

## CEM AM 65/1-25T

no head	: 96,000 litres per hour
30 metres head	: 90,000 litres per hour
35 metres head	: 81,000 litres per hour
40 metres head	: 72,000 litres per hour
45 metres head	: 59,000 litres per hour
50 metres head	: 45,000 litres per hour
55 metres head	: 27,000 litres per hour
<b>discharge head</b>	<b>: 56.0 metres maximum PRESSURE PUMP</b>
suction head	: 7.5 metres
particle size	: 14.0 mm maximum
connections	: discharge : DN65 flange with 2.1/2" internal thread : suction : DN80 flange with 3" internal thread
dimensions	: l x w x h = 892 x 350 x 382 mm
weight	: 198 kg
amperage	: 400 V : 35.0 A : 690 V : 20.5 A
shaft power	: 18.0 kW, 25.0 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
92.15.250	CEM AM 65/1-25T	400/690 V

## ULEX PRESSURE PUMP, SELF-PRIMING

Ideal deck wash pump, and also suitable for sprinkling in agriculture and horticulture.

Excellent value for money.

Check the direction of rotation after installation, as the impeller may run off the shaft if the direction of rotation is incorrect.

type	: BB
colour	: grey
pump type	: self-priming centrifugal pump
impeller type	: closed impeller
motor type	: short circuit motor
fuse	: NOT inbuilt
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : brass
	: impeller chamber : cast iron
	: pump housing : cast iron
	: pump shaft : stainless steel
liquids	: clean to slightly contaminated water.
voltages	: 400 volt three phase



## ULEX BB-3T

no head	: 18,600 litres per hour
5 metres head	: 18,600 litres per hour
10 metres head	: 17,400 litres per hour
15 metres head	: 16,800 litres per hour
20 metres head	: 15,600 litres per hour
25 metres head	: 13,800 litres per hour
30 metres head	: 11,900 litres per hour
<b>discharge head</b>	<b>: 32.1 metres maximum PRESSURE PUMP</b>
suction head	: 6.0 metres
particle size	: 3 mm maximum
connections	: 2" internal thread
dimensions	: l x w x h = 460 x 290 x 345 mm
weight	: 53 kg
insulation class	: IP54
amperage	: 5.2 A
shaft power	: 2.2 kW, 3.0 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.25.423	Ulex BB-3T	400 V



## AIR DRIVEN MEMBRANE PUMP, SELF-PRIMING

Can run dry indefinitely and provides suction when dry. Also very suitable for viscous liquids like lubricating oil.

Is used to pump out open excavations and in the foodstuffs and chemicals industries.

Can also be used as a submersible pump.

The ATEX version is ideal for use on tankers or where there is an explosion risk.

Air pressure	: Maximum 7 bar!
Pump type	: self-priming membrane pump
Motor type	: pneumatic piston motor
Shaft sealing	: N.A.
Materials	: membrane : Buna or Teflon +
	: balls : Buna or Teflon +
	: valves : Buna or Teflon +
	: seats : Buna or Teflon +
	: pump chamber : aluminium ++
	: pump housing : aluminium ++
	: pump shaft : N.A.

+ also available in : NBR, neoprene, EPDM, Viton

++ also available in : cast iron, stainless steel 316

Liquids : **BUNA** : slightly contaminated liquids such as kerosene, gas oil and lubricating oil.  
: **TEFLON** : unleaded petrol, various chemicals

**ATEX** : II 2GD IIB Tx

## AIR MEMBRANE PUMP 0.5

NB : no guarantee without use of air filter and water separator

viscosity : has a very substantial effect on capacity

capacities : **measured with water (Teflon 20% less CAPACITY)**

no head : 3,180 litres per hour

10 metres head : 2,850 litres per hour

20 metres head : 2,760 litres per hour

30 metres head : 2,040 litres per hour

40 metres head : 1,560 litres per hour

50 metres head : 1,050 litres per hour

60 metres head : 480 litres per hour

discharge head : 70.0 metres maximum

suction head : Buna : 7.6 metres, DRY 4.6 metres

: Teflon : 6.0 metres, DRY 3.0 metres

particle size : 1.5 mm maximum

connections : 1/2" internal thread

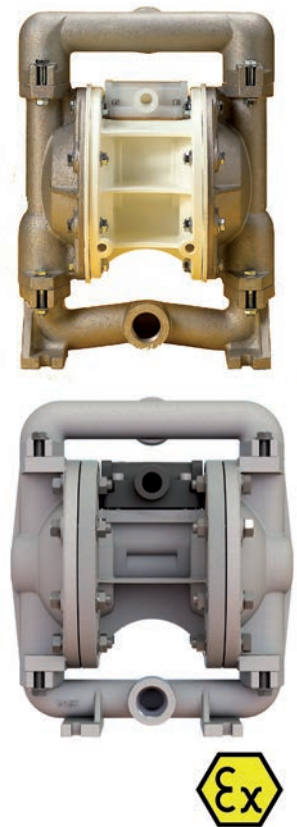
air supply : 1/4" internal thread

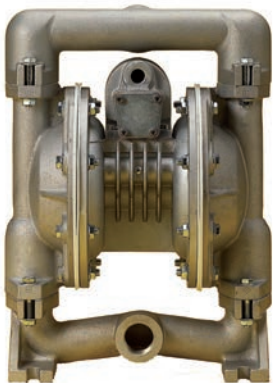
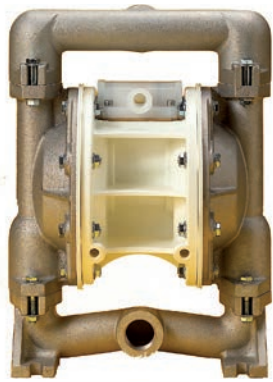
air consumption : approx. 25% more than the capacity times the pressure

dimensions : wxdxh = approx. 208 x 149 x 247 mm

weight : 1.6 kg

ARTIKELNO	DESCRIPTION	TYPE
92.90.512	Membrane Pump 0.5	Buna, ATEX (zone 1)
92.90.513	Membrane Pump 0.5	Teflon, ATEX (zone 1)





## AIR MEMBRANE PUMP 1.0

NB	: no guarantee without use of air filter and water separator
viscosity	: has a very substantial effect on capacity
capacities	: <b>measured with water (Teflon 20% less CAPACITY)</b>
no head	: 11,000 litres per hour
10 metres head	: 10,200 litres per hour
20 metres head	: 9,300 litres per hour
30 metres head	: 8,400 litres per hour
40 metres head	: 7,200 litres per hour
50 metres head	: 6,400 litres per hour
60 metres head	: 5,200 litres per hour
discharge head	: 70.0 metres maximum
suction head	: Buna : 9.4 metres, DRY 4.6 metres : Teflon : 9.4 metres, DRY 2.4 metres
particle size	: 3.2 mm maximum
connections	: 1" internal thread
air supply	: 3/8" internal thread
air consumption	: approx. 25% more than the capacity times the pressure
dimensions	: wxdxh = approx. 273 x 231 x 369 mm
weight	: 12.2 kg

ARTIKELNO	DESCRIPTION	TYPE
92.90.525	Membrane Pump 1.0	Buna, ATEX (zone 1)
92.90.526	Membrane Pump 1.0	Teflon, ATEX (zone 1)

## AIR MEMBRANE PUMP 1.5

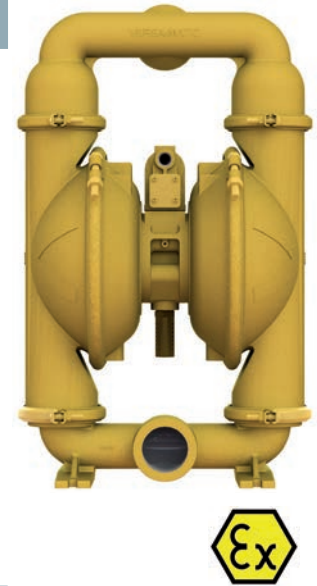
NB	: no guarantee without use of air filter and water separator
viscosity	: has a very substantial effect on capacity
capacities	: <b>measured with water (Teflon 20% less CAPACITY)</b>
no head	: 27,600 litres per hour
10 metres head	: 24,600 litres per hour
20 metres head	: 21,600 litres per hour
30 metres head	: 21,000 litres per hour
40 metres head	: 15,600 litres per hour
50 metres head	: 12,600 litres per hour
60 metres head	: 9,000 litres per hour
discharge head	: 70.0 metres maximum
suction head	: Buna : 9.4 metres, DRY 5.8 metres : Teflon : 8.8 metres, DRY 3.7 metres
particle size	: 6.0 mm maximum
connections	: suction: 1.1/2" internal thread : pressure : 1.1/2" internal thread
air supply	: 1/2" internal thread
air consumption	: approx. 25% more than the capacity times the pressure
dimensions	: wxdxh = approx. 471 x 310 x 564 mm
weight	: 25.0 kg

ARTIKELNO	DESCRIPTION	TYPE
92.90.540	Membrane Pump 1.5	Buna, ATEX (zone 1)
92.90.541	Membrane Pump 1.5	Teflon, ATEX (zone 1)

## AIR MEMBRANE PUMP 2.0

NB	: no guarantee without use of air filter and water separator
viscosity	: has a very substantial effect on capacity
capacities	: <b>measured with water (Teflon 20% less CAPACITY)</b>
no head	: 37,000 litres per hour
10 metres head	: 34,200 litres per hour
20 metres head	: 31,200 litres per hour
30 metres head	: 27,600 litres per hour
40 metres head	: 24,300 litres per hour
50 metres head	: 20,400 litres per hour
60 metres head	: 16,800 litres per hour
discharge head	: 70.0 metres maximum
suction head	: Buna : 9.8 metres, DRY 5.5 metres : Teflon : 9.1 metres, DRY 3.0 metres
particle size	: 11.1 mm maximum
connections	: 2" internal thread
air supply	: 1/2" internal thread
air consumption	: approx. 25% more than the capacity times the pressure
dimensions	: wxdxh = approx. 450 x 333 x 677 mm
weight	: 36.7 kg

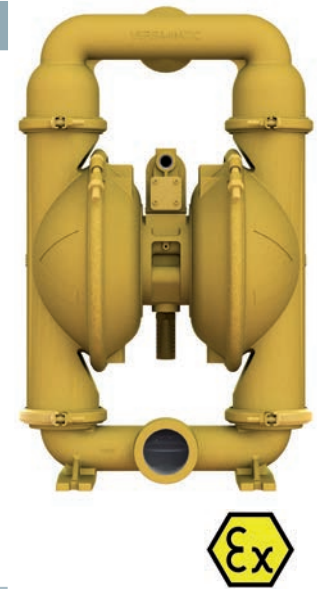
ARTIKELNO	DESCRIPTION	TYPE
92.90.550	Membrane Pump 2.0	Buna, ATEX (zone 1)
92.90.551	Membrane Pump 2.0	Teflon, ATEX (zone 1)



## AIR MEMBRANE PUMP 3.0

NB	: no guarantee without use of air filter and water separator
viscosity	: has a very substantial effect on capacity
capacities	: <b>measured with water (Teflon 20% less CAPACITY)</b>
no head	: 61,980 litres per hour
10 metres head	: 56,800 litres per hour
20 metres head	: 52,200 litres per hour
30 metres head	: 49,200 litres per hour
40 metres head	: 41,280 litres per hour
50 metres head	: 35,160 litres per hour
60 metres head	: 27,900 litres per hour
discharge head	: 70.0 metres maximum
suction head	: Buna : 9.4 metres, DRY 4.9 metres : Teflon : 9.0 metres, DRY 5.2 metres
particle size	: 9.5 mm maximum
connections	: flange DN80
air supply	: 1/2" internal thread
air consumption	: approx. 25% more than the capacity times the pressure
dimensions	: wxdxh = approx. 638 x 409 x 922 mm
weight	: 66.2 kg

ARTIKELNO	DESCRIPTION	TYPE
92.90.575	Membrane Pump 3.0	Buna, ATEX (zone 1)
92.90.576	Membrane Pump 3.0	Teflon, ATEX (zone 1)



## SHOWER /TOILET MEMBRANE PUMPS SELF-PRIMING FOR GREY AND BLACK WATER

As the pumps have an extra powerful motor they are especially suitable for contaminated water with solids, a higher viscosity or a higher specific gravity (heavier).

Pumping out black water tanks, faeces (without coarse and/or hard components) etc.

type	: SHOWER / TOILET
colour	: black
pump type	: self-priming centrifugal pump
impeller type	: membrane
motor type	: brushes motor with 12 and 24 volt : induction motor with 230 volt : short circuit motor with 400 volt
fuse	: none
shaft seal	: n/a
materials	: membrane : santoprene : pump housing : plastic : pump shaft : n/a
liquids	: water with a lot of solids, a higher viscosity or a higher s.g.
voltages	: 12 V DC : 24 V DC : 230 V mains : 400 V three phase



### SHOWER 14, GREY WATER

no head	: 840 litres per hour, 14,0 litre per minute
discharge head	: 3.0 metres maximum
suction head	: 3.0 metres
particle size	: 9 mm maximum
connections	: 19 mm hose connection
dimensions	: l x w x h = approx. 273 x 111/173 x 117 mm
weight	: 1,5 kg
amperage	: 12 V, 3.5 A : 24 V, 1.75 A

ARTIKELNO	DESCRIPTION	VOLT
92.91.112	Shower 14 grey water	12 V
92.91.124	Shower 14 grey water	24 V



### SHOWER 19, GREY WATER

no head	: 1,140 litres per hour, 19.0 litre per minute
discharge head	: 3.0 metres maximum
suction head	: 3.0 metres
particle size	: 9 mm maximum
connections	: 19 mm hose connection
dimensions	: l x w x h = approx. 280 x 111/198 x 117 mm
weight	: 1.6 kg
amperage	: 12 V, 8.0 A : 24 V, 4.0 A

ARTIKELNO	DESCRIPTION	VOLT
92.91.212	Shower 19 grey water	12 V
92.91.224	Shower 19 grey water	24 V

## TOILET 18, BLACK WATER

no head : 1,080 litres per hour, 18.0 litre per minute  
 discharge head : 3.0 metres maximum  
 suction head : 3.0 metres  
 particle size : 15 mm maximum  
 connections : 38 mm hose connection  
 dimensions : lwxh = approx. 289 x 111/365 x 117 mm  
 weight : 2.1 kg  
 amperage : 12 V, 8.0 A  
           : 24 V, 4.5 A



ARTIKELNO	DESCRIPTION	VOLT
<b>92.91.312</b>	Toilet 18 black water	12 V
<b>92.91.324</b>	Toilet 18 black water	24 V

## TOILET 30, BLACK WATER

no head : 1,800 litres per hour, 30.0 litre per minute  
 discharge head : 5.0 metres maximum  
 suction head : 3.0 metres  
 particle size : 15 mm maximum  
 connections : 30 mm hose connection  
 dimensions : lwxh = approx. 380 x 200 x 280 mm  
 weight : approx. 10 kg  
 amperage : 12 V, 28,0 A  
           : 24 V, 14,0 A  
           : 230 V, 3.1 A  
           : 400 V, 0.9 A  
 shaft power : 0.25 kW, 0.33 HP, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>92.91.401</b>	Toilet 30 black water	12 V
<b>92.91.402</b>	Toilet 30 black water	24 V
<b>92.91.423</b>	Toilet 30 black water	230 V
<b>92.91.440</b>	Toilet 30 black water	400 V

## TOILET 30, BLACK WATER

no head : 4,200 litres per hour, 70.0 litre per minute  
 discharge head : 7.0 metres maximum  
 suction head : 4.0 metres  
 particle size : 25 mm maximum  
 connections : 35/40 mm hose connection  
 dimensions : lwxh = approx. 470 x 250 x 340 mm  
 weight : approx. 18 kg  
 amperage : 12 V, 48.0 A  
           : 24 V, 24.0 A  
           : 230 V, 4.5 A  
           : 400 V, 1.1 A  
 shaft power : 0.37 kW, 0.5 HP, 1500 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>92.91.601</b>	Toilet 70 black water	12 V
<b>92.91.602</b>	Toilet 70 black water	24 V
<b>92.91.623</b>	Toilet 70 black water	230 V
<b>92.91.640</b>	Toilet 70 black water	400 V



## TOILET 120, BLACK WATER

no head	: 7,200 litres per hour, 120.0 litre per minute
discharge head	: 7.0 metres maximum
suction head	: 4.0 metres
particle size	: 30 mm maximum
connections	: 45 mm hose connection
dimensions	: l x w x h = approx. 580 x 300 x 420 mm
weight	: approx. 24 kg
amperage	: 12 V, 56.0 A
	: 24 V, 28.0 A
	: 230 V, 5.5 A
	: 400 V, 2.3 A
shaft power	: 0.55 kW, 0.7 HP, 1500 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>92.91.801</b>	Toilet 120 black water	12 V
<b>92.91.802</b>	Toilet 120 black water	24 V
<b>92.91.823</b>	Toilet 120 black water	230 V
<b>92.91.840</b>	Toilet 120 black water	400 V

## ALPHA PUMP SERIES F, SELF-PRIMING

Especially for dirty water with solids, a higher viscosity or a higher specific gravity (heavier) because these pumps have an extra powerful motor.

Pumping out dirty water tanks, faeces (without coarse and/or hard components) etc.

type	: F RA
colour	: blue
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: induction motor with 230 volt : short circuit motor with 400 volt
fuse	: inbuilt thermal safeguard only with the 230 volt motors
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron : pump housing : cast iron : pump shaft : stainless steel AISI 420
liquids	: water with a lot of solids, a higher viscosity or a higher s.g.
voltages	: 230 V mains : 400 V three phase

## ALPHA F 01½RA-1.5

no head	: 17,400 litres per hour
5 metres head	: 17,400 litres per hour
10 metres head	: 15,900 litres per hour
15 metres head	: 9,300 litres per hour
discharge head	: 18.0 metres maximum
suction head	: 7.0 metres
particle size	: 9 mm maximum
connections	: 1.1/2" internal thread
dimensions	: lwxh = approx. 426 x 190 x 288 mm
weight	: approx. 23.5 kg
amperage	: 230 V, 8.0 A : 400 V, 3.0 A
shaft power	: 1.1 kW, 1.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>92.92.030</b>	Alpha F 01½RA-M-1.5	230 V
<b>92.92.035</b>	Alpha F 01½RA-T-1.5	400 V



## ALPHA F 02RA-T-3

no head	: 27,000 litres per hour
5 metres head	: 27,000 litres per hour
10 metres head	: 25,200 litres per hour
15 metres head	: 16,200 litres per hour
discharge head	: 19.0 metres maximum
suction head	: 7.0 metres
particle size	: 14 mm maximum
connections	: 2" internal thread
dimensions	: lwxh = approx. 502 x 205 x 321 mm
weight	: approx. 30.5 kg
amperage	: 5.7 A
shaft power	: 2.2 kW, 3.0 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>92.92.040</b>	Alpha F 02RA-T-3	400 V





## ALPHA F 03RASG-T-4

no head	: 48,000 litres per hour
5 metres head	: 48,000 litres per hour
10 metres head	: 36,000 litres per hour
15 metres head	: 21,600 litres per hour
discharge head	: 19.0 metres maximum
suction head	: 7.0 metres
particle size	: 20 mm maximum
connections	: 3" internal thread
dimensions	: l x w x h = approx. 480 x 205 x 306 mm
weight	: approx. 32 kg
amperage	: 4.0 A
shaft power	: 3.0 kW, 4 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>92.92.043</b>	Alpha F 03RASG-T-4	400 V



## ALPHA F 03RAG-T-7.5

no head	: 66,000 litres per hour
15 metres head	: 66,000 litres per hour
20 metres head	: 45,000 litres per hour
discharge head	: 25.0 metres maximum
suction head	: 7.0 metres
particle size	: 19 mm maximum
connections	: 3" internal thread
dimensions	: l x w x h = approx. 651 x 274 x 435 mm
weight	: approx. 75 kg
amperage	: 7.6 A
shaft power	: 5.5 kW, 7.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>92.92.050</b>	Alpha F 03RAG-T-7.5	400/690 V



## FAECES PUMP, SELF-PRIMING

Self-priming pump for transporting all domestic water and faeces.  
Can be located above the liquid level. Provided with a chopper.

In view of stricter environmental measures:  
**"A PUMP MADE FOR THE FUTURE"**

type	: B
colour	: blue
pump type	: self-priming centrifugal pump,
impeller type	: half open impeller with knife
motor type	: short circuit motor
fuse	: NOT inbuilt
shaft seal	: carbon on ceramic mechanical seal
materials	: impeller : cast iron
	: pump housing : cast iron
	: pump shaft : stainless steel
liquids	: heavily contaminated water (sewage) with large solid pieces (not stone or metal)
voltage	: 400 volt three phase

## FAECES PUMP B40M + CHOPPER

no head	: 21,500 litres per hour
5 metres head	: 21,500 litres per hour
10 metres head	: 15,000 litres per hour
15 metres head	: 5,000 litres per hour
discharge head	: 15.0 metres maximum
suction head	: 5.0 metres maximum
particle size	: 18 mm maximum
connections	: 1.1/2" internal thread
dimensions	: lxxh = 438 x 215 x 240 mm
weight	: 26 kg
amperage	: 230 V, approx. 9.2 A
	: 400 V, approx. 2.4 A
shaft power	: 1.1 kW, 1.5 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>92.96.040</b>	Faeces Pump B40M + chopper	230 V
<b>92.96.045</b>	Faeces Pump B40M + chopper	400 V



## FAECES PUMP B50M + CHOPPER

no head	: 35,500 litres per hour
5 metres head	: 35,500 litres per hour
10 metres head	: 30,500 litres per hour
15 metres head	: 16,000 litres per hour
discharge head	: 18.0 metres maximum
suction head	: 5.0 metres maximum
particle size	: 25 mm maximum
connections	: 2" internal thread
dimensions	: lxxh = 555 x 235 x 324 mm
weight	: 44 kg
amperage	: approx. 5.5 A
shaft power	: 2.2 kW, 3.0 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>92.96.050</b>	Faeces Pump B50M + chopper	400/690 V





## FAECES PUMP B70M + CHOPPER

no head	: 82,000 litres per hour
5 metres head	: 82,000 litres per hour
10 metres head	: 76,000 litres per hour
15 metres head	: 54,000 litres per hour
discharge head	: 20.0 metres maximum
suction head	: 5.0 metres maximum
particle size	: 22 mm maximum
connections	: 3" internal thread
dimensions	: l x w x h = 636 x 400 x 432 mm
weight	: 60 kg
amperage	: approx. 10,0 A
shaft power	: 4.0 kW, 5.5 hp, 2850 rpm

ARTIKELNO	DESCRIPTION	VOLT
92.96.070	Faeces Pump B70M + chopper	400/690 V

## KOSHIN PUMP, SELF-PRIMING

Professional self-priming pump for commercial shipping, large pleasure craft, construction, transport, mobile cranes etc.

type	: FS
colour	: blue with aluminium
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: completely closed brush motor with fan cooling
fuse	: NOT inbuilt
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : sea water resistant aluminium
	: impeller housing : sea water resistant aluminium
	: pump housing : sea water resistant aluminium
	: pump shaft : stainless steel
liquids	: clean and slightly contaminated gas oil, petrol, spindle oil, water and sea water (no sea water for FS-12D)
voltages	: 12 V DC
	: 24 V DC

## KOSHIN FS-12D / FS-2024S

no head	: 2,400 litres per hour
5 metres head	: 1,320 litres per hour
discharge head	: 8.5 metres maximum
suction head	: 3.0 metres
particle size	: zero
connections	: 3/4" hose connection and 3/4" internal thread
dimensions	: l x w x h = 263 x 126 x 180 mm
weight	: 4.1 kg
amperage	: 12 V, 15 A
	: 24 V, 7 A
shaft power	: 0.08 kW, 0.1 hp, 7300 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>93.10.012</b>	Koshin FS-12D	12 V
<b>93.10.224</b>	Koshin FS-2024S (sea water resistant)	24 V

## KOSHIN FS-3224S

no head	: 6,000 litres per hour
5 metres head	: 4,800 litres per hour
10 metres head	: 3,900 litres per hour
15 metres head	: 1,500 litres per hour
discharge head	: 18.5 metres maximum
suction head	: 5.0 metres
particle size	: zero
connections	: 1.1/4" hose connection and 1.1/4" internal thread
dimensions	: l x w x h = 283 x 122 x 154 mm
weight	: 8.0 kg
amperage	: 16 A
shaft power	: 0.2 kW, 0.26 hp, 6200 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>93.10.324</b>	Koshin FS-3224S (sea water resistant)	24 V

## TELLARINI PUMP, BRASS, SELF-PRIMING

Robust self-priming side channel pump for clean liquids, gas oil, water, wine, fruit juice etc.

type	: ECC, EEM, ENT and ENM
colour	: blue with brass
pump type	: self-priming liquid ring pump, not a centrifugal pump and may therefore NEVER be completely sealed off
impeller type	: open star impeller
motor type	: 12 and 24 volt : brush motor
	: 230 volt : induction motor with reversing switch
	: 400 volt : short circuit motor
<b>rotation</b>	: <b>2 directions through reversing switch, only for 230 volt (EEM 20, EEM25, EEM 30 and ENM40)</b>
fuse	: NOT inbuilt
shaft seal	: nitrile rubber lip seal with stainless steel spring, mechanical seal available and it can be fitted afterwards
materials	: impeller : brass
	: impeller housing : brass
	: pump housing : brass
	: pump shaft : stainless steel 316
liquids	: maximum temperature 90°C continuous water, gas oil and other clean liquids without abrasive particles
<b>insulation class</b>	: <b>IP23 / IP44 / IP55</b>
voltages	: 12 V DC
	: 24 V DC
	: 230 V mains
	: 400 V three phase



## TELLARINI ECC 20

no head	: 1,500 litres per hour
5 metres head	: 1,200 litres per hour
10 metres head	: 780 litres per hour
15 metres head	: 120 litres per hour
discharge head	: 15.5 metres maximum
suction head	: 6.0 metres
particle size	: zero
connections	: 3/4" external thread and 3/4" hose connection
dimensions	: lxxh = 283 x 122 x 154 mm
weight	: 4.9 kg
<b>insulation class</b>	: <b>IP23</b>
amperage	: 12 V, 18-20 A
	: 24 V, 10-12 A
shaft power	: 0.22 kW, 0.3 hp, 2400 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.20.105</b>	Tellarini ECC 12-20	12 V
<b>93.20.110</b>	Tellarini ECC 24-20	24 V

## TELLARINI EEM 20 / ENT 20

no head	: 1,560 litres per hour
5 metres head	: 1,380 litres per hour
10 metres head	: 1,080 litres per hour
15 metres head	: 780 litres per hour
20 metres head	: 480 litres per hour
25 metres head	: 180 litres per hour
discharge head	: 26.0 metres maximum
suction head	: 6.0 metres
particle size	: zero
connections	: 3/4" external thread and 3/4" hose connection
dimensions	: lwxhxh = 248 x 120 x 180 mm
weight	: 5.4 kg
<b>rotation</b>	<b>: 2 directions through reversing switch, only for 230 volt (EEM 20)</b>
<b>insulation class</b>	<b>: IP55</b>
amperage	: 230 V, 2.0 A
	: 400 V, 0.7 A
shaft power	: 0.25 kW, 0.3 hp, 2800 rpm



ARTIKELNO	DESCRIPTION	VOLT
93.20.115	Tellarini EEM 20	230 V
93.20.120	Tellarini ENT 20	400 V

## TELLARINI ECC 12-25

no head	: 3,720 litres per hour
5 metres head	: 2,640 litres per hour
10 metres head	: 840 litres per hour
discharge head	: 12.0 metres maximum
suction head	: 6.0 metres
particle size	: zero
connections	: 1" external thread and 1" hose connection
dimensions	: lwxhxh = 322 x 140 x 171 mm
weight	: 8.9 kg
<b>insulation class</b>	<b>: IP23</b>
amperage	: 30-37 A
shaft power	: 0.45 kW, 0.6 hp, 1500 rpm



ARTIKELNO	DESCRIPTION	VOLT
93.20.205	Tellarini ECC 12-25	12 V

## TELLARINI ECC 24-25

no head	: 3,660 litres per hour
5 metres head	: 2,700 litres per hour
10 metres head	: 1,440 litres per hour
discharge head	: 14.0 metres maximum
suction head	: 6.0 metres
particle size	: zero
connections	: 1" external thread and 1" hose connection
dimensions	: lwxhxh = 322 x 140 x 171 mm
weight	: 8.9 kg
<b>insulation class</b>	<b>: IP23</b>
amperage	: 17-20 A
shaft power	: 0.45 kW, 0.6 hp, 1600 rpm



ARTIKELNO	DESCRIPTION	VOLT
93.20.210	Tellarini ECC 24-25	24 V



## TELLARINI EEM 25 / ENT 25

no head : 3.180 litres per hour  
 5 metres head : 2.280 litres per hour  
 10 metres head : 960 litres per hour  
 discharge head : 14.0 metres maximum  
 suction head : 6.0 metres  
 particle size : zero  
 connections : 1" external thread and 1" hose connection  
 dimensions : l x w x h = 294 x 141 x 210 mm  
 weight : 8.9 kg  
**rotation : 2 directions through reversing switch, only for 230 volt (EEM 25)**  
**insulation class : IP55**  
 amperage : 230 V, 2.2 A  
                   : 400 V, 1.1 A  
 shaft power : 0.4 kW, 0.5 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
93.20.220	Tellarini EEM 25	230 V
93.20.225	Tellarini ENT 25	400 V



## TELLARINI EEM 30 / ENT 30

no head : 5,460 litres per hour  
 5 metres head : 3,900 litres per hour  
 10 metres head : 1,740 litres per hour  
 discharge head : 14.0 metres maximum  
 suction head : 6.0 metres  
 particle size : zero  
 connections : 1.1/2" external thread and 1.1/2" hose connection  
 dimensions : l x w x h = 330 x 166 x 232 mm  
 weight : 12.0 kg  
**rotation : 2 directions through reversing switch, only for 230 volt (EEM 30)**  
**insulation class : IP55**  
 amperage : 230 V, 4.8 A  
                   : 400 V, 1.9 A  
 shaft power : 0.75 kW, 1.0 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
93.20.305	Tellarini EEM 30	230 V
93.20.310	Tellarini ENT 30	400 V



## TELLARINI ENM 40 / ENT 40

no head : 7,800 litres per hour  
 5 metres head : 6,300 litres per hour  
 10 metres head : 4,200 litres per hour  
 15 metres head : 2,220 litres per hour  
 discharge head : 19.0 metres maximum  
 suction head : 6.0 metres  
 particle size : zero  
 connections : 1.1/2" external thread and 1.1/2" hose connection  
 dimensions : l x w x h = 353 x 166 x 232 mm  
 weight : 14.7 kg  
**rotation : 2 directions through reversing switch, only for 230 volt (ENM 40)**  
**insulation class : IP44 (ENM40) / IP55 (ENT40)**  
 amperage : 230 V, 5.8 A  
                   : 400 V, 2.1 A  
 shaft power : 0.9 kW, 1.2 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
93.20.410	Tellarini ENM 40	230 V
93.20.415	Tellarini ENT 40	400 V

## TELLARINI ENM 50

no head : 14,400 litres per hour  
 5 metres head : 12,600 litres per hour  
 10 metres head : 10,200 litres per hour  
 15 metres head : 7,620 litres per hour  
 20 metres head : 4,380 litres per hour  
 discharge head : 24.0 metres maximum  
 suction head : 6.0 metres  
 particle size : zero  
 connections : 2" external thread and 2" hose connection  
 dimensions : l x w x h = 412 x 208 x 246 mm  
 weight : 22.8 kg  
**insulation class** : **IP55**  
 amperage : 11.8 A  
 shaft power : 1.5 kW, 2.0 hp, 1400 rpm



ARTIKELNO	DESCRIPTION	VOLT
93.20.505	Tellarini ENM 50	230 V

## TELLARINI ENT 50

no head : 15,000 litres per hour  
 5 metres head : 13,380 litres per hour  
 10 metres head : 11,280 litres per hour  
 15 metres head : 8,820 litres per hour  
 20 metres head : 6,000 litres per hour  
 25 metres head : 3,000 litres per hour  
 discharge head : 28.0 metres maximum  
 suction head : 6.0 metres  
 particle size : zero  
 connections : 2" external thread and 2" hose connection  
 dimensions : l x w x h = 412 x 208 x 246 mm  
 weight : 22.8 kg  
**insulation class** : **IP55**  
 amperage : 4.2 A  
 shaft power : 1.9 kW, 2.5 hp, 1400 rpm



ARTIKELNO	DESCRIPTION	VOLT
93.20.510	Tellarini ENT 50	400 V

## CITY GAS OIL PUMP (AND WATER), NOT SELF-PRIMING

Cast iron pump for transporting clean water and thin clean oil products such as gas oil, petrol etc. Used in shipping as a fuel trim pump.

type	: IQ 500
colour	: blue
pump type	: liquid ring pump, NOT a centrifugal pump
impeller type	: peripherale impeller
motor type	: 230 volt, induction motor : 400 volt, short circuit motor
fuse	: inbuilt thermal safeguard for 230 volt
shaft seal	: ceramic on carbon mechanical seal + viton
materials	: impeller : brass : impeller housing : cast iron : pump housing : cast iron : pump shaft : stainless steel
liquids	: maximum temperature 90°C continuous water, gas oil and other clean liquids without abrasive particles
voltages	: 230 V mains : 400 V three phase



## CITY GAS OIL PUMP IQ, NOT SELF-PRIMING

no head	: 2,400 litres per hour
5 metres head	: 2,400 litres per hour
10 metres head	: 2,040 litres per hour
15 metres head	: 1,710 litres per hour
20 metres head	: 1,410 litres per hour
25 metres head	: 1,080 litres per hour
30 metres head	: 780 litres per hour
35 metres head	: 480 litres per hour
discharge head	: 38.0 metres maximum
suction head	: 7.0 metres, when using foot valve
particle size	: zero
connections	: 1" internal thread
dimensions	: l x w x h = approx. 223 x 120 x 152 mm
weight	: 5.3 kg
amperage	: 230 V : 2.6 A : 400 V : 1.2 A
shaft power	: 0.37 kW, 0.55 hp, 2800 rpm
cable	: none

ARTIKELNO	DESCRIPTION	VOLT
93.25.061	City gas oil pump IQ 500M	230 V
93.25.063	City gas oil pump IQ 500	400 V



## CITY GAS OIL PUMP (AND WATER), SELF-PRIMING

Cast iron pump for transporting clean water and thin clean oil products such as gas oil, petrol etc.  
Used in shipping as a fuel trim pump.

type	: IL
colour	: blue
pump type	: liquid ring pump, NOT a centrifugal pump
impeller type	: turbine impeller, star impeller
motor type	: induction motor
fuse	: inbuilt thermal safeguard for 230 volt
shaft seal	: ceramic on carbon mechanical seal + viton
materials	: impeller : brass
	: impeller housing : brass
	: pump housing : cast iron
	: pump shaft : stainless steel
liquids	: water, gas oil and other clean liquids without abrasive particles
voltage	: 230 V mains
	: 400 V three phase

## CITY GAS OIL PUMP IL, SELF-PRIMING

no head	: 2,400 litres per hour
5 metres head	: 2,400 litres per hour
10 metres head	: 2,000 litres per hour
15 metres head	: 1,590 litres per hour
20 metres head	: 1,200 litres per hour
25 metres head	: 780 litres per hour
30 metres head	: 360 litres per hour
discharge head	: 31.5 metres maximum
suction head	: 4.0 metres
particle size	: zero
connections	: 3/4" internal thread
dimensions	: l x w x h = approx. 260 x 120 x 159 mm
weight	: 7.3 kg
amperage	: 230 V, 3.0 A
	: 400 V, 1.2 A
shaft power	: 0.375 kW, 0.5 hp, 2800 rpm
cable	: none



ARTIKELNO	DESCRIPTION	VOLT
<b>93.25.071</b>	City gas oil pump ILM 50	230 V
<b>93.25.073</b>	City gas oil pump IL 50	400 V

## GAS OIL STATION COMPLETE, SELF-PRIMING

Complete filling system for vehicles that run on gas oil.  
For filling up forklift trucks, trucks, tractors, mobile cranes etc.

type	: CK 50
pump type	: liquid ring pump, NOT a centrifugal pump
impeller type	: turbine impeller
motor type	: induction motor
fuse	: inbuilt thermal safeguard
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : brass
	: impeller housing : cast iron
	: pump housing : cast iron
	: pump shaft : stainless steel
liquid	: gas oil
voltage	: 230 V mains



## GAS OIL STATION

no head	: 2,100 litres per hour
5 metres head	: 1,800 litres per hour
10 metres head	: 1,200 litres per hour
15 metres head	: 600 litres per hour
discharge head	: 18.0 metres maximum
suction head	: 4.0 metres
particle size	: zero
connections	: 1" internal thread
dimensions	: l x w x h = approx. 570 x 350 x 400 mm, incl. wall cabinet
amperage	: 2.3 A
shaft power	: 0.375 kW, 0.5 hp, 2800 rpm
cable	: 1.5 metre with earthed plug

complete with:

- liquid meter with top-up counter and total counter
- 1 x 2 metre oil resistant hose with 1" male thread on both sides
- 1 suction filter with valve 1" female thread
- 1 aluminium (non-automatic) nozzle with 1" female thread
- pump has overflow, so an automatic nozzle can be fitted
- steel frame for wall attachment

ARTIKELNO	DESCRIPTION	VOLT
93.25.091	Gas oil station complete	230 V

## JABSCO PAR-MAX MEMBRANE PUMP, SELF-PRIMING

Automatically operating pump for drinking water systems or flushing toilets in combination with cistern.  
Ideal for installation in small spaces because there is no pressure reservoir.  
Pump starts when the tap is opened and stops when the tap is closed.  
No problems if it runs dry.

type	: Par-Max
colour	: black
pump type	: membrane pump (double acting)
impeller type	: N.A.
motor type	: brush motor (permanent magnet)
fuse	: incorporated in wiring 12 V, 6 A, 24 V, 3 A
shaft seal	: N.A.
materials	: membrane : Santoprene
	: valves : Santoprene
	: pump housin : glass fibre reinforced polypropylene
liquids	: clean water without floating solids, and without oil or oil residues
voltage	: 12 V DC
	: 24 V DC

## JABSCO PAR-MAX-2, WITH PRESSURE SWITCH

model	: 31395-0392
capacity	: 540 litres per hour or 9.0 litres per minute
switch on pressure	: 0.6 bar
switch off pressure	: 2.4 bar
suction head	: 1.2 metres
particle size	: zero
connections	: 1/2" hose connection and 1/2" external thread
dimensions	: lxxh = 229 x 105 x 121 mm
weight	: 1.6 kg
amperage	: 4.4 A at 0.7 bar



ARTIKELNO	DESCRIPTION	VOLT
93.27.012	Jabsco Par-Max-2 with pressure switch	12 V

## JABSCO PAR-MAX-3, WITH PRESSURE SWITCH

model	: 32600-0092
capacity	: 780 litres per hour or 13 litres per minute
switch on pressure	: 1.3 bar
switch off pressure	: 2.4 bar
suction head	: 1.2 metres
particle size	: zero
connections	: 1/2" hose connection and 1/2" external thread
dimensions	: lxxh = 196 x 106 x 90 mm
weight	: 2.1 kg
amperage	: 6,0 A at 0,7 bar



Used on Par-Max pressurized water system (97.11.510).

ARTIKELNO	DESCRIPTION	VOLT
93.27.112	Jabsco Par-Max-3 with pressure switch 13 lpm	12 V



## JABSCO PAR-MAX-4, WITH PRESSURE SWITCH

model	: 31620=0094
capacity	: 960 litres per hour or 16 litres per minute
switch on pressure	: 1.3 bar
switch off pressure	: 2.4 bar
suction head	: 1.2 metres
particle size	: zero
connections	: 1/2" hose connection and 1/2" external thread
dimensions	: lxxh = 196 x 106 x 90 mm
weight	: 2.1 kg
amperage	: 3,0 A at 0,7 bar

Used on Par-Max pressurized water system (97.11.520).

ARTIKELNO	DESCRIPTION	VOLT
<b>93.27.124</b>	Jabsco Par-Max-4 with pressure switch 16 lpm	24 V

## TELLARINI JET PUMP, SELF-PRIMING

All stainless steel pump for sanitary drinking water systems on board ships and yachts (also available as complete pressurized water system).

colour	: blue and stainless steel
pump type	: self-priming centrifugal pump with jet system
impeller type	: closed impeller
motor type	: brush motor
fuse	: NOT inbuilt
shaft seal	: mechanical seal ceramic / carbon / NBR
materials	: impeller : Noryl
	: impeller chamber : Noryl
	: pump housing : stainless steel 304
	: pump shaft : stainless steel 304
liquids	: clean water
voltages	: 24 V DC

## TELLARINI JET PUMP-24DC

no head	: 3,700 litres per hour
5 metres head	: 3,600 litres per hour
10 metres head	: 3,360 litres per hour
15 metres head	: 2,520 litres per hour
20 metres head	: 1,860 litres per hour
25 metres head	: 1,140 litres per hour
30 metres head	: 60 litres per hour
discharge head	: 36.0 metres maximum
suction height	: 8.0 metres
particle size	: zero
connections	: 1" internal thread
dimensions	: l x w x h = 409 x 170 x 190 mm
weight	: 7.9 kg
amperage	: 19 A
shaft power	: 0.525 kW, 0.7 hp, 2700 rpm

Used on Jet pump pressurized water system (97.27.010).



ARTIKELNO	DESCRIPTION	VOLT
93.28.060	Tellarini jet pump-24DC	24 V

## SPECK PRESSURE PUMP, SELF-PRIMING

For shipping, industry, agriculture etc.  
Is used in cooling and humidification systems and for drinking water, laundry and cleaning purposes.  
High pressure at low energy consumption and noise levels.  
May run continuously.

type	: PY
colour	: olive green with brass
pump type	: self-priming pump
impeller type	: open peripheral impeller
motor type	: brush motor for 24 volt
fuse	: NOT inbuilt
shaft seal	: ceramic on carbon mechanical seal with NBR
materials	: impeller : brass*
	: pump housing : brass*
	: pump shaft : stainless steel 1.4122*
liquids	: all kinds of low viscosity and clean liquids, 24 volt also suitable for gas oil (oil resistant seals)
temperature of liquid	: water maximum 140 °C, oil maximum 160 °C
voltages	: 24 V DC (other voltages possible)

\* various materials available



## SPECK PY-2071-24DC

no head	: 900 litres per hour
5 metres head	: 900 litres per hour
10 metres head	: 750 litres per hour
15 metres head	: 650 litres per hour
20 metres head	: 480 litres per hour
25 metres head	: 360 litres per hour
30 metres head	: 180 litres per hour
35 metres head	: 60 litres per hour
discharge head	: 36.0 metres maximum
suction head	: 8.0 metres
particle size	: zero
connections	: 1/2" internal thread
dimensions	: lxwxh = 340 x 145 x 180 mm
weight	: 8.4 kg
amperage	: 24.4 A
shaft power	: 0.37 kW, 0.5 hp, 3000 rpm

ARTIKELNO	DESCRIPTION	VOLT
93.29.510	Speck PY-2071-24DC	24 V

## CITY GARDEN PUMP, SELF-PRIMING

Self-priming centrifugal pump with inbuilt ejector, suitable for garden sprinkling and pressurizing.

type	: JET
colour	: blue
pump type	: limited self-priming centrifugal pump
impeller type	: closed impeller
motor type	: induction motor, 230 volt
fuse	: inbuilt thermal safeguard
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : techno polymere
	: impeller housing : techno polymere
	: ejector : techno polymere
	: pump housing : cast iron
	: pump shaft : stainless steel EN 10088-3, 1.4104
liquids	: clean water
voltages	: 230 V mains

## CITY GARDEN PRESSURE PUMP JET

no head	: 3,120 litres per hour
15 metres head	: 3,120 litres per hour
20 metres head	: 2,760 litres per hour
25 metres head	: 1,920 litres per hour
30 metres head	: 1,320 litres per hour
35 metres head	: 840 litres per hour
40 metres head	: 420 litres per hour
discharge head	: 42.0 metres maximum
suction head	: 9.0 metres, when using foot valve
impeller	: techno polymere
particle size	: zero
connections	: 1" internal thread
dimensions	: lwxh = 439 x 230 x 260 mm
weight	: 10.9 kg
amperage	: 230 V, 3.9 A
shaft power	: 0.55 kW, 0.75 hp, 2900 rpm
cable	: 1.5 metre PVC cable integral earthed plug
comes with	: carrying frame



ARTIKELNO	DESCRIPTION	VOLT
93.33.620	City garden pressure pump Jet	230 V

## SUCTION SET 1", 4 METRES

- 4 metre suction hose with 2 x 1" external thread
- suction strainer with non-return valve and 1" internal thread
- 1 straight nipple 1" external thread
- 1 bend with swivel 1" internal thread and 1" adaptor

ARTIKELNO	DESCRIPTION
93.33.695	Suction set 1", 4 metres



## CITY JET PUMP, SELF-PRIMING

Self-priming centrifugal pump with inbuilt ejector, suitable for pressurizing, garden sprinkling and transporting clean liquids up to a maximum temperature of 40°C.

type	: JS and JSE
colour	: blue
pump type	: limited self-priming centrifugal pump
impeller type	: closed impeller
motor type	: induction motor, 230 volt : short circuit motor, 400 volt : insulation class: F, IP44
fuse	: inbuilt thermal safeguard, only with 230 volt
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : technopolymer (JS) or brass (JSE) : impeller housing : technopolymer : ejector : technopolymer : pump housing : cast iron : pump shaft : stainless steel EN 10088-3, 1.4104
liquids	: clean water with a maximum temperature of 40°C
voltages	: 230 V mains : 400 V three phase



## CITY JET PUMP JS 08

no head	: 3,120 litres per hour
15 metres head	: 3,120 litres per hour
20 metres head	: 2,760 litres per hour
25 metres head	: 1,920 litres per hour
30 metres head	: 1,320 litres per hour
35 metres head	: 840 litres per hour
40 metres head	: 420 litres per hour
discharge head	: 42.0 metres maximum
suction head	: 9.0 metres, when using foot valve
particle size	: zero
connections	: 1" internal thread
dimensions	: lxwxh = 379 x 160 x 171 mm
weight	: 10.2 kg
amperage	: 230 V, 3.9 A
shaft power	: 0.55 kW, 0.75 hp, 2900 rpm

Used on Jet pump pressurized water system (97.34.650).

ARTIKELNO	DESCRIPTION	VOLT
93.34.020	City Jet pump JS 08M	230 V



## CITY JET PUMP JS 10

no head	: 3,000 litres per hour
30 metres head	: 3,000 litres per hour
35 metres head	: 2,010 litres per hour
40 metres head	: 1,320 litres per hour
45 metres head	: 780 litres per hour
50 metres head	: 360 litres per hour
55 metres head	: 60 litres per hour
discharge head	: 56.0 metres maximum
suction head	: 9.0 metres, when using foot valve
particle size	: zero
connections	: 1" internal thread
dimensions	: l x w x h = 402 x 180 x 201 mm
weight	: 13,8kg
amperage	: 230 V, 4.7 A
	: 400 V, 2.0 A
shaft power	: 0.75 kW, 1.0 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>93.34.041</b>	City Jet pump JS 10HM	230 V
<b>93.34.046</b>	City Jet pump JS 10H	400 V

## CITY JET PUMP JS 12

no head	: 3,000 litres per hour
35 metres head	: 3,000 litres per hour
40 metres head	: 2,700 litres per hour
45 metres head	: 1,620 litres per hour
50 metres head	: 960 litres per hour
55 metres head	: 510 litres per hour
60 metres head	: 240 litres per hour
discharge head	: 64.0 metres maximum
suction head	: 9.0 metres, when using foot valve
particle size	: zero
connections	: 1" internal thread
dimensions	: l x w x h = 402 x 180 x 201 mm
weight	: 15.0 kg
amperage	: 230 V, 5.8 A
	: 400 V, 2.7 A
shaft power	: 0.9 kW, 1.25 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>93.34.050</b>	City Jet pump JS 12HM	230 V
<b>93.34.055</b>	City Jet pump JS 12H	400 V



## CITY JET PUMP JSE 15

no head	: 7,200 litres per hour
20 metres head	: 7,200 litres per hour
25 metres head	: 5,280 litres per hour
30 metres head	: 4,080 litres per hour
35 metres head	: 2,880 litres per hour
40 metres head	: 2,100 litres per hour
45 metres head	: 1,200 litres per hour
50 metres head	: 600 litres per hour
discharge head	: 52.0 metres maximum
suction head	: 9.0 metres, when using foot valve
particle size	: zero
connections	: discharge : 1" internal thread
	: suction : 1.1/4" internal thread
dimensions	: lwxh = 523 x 206 x 242 mm
weight	: 25.4 kg
amperage	: 230 V, 7.9 A
	: 400 V, 3.4 A
shaft power	: 1.1 kW, 1.5 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.34.060</b>	City Jet pump JSE 15MM	230 V
<b>93.34.065</b>	City Jet pump JSE 15M	400 V



## CITY JET PUMP JSE 20

no head	: 7,200 litres per hour
30 metres head	: 7,200 litres per hour
35 metres head	: 5,400 litres per hour
40 metres head	: 4,080 litres per hour
45 metres head	: 3,000 litres per hour
50 metres head	: 1,890 litres per hour
55 metres head	: 1,050 litres per hour
discharge head	: 60.0 metres maximum
suction head	: 9.0 metres, when using foot valve
particle size	: zero
connections	: discharge : 1" internal thread
	: suction : 1.1/4" internal thread
dimensions	: lwxh = 523 x 206 x 242 mm
weight	: 26.5 kg
amperage	: 230 V, 9.3 A
	: 400 V, 4.2 A
shaft power	: 1.5 kW, 2.0 hp, 2900 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.34.070</b>	City Jet pump JSE 20MM	230 V
<b>93.34.075</b>	City Jet pump JSE 20M	400 V

## CITY JET PUMP JSE 30

no head	: 7,200 litres per hour
40 metres head	: 7,200 litres per hour
45 metres head	: 5,760 litres per hour
50 metres head	: 4,500 litres per hour
55 metres head	: 3,240 litres per hour
60 metres head	: 2,250 litres per hour
65 metres head	: 1,500 litres per hour
70 metres head	: 700 litres per hour
discharge head	: 74.0 metres maximum
suction head	: 9.0 metres, when using foot valve
particle size	: zero
connections	: discharge : 1" internal thread
	: suction : 1.1/4" internal thread
dimensions	: lxwxh = 523 x 206 x 242 mm
weight	: 26.8 kg
amperage	: 5.5 A
shaft power	: 2.2 kW, 3.0 hp, 2900 rpm



ARTIKELNO	DESCRIPTION	VOLT
<b>93.34.085</b>	City Jet pump JSE 30M	400 V

## LOWARA JET PUMP, SELF-PRIMING

Handy all stainless steel pump for all kinds of applications, for example garden sprinkling and pressurization, transport of mildly corrosive liquids in industry, hospitals and laboratories.

type	: JET-BGM
colour	: stainless steel
pump type	: self-priming centrifugal pump with jet system
impeller type	: closed impeller
motor type	: induction motor
fuse	: with 230 volt, inbuilt thermal safeguard
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : stainless steel 304
	: impeller chamber : stainless steel 304
	: ejector : thermoplastic
	: pump housing : stainless steel 304
	: pump shaft : stainless steel 304
liquids	: clean low viscosity liquids without solids with a maximum temperature of 40°C
voltages	: 230 V mains



## LOWARA JET PUMP BGM-5/A

no head	: 3,900 litres per hour
5 metres head	: 3,900 litres per hour
10 metres head	: 3,900 litres per hour
15 metres head	: 3,900 litres per hour
20 metres head	: 3,240 litres per hour
25 metres head	: 2,400 litres per hour
30 metres head	: 1,560 litres per hour
35 metres head	: 840 litres per hour
40 metres head	: 120 litres per hour
discharge head	: 40.2 metres maximum
suction height	: 8.0 metres, when using foot valve
particle size	: zero
connections	: discharge : 1" internal thread
	: suction : 1.1/4" internal thread
dimensions	: l x w x h = 383 x 215 x 223 mm
weight	: 12 kg
amperage	: 4.0 A
shaft power	: 0.55 kW, 0.75 hp, 2800 rpm

Used on Lowara BGM-5 pressurized water system (97.37.010 and 97.37.020).

ARTIKELNO	DESCRIPTION	VOLT
93.37.420	Lowara Jet pump BGM-5/A	230 V

## LOWARA JET PUMP BGM-7/A

no head	: 3,960 litres per hour
20 metres head	: 3,960 litres per hour
25 metres head	: 3,000 litres per hour
30 metres head	: 2,280 litres per hour
35 metres head	: 1,500 litres per hour
40 metres head	: 720 litres per hour
45 metres head	: 180 litres per hour
discharge head	: 46.0 metres maximum
suction height	: 8.0 metres, when using foot valve
particle size	: zero
connections	: discharge : 1" internal thread : suction : 1.1/4" internal thread
dimensions	: lwxh = 383 x 215 x 223 mm
weight	: 13 kg
amperage	: 4.8 A
shaft power	: 0,75 kW, 1.0 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.37.430</b>	Lowara Jet pump BGM-7/A	230 V



## LOWARA JET PUMP BGM-9/A

no head	: 4,200 litres per hour
25 metres head	: 4,200 litres per hour
30 metres head	: 3,480 litres per hour
35 metres head	: 2,520 litres per hour
40 metres head	: 1,620 litres per hour
45 metres head	: 840 litres per hour
discharge head	: 50.0 metres maximum
suction height	: 8.0 metres, when using foot valve
particle size	: zero
connections	: discharge : 1" internal thread : suction : 1.1/4" internal thread
dimensions	: lwxh = 383 x 215 x 223 mm
weight	: 13 kg
amperage	: 5.6 A
shaft power	: 0.9 kW, 1.2 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.37.440</b>	Lowara Jet pump BGM-9/A	230 V



## LOWARA JET PUMP BGM-11/A

no head	: 4,500 litres per hour
25 metres head	: 4,500 litres per hour
30 metres head	: 4,320 litres per hour
35 metres head	: 3,240 litres per hour
40 metres head	: 2,400 litres per hour
45 metres head	: 1,440 litres per hour
50 metres head	: 540 litres per hour
discharge head	: 53.0 metres maximum
suction height	: 8.0 metres, when using foot valve
particle size	: zero
connections	: discharge : 1" internal thread : suction : 1.1/4" internal thread
dimensions	: lwxh = 383 x 215 x 223 mm
weight	: 16 kg
amperage	: 6.8 A
shaft power	: 1.1 kW, 1.5 hp, 2800 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.37.450</b>	Lowara Jet pump BGM-11/A	230 V



## DIGITEL CH PUMP, WITH DC ELECTRIC MOTOR

Brushless central heating pump for 12 or 24 volt DC with very low power consumption thanks to the application of advanced electronics. Central heating systems on board ships and yachts, in caravans and all other CH and solar boiler installations operating independently of the mains.

type	: 203S	
colour	: red	
special feature	: very quiet	
pump type	: normal priming centrifugal pump	
impeller type	: closed impeller	
motor type	: 2-pole semi wet digital inner pole motor with 3 adjustable stabilized speeds	
fuse	: NONE	
shaft seal	: sealless	
system pressure	: 6 bar maximum	
back pressure	: at least 1.3 bar at 75°C	
	: at least 1.5 bar at 90°C	
materials	: impeller	: stainless steel
	: pump housing	: cast iron
	: pump shaft	: ceramic oxide
liquids	: clean water with a maximum temperature of 100°C	
voltages	: 12 and 24 V DC	



## DIGITEL CH PUMP 203S

no head	: 3,500 litres per hour	
1.5 metres head	: 1,500 litres per hour	
discharge head	: 2.0 metres maximum	
suction height	: zero	
particle size	: zero	
connections	: 1.1/2" external thread (is supplied without connectors)	
dimensions	: installed length 180 mm	
weight	: 3.5 kg	
voltage	: minimum	: 16.0 V
	: maximum	: 30.0 V
shaft power	: min. 10 W, max. 20 W	
power cons.	: min. 12W, max. 24W	
amperage	: 12 V	: 1= 1.00 through 1.40 A
		: 2= 1.40 through 1.70 A
		: 3= 1.70 through 2.00 A
	: 24 V	: 1= 0.50 through 0.70 A
		: 2= 0.70 through 0.85 A
		: 3= 0.85 through 1.00 A

ARTIKELNO	DESCRIPTION	VOLT
<b>93.75.012</b>	Digitel CV pump 203S 12DC	12 V
<b>93.75.024</b>	Digitel CV pump 203S 24DC	24 V

## DAB CIRCULATION PUMP

For large and small heating installations.  
And for transport of various low-viscosity media that do not contain solids.  
High efficiency, low power consumption, very low noise.

type	: Evosta
colour	: green
special feature	: very low noise
pump type	: non self-priming centrifugal pump
impeller type	: closed impeller
motor type	: "half wet" variable speed
fuse	: built-in thermal protection
seal	: non-sealed
system pressure	: up to 10 atmospheres
materials	: impeller : plastic
	: pump housing : cast iron
	: pump shaft : oxide ceramic
liquids	: clean water with a temperature of -10 °C to +110 °C
voltage	: 230 volts AC

## DAB EVOSTA 2 40-70

no head	: 3,600 litres per hour
at 1 meter	: 3,400 litres per hour
at 5 meters	: 950 litres per hour
discharge head	: maximum 6.9 meters
suction head	: zero
particle size	: zero
connections	1 1/2" outside thread (supplied without coupling)
dimensions	: installed length 130 or 180 mm
weight	: 2.19 kg
insulation class	: IPX5
current	: 0.043 to 0.32 A
power consumption	: min. 4 watts, 35 watts max.
rev/min	: variable

ARTIKELNO	DESCRIPTION	VOLT
<b>93.75.423</b>	DAB Evosta 2 40-70/130, 50/60 Hz	230 V
<b>93.75.428</b>	DAB Evosta 2 40-70/180, 50/60 Hz	230 V



## CH CONNECTIONS

ARTIKELNO	2 X INTERNAL THREAD	MATERIAL
<b>93.75.991</b>	1.1/2" x 1"	steel
<b>93.75.992</b>	1.1/4" x 3/4"	steel
<b>93.75.993</b>	1.1/4" x 3/4"	brass



## CHANGEMASTER GEARWHEEL PUMP

For pressurizing the lubricating oil system of marine engines and pumping out lubricating oil drums when no 230 volt supply is available.

type	: GM
colour	: green with aluminium
special feature	: inbuilt overflow valve
pump type	: gearwheel pump, limited self-priming
impeller type	: steel gearwheels
motor type	: dust and waterproof brush motor
fuse	: NOT inbuilt
shaft seal	: lip seal
materials	: impeller : steel gearwheels : pump housing : aluminium : pump shaft : stainless steel
liquids	: clean lubricating oil and neutral low viscosity liquids with lubricating properties
voltage	: 24 V DC



## CHANGEMASTER GM-2524H

running time	: 25 minutes, may NOT run continuously
viscosity	: has a very big effect on capacity, maximum 800 centistokes or 110 Engler approx. equal to SAE 20 at 0°C
capacities	: <b>measured with water</b>
no head	: 1,200 litres per hour
5 metres head	: 1,125 litres per hour
10 metres head	: 1,050 litres per hour
15 metres head	: 960 litres per hour
discharge head	: 20 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: suction : 1" internal thread : discharge : 3/4" internal thread
dimensions	: lxwxh = 300 x 150 x 210 mm
weight	: 10.0 kg
amperage	: 16.0 A
shaft power	: 0.2 kW, 0.26 hp, 6200 rpm
cable	: 5 metre without plug, an inbuilt switch on the pump

ARTIKELNO	DESCRIPTION	VOLT
93.90.224	Changemaster GM-2524H	24 V



## SAER GEARWHEEL PUMP

The pumps can be used for transporting low viscosity and lubricating liquids without solids or abrasive components, such as diesel oil, light lubricating oil, spindle oil, preheated grease and gas oil.

type	: SAER
colour	: olive green
pump type	: gearwheel pump, limited self-priming
impeller type	: gearwheels
fuse	: NOT inbuilt
shaft seal	: lip seal
materials	: gearwheels : 1 brass gearwheel : 1 steel gearwheel
	: pump housing : cast steel
	: pump shaft : toughened steel
liquids	: clean lubricating oil and neutral low viscosity liquids with lubricating properties
voltage	: 230 V mains : 400 V three phase

## SAER GEARWHEEL PUMP CFP12-6

viscosity	: has a very big effect on capacity, maximum 20 Engler
capacities	: <b>measured with water</b>
no head	: 720 litres per hour
30 metres head	: 720 litres per hour
50 metres head	: 600 litres per hour
discharge head	: 70 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 3/4" internal thread
dimensions	: l x w x h = 310 x 150 x 180 mm
weight	: 8.8 kg
amperage	: 3.0 A
shaft power	: 0.37 kW, 0.5 hp, 1390 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.412</b>	Saer gearwheel pump CFP12-6	230 V
<b>93.90.413</b>	Saer gearwheel pump CFP12-6	400 V



## SAER GEARWHEEL PUMP CF 25-6

viscosity	: has a very big effect on capacity, maximum 20 Engler
capacities	: <b>measured with water</b>
no head	: 1,500 litres per hour
30 metres head	: 1,520 litres per hour
50 metres head	: 1,200 litres per hour
60 metres head	: 900 litres per hour
discharge head	: 70 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 1" internal thread
dimensions	: l x w x h = 320 x 180 x 190 mm
weight	: 14.2 kg
amperage	: 6.0 A
shaft power	: 0.75 kW, 1.0 hp, 1390 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.425</b>	Saer gearwheel pump CF25-6	230 V
<b>93.90.426</b>	Saer gearwheel pump CF25-6	400 V



## GEARWHEEL PUMP

The pumps can be used for transporting low viscosity and lubricating liquids without solids or abrasive components, such as diesel oil, light lubricating oil, spindle oil, preheated grease and gas oil.

type	: GEAR
colour	: blue
special feature	: inbuilt overflow valve (maximum of 10 bar), NOT ADJUSTED
pump type	: gearwheel pump, limited self-priming
impeller type	: gearwheels
motor type	: 230 volt induction motor : 400 volt short circuit motor (normalized flange motors)
fuse	: NOT inbuilt
shaft seal	: carbon on hard metal mechanical seal
materials	: gearwheels : steel* : pump housing : cast steel* : pump shaft : toughened steel*
liquids	: clean lubricating oil and neutral low viscosity liquids with lubricating properties, maximum 140°C
viscosity	: maximum 20 Engler
voltage	: 230 V mains : 400 V three phase

\* available in bronze or stainless steel for the foodstuffs industry



## GEARWHEEL PUMP GEAR 300/5L-10B

viscosity	: has a very big effect on capacity, maximum 20 Engler
capacities	: <b>measured with water</b>
no head	: 300 litres per hour, 5 litres per minute
discharge head	: 100 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 1/2" internal thread
dimensions	: l x w x h = 390 x 150 x 226 mm
weight	: 11 kg
amperage	: 230 V, 2.6 A : 400 V, 0.8 A
shaft power	: 0.25 kW, 0.35 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.505</b>	Gearwheel pump Gear 300/5L-10BM	230 V
<b>93.90.506</b>	Gearwheel pump 300/5L-10BT	400 V



## GEARWHEEL PUMP GEAR 600/10L-10B

viscosity	: has a very big effect on capacity, maximum 20 Engler
capacities	: <b>measured with water</b>
no head	: 600 litres per hour, 10 litres per minute
discharge head	: 100 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 3/4" internal thread
dimensions	: l x w x h = 410 x 155 x 226 mm
weight	: 14 kg
amperage	: 230 V, 3.2 A : 400 V, 1.2 A
shaft power	: 0.37 kW, 0.5 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.510</b>	Gearwheel pump 600/10L-10BM	230 V
<b>93.90.511</b>	Gearwheel pump Gear 600/10L-10BT	400 V

## GEARWHEEL PUMP GEAR 900/15L-10B

viscosity	: has a very big effect on capacity, maximum 20 Engler
capacities	: <b>measured with water</b>
no head	: 1000 litres per hour, 16 litres per minute
discharge head	: 100 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 3/4" internal thread
dimensions	: l x w x h = 450 x 155 x 226 mm
weight	: 15 kg
amperage	: 230 V, 4.1 A : 400 V, 1.4 A
shaft power	: 0.55 kW, 0.75 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.515</b>	Gearwheel pump Gear 900/15L-10BM	230 V
<b>93.90.516</b>	Gearwheel pump Gear 900/15L-10BT	400 V



## GEARWHEEL PUMP GEAR-1500/25L-10B

viscosity	: has a very big effect on capacity, maximum 20 Engler
capacities	: <b>measured with water</b>
no head	: 1,500 litres per hour, 25 litres per minute
discharge head	: 100 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 3/4" internal thread
dimensions	: l x w x h = 460 x 200 x 245 mm
weight	: 18 kg
amperage	: 230 V, 5.7 A : 400 V, 2.0 A
shaft power	: 0.75 kW, 1 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.525</b>	Gearwheel pump Gear 1500/25L-10BM	230 V
<b>93.90.526</b>	Gearwheel pump Gear 1500/25L-10BT	400 V





## GEARWHEEL PUMP GEAR 2400/40L-10B

viscosity	: has a very big effect on capacity, maximum 20 Engler
capacities	: <b>measured with water</b>
no head	: 2,000 litres per hour, 33 litres per minute
discharge head	: 100 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 1" internal thread
dimensions	: l <sub>w</sub> xh = 465 x 200 x 260 mm
weight	: 21 kg
amperage	: 230 V, 9.3 A
	: 400 V, 2.5 A
shaft power	: 1.1 kW, 1.5 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.540</b>	Gearwheel pump Gear 2400/40L-10BM	230 V
<b>93.90.541</b>	Gearwheel pump Gear 2400/40L-10BT	400 V



## GEARWHEEL PUMP GEAR 3000/50L-10B

viscosity	: has a very big effect on capacity, max. 20 Engler
capacities	: <b>measured with water</b>
no head	: 3,000 litres per hour, 50 litres per minute
discharge head	: 100 metres maximum
suction head	: depends on viscosity
particle size	: zero
connections	: 1" internal thread
dimensions	: l <sub>w</sub> xh = 525 x 200 x 260 mm
weight	: 24 kg
amperage	: 230 V, 9.3 A
	: 400 V, 3.6 A
shaft power	: 1.5 kW, 2 hp, 1400 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>93.90.550</b>	Gearwheel pump Gear 3000/50L-10BM	230 V
<b>93.90.551</b>	Gearwheel pump Gear 3000/50L-10BT	400 V

### KOSHIN PUMP, SELF-PRIMING

Sturdy ballast pump for shipping, construction etc.

type : SE  
 colour : orange  
 pump type : self-priming centrifugal pump  
 impeller type : open impeller  
 motor type : 2 stroke KOSHIN petrol engine  
 shaft seal : ceramic on carbon mechanical seal  
 materials : impeller : cast iron  
               : impeller housing : cast iron  
               : pump housing : aluminium  
               : pump shaft : stainless steel  
 liquids : slightly contaminated water

### KOSHIN SEV-25L, PETROL ENGINE, 2 STROKE

no head : 6,600 litres per hour  
 10 metres head : 5,220 litres per hour  
 15 metres head : 4,500 litres per hour  
 20 metres head : 3,600 litres per hour  
 25 metres head : 2,300 litres per hour  
 30 metres head : 750 litres per hour  
 discharge head : 32.0 metres maximum  
 suction head : 7.0 metres  
 particle size : 2 mm maximum  
 connections : 1" external thread  
               : 1" hose connections  
 dimensions : l x w x h = 330 x 280 x 330 mm  
 weight : 6 kg, tank capacity 0.6 litres  
 type motor : KOSHIN, KC26, 2 stroke engine, mixed lubrication 1:50  
 shaft power : 0.68 kW, 0.93 hp at 7500 rpm  
 tank volume : 0.6 litre, approx. 50 minutes



ARTIKELNO	DESCRIPTION
94.05.130	Koshin SEV-25L petrol engine 2 stroke

## KOSHIN PUMP, SELF-PRIMING

Sturdy ballast pump for shipping, construction etc.

type	: SE
colour	: black
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: 4 stroke HONDA petrol engine
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron
	: impeller housing : cast iron
	: pump housing : aluminium
	: pump shaft : stainless steel
liquids	: slightly contaminated water



## KOSHIN SEH-25L, PETROL ENGINE, 4 STROKE

no head	: 6,900 litres per hour
10 metres head	: 5,300 litres per hour
15 metres head	: 4,500 litres per hour
20 metres head	: 3,500 litres per hour
25 metres head	: 2,300 litres per hour
30 metres head	: 660 litres per hour
discharge head	: 32.0 metres maximum
suction head	: 7.0 metres
particle size	: 2 mm maximum
connections	: 1" external thread
	: 1" hose connections
dimensions	: l x w x h = 375 x 235 x 330 mm
weight	: 7 kg
type motor	: HONDA, GX25, 24.5 cc, 4 stroke engine, E5 petrol
shaft power	: 0.81 kW , 1.1 hp at 7000 rpm
tank volume	: 0.58 litre, approx. 60 minutes

ARTIKELNO	DESCRIPTION
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<b>94.05.224</b>	Koshin SEH-25L petrol engine 4 stroke
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## KOSHIN SEH-25H, PETROL ENGINE, 4 STROKE

no head	: 8,100 litres per hour
10 metres head	: 7,900 litres per hour
15 metres head	: 7,800 litres per hour
20 metres head	: 7,300 litres per hour
25 metres head	: 6,400 litres per hour
30 metres head	: 5,200 litres per hour
35 metres head	: 3,600 litres per hour
40 metres head	: 1,800 litres per hour
discharge head	: 43.0 metres maximum
suction head	: 7.0 metres
particle size	: 2 mm maximum
connections	: 1" external thread
	: 1" hose connections
dimensions	: l x w x h = 390x 326 x 473 mm
weight	: 12.5 kg
type motor	: HONDA, GXH50, 49.4 cc 4 stroke engine, E5 petrol
shaft power	: 1.76 kW, 2.4 hp at 7000 r
tank volume	: 0.77 litre, approx. 50 minutes

ARTIKELNO	DESCRIPTION
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<b>94.05.225</b>	Koshin SEH-25H petrol engine 4 stroke
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**KOSHIN SEH-50X, PETROL ENGINE, 4 STROKE**

no head : 36,000 litres per hour  
 5 metres head : 33,000 litres per hour  
 10 metres head : 28,500 litres per hour  
 15 metres head : 24,000 litres per hour  
 20 metres head : 18,000 litres per hour  
 25 metres head : 10.800 litres per hour  
 discharge head : 30.0 metres maximum  
 suction head : 7.0 metres  
 particle size : 3 mm maximum  
 connections : 2" external thread  
                   : 2" hose connections  
 dimensions : lwxhxh = 506 x 402 x 421 mm  
 weight : 24 kg  
 type motor : HONDA, GX120, 4 stroke engine, E5 petrol  
 shaft power : 2.79 kW, 3.8 hp at 3600 rpm  
                   : 4.04 kW, 5.5 hp at 4000 rpm  
 tank volume : 2.0 litres, approx. 2 hours



ARTIKELNO	DESCRIPTION
<b>94.05.250</b>	Koshin SEH-50X petrol engine 4 stroke

**KOSHIN SEH-80X, PETROL ENGINE, 4 STROKE**

no head : 54,000 litres per hour  
 5 metres head : 49,500 litres per hour  
 10 metres head : 42,000 litres per hour  
 15 metres head : 36,000 litres per hour  
 20 metres head : 27,000 litres per hour  
 25 metres head : 9,000 litres per hour  
 discharge head : 26.0 metres maximum  
 suction head : 7.0 metres  
 particle size : 3 mm maximum  
 connections : 3" external thread  
                   : 3" hose connections  
 dimensions : lwxhxh = 525 x 399 x 476 mm  
 weight : 34 kg  
 type motor : HONDA, GX160, 4 stroke engine, E5 petrol  
 shaft power : 3.8 hp at 3600 rpm  
                   : 5.5 hp at 4000 rpm  
 tank volume : 3.1 litres, approx. 2 hours and 10 minutes



ARTIKELNO	DESCRIPTION
<b>94.05.280</b>	Koshin SEH-80X petrol engine 4 stroke



## KOSHIN SEH-100X, PETROL ENGINE, 4 STROKE

no head	: 90,000 litres per hour
5 metres head	: 81,000 litres per hour
10 metres head	: 72,000 litres per hour
15 metres head	: 63,000 litres per hour
20 metres head	: 54,000 litres per hour
25 metres head	: 27,000 litres per hour
discharge head	: 28.0 metres maximum
suction head	: 7.0 metres
particle size	: 3 mm maximum
connections	: 4" external thread
	: 4" hose connections
dimensions	: lwxh = 680 x 487 x 684 mm
weight	: 59 kg
type motor	: HONDA, GX240, 4 stroke engine, E5 petrol
shaft power	: 4.41 kW, 6.0 hp at 3600 rpm
	: 5.29 kW, 7.2 hp at 4000 rpm
tank volume	: 5.3 litres, approx. 2.5 hours

ARTIKELNO	DESCRIPTION
94.05.299	Koshin SEH-100X petrol engine 4 stroke

## KOSHIN PRESSURE PUMP, SELF-PRIMING

Because of the high pressure is ideal for spray washing holds, for sprinkling in agriculture, for use by fire services and as an emergency firefighting pump on passenger ships.

type	: SER
colour	: yellow
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: 4 stroke ROBIN petrol engine
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron
	: impeller housing : cast iron
	: pump housing : aluminium
	: pump shaft : stainless steel
liquids	: clean to slightly contaminated water

## KOSHIN PRESSURE PUMP SER-40EX, PETROL ENGINE



no head	: 25,800 litres per hour
5 metres head	: 24,000 litres per hour
10 metres head	: 22,500 litres per hour
15 metres head	: 21,000 litres per hour
20 metres head	: 18,000 litres per hour
25 metres head	: 15,000 litres per hour
30 metres head	: 13,500 litres per hour
35 metres head	: 12,000 litres per hour
40 metres head	: 9,000 litres per hour
45 metres head	: 7,000 litres per hour
50 metres head	: 4,500 litres per hour
55 metres head	: 1,500 litres per hour
discharge head	: 57.0 metres maximum
suction head	: 7.0 metres
particle size	: 3 mm maximum
connections	: 2" external thread
	: 2" hose connections
dimensions	: lwxh = 620 x 380 x 528 mm
weight	: 35 kg
tank capacity	: 3.6 litres
type motor	: ROBIN EX170D, 169 cc, 4 stroke engine, E5 petrol
shaft power	: 2.94 kW, 4.0 hp at 3600 rpm
	: 4.19 kW, 5.7 hp at 4000 rpm
tank volume	: 3.6 litres, approx. 2.5 hours

ARTIKELNO	DESCRIPTION
94.06.140	Koshin pressure pump SER-40EX petrol engine

for current prices, visit [www.hoenderop.com](http://www.hoenderop.com)



## KOSHIN FIRE PUMP SERH-50BD WITH DIESEL MOTOR, SELF-PRIMING

Because of the very high pressure this is ideal for jet-washing holds, for overhead irrigation, for use by fire services and as an emergency firefighting pump on passenger ships.

type	: SERH-50BD
colour	: orange
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: 4 stroke diesel engine
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron
	: impeller housing : cast iron
	: pump housing : aluminium
	: pump shaft : stainless steel
liquids	: clean to slightly contaminated water

## KOSHIN FIRE PUMP SERH-50BD-20, DIESEL ENGINE

no head	: 24,000 litres per hour
5 metres head	: 22,000 litres per hour
10 metres head	: 20,000 litres per hour
15 metres head	: 18,000 litres per hour
20 metres head	: 15,600 litres per hour
25 metres head	: 13,200 litres per hour
30 metres head	: 11,000 litres per hour
35 metres head	: 7,300 litres per hour
40 metres head	: 3,300 litres per hour
discharge head	: 44.0 metres maximum
suction head	: 7.0 metres
particle size	: 3 mm maximum
connections	: 2" external thread
dimensions	: LxWxH = 800 x 680 x 710 mm
weight	: 46 kg
type motor	: ROBIN DY23-2D, 4 stroke diesel engine
shaft power	: 3.08 kW, 4.2 hp at 3600 rpm
tank capacity	: 3.2 litres, approx. 3.0 hours



ARTIKELNO	DESCRIPTION
94.20.750	Koshin fire pump SERH-50BD-20, diesel engine

## KOSHIN FIRE PUMP SERH-50BDHR WITH DIESEL MOTOR, SELF-PRIMING

Because of the very high pressure this is ideal for jet-washing holds, for overhead irrigation, for use by fire services and as an emergency firefighting pump on passenger ships.

type	: SERH-50BDHR
colour	: orange
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: 4 stroke Hatz diesel engine
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron
	: impeller housing : cast iron
	: pump housing : aluminium
	: pump shaft : stainless steel
liquids	: clean to slightly contaminated water



## KOSHIN FIRE PUMP SERH-50BDHR-20, DIESEL ENGINE

no head	: 22,800 litres per hour
5 metres head	: 22,200 litres per hour
10 metres head	: 20,400 litres per hour
15 metres head	: 18,000 litres per hour
20 metres head	: 16,200 litres per hour
25 metres head	: 13,800 litres per hour
30 metres head	: 11,400 litres per hour
35 metres head	: 8,400 litres per hour
40 metres head	: 4,800 litres per hour
discharge head	: 45.0 metres maximum
suction head	: 7.0 metres
particle size	: 3 mm maximum
connections	: 2" external thread
dimensions	: LxWxH = 800 x 680 x 710 mm
weight	: 55 kg
type motor	: HATZ 1B20, 4 stroke diesel engine
shaft power	: 3.52 kW, 4.8 hp at 3600 rpm
tank capacity	: 3.2 litres, approx. 3.0 hours

ARTIKELNO	DESCRIPTION
94.21.050	Koshin fire pump SERH-50BDHR-20, diesel engine



## KOSHIN FIRE PUMP SERH-50BDHR-30, DIESEL ENGINE

no head	: 33,600 litres per hour
5 metres head	: 33,000 litres per hour
10 metres head	: 30,600 litres per hour
15 metres head	: 28,800 litres per hour
20 metres head	: 26,400 litres per hour
25 metres head	: 24,000 litres per hour
30 metres head	: 21,000 litres per hour
35 metres head	: 18,000 litres per hour
40 metres head	: 13,800 litres per hour
45 metres head	: 9,600 litres per hour
50 metres head	: 3,600 litres per hour
discharge head	: 52.0 metres maximum
suction head	: 7.0 metres
particle size	: 3 mm maximum
connections	: discharge : 2" external thread
	: suction : 2 1/2" external thread
dimensions	: LxWxH = 800 x 700 x 710 mm
weight	: 60 kg
type motor	: HATZ 1B30, 4 stroke diesel engine
shaft power	: 5.36 kW, 7.3 hp at 3600 rpm
tank capacity	: 4.6 litres, approx. 3.5 hours

ARTIKELNO	DESCRIPTION
94.21.055	Koshin fire pump SERH-50BDHR-30, diesel engine

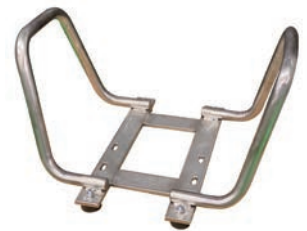
## CEM BRONZE FIRE PUMP WITH DIESEL MOTOR, SELF-PRIMING

The high pressure makes it very well suited for jet-washing ships' holds, for overhead irrigation, as a fire pump for the fire service, as an emergency fire pump for passenger ships or as a bilge pump.

type	: AM-D
colour	: bronze
pump type	: self-priming centrifugal pump
impeller type	: open impeller
motor type	: 4-stroke Lombardini diesel
seal	: mechanical seal (ceramic on carbon)
materials	: impeller : bronze
	: impeller housing : bronze
	: pump housing : bronze
	: pump shaft : stainless steel AISI 316
liquids	: clean and slightly contaminated water

## CEM BRONZE FIRE PUMP AM-D 40, DIESEL ENGINE

no head	: 31,200 litres per hour
at 10 meters	: 31,200 litres per hour
at 15 meters	: 28,800 litres per hour
at 20 meters	: 25,200 litres per hour
at 25 meters	: 22,200 litres per hour
at 30 meters	: 18,600 litres per hour
at 35 meters	: 10,200 litres per hour
at 40 meters	: 4,800 litres per hour
discharge head	: 42.0 meters maximum
suction head	: 4.5 meters
particle size	: 4.5 mm maximum
connections	: suction : 1.1/2" Internal thread
	: discharge : 2" Internal thread
dimensions	: LxWxH = 504 x 373 x 444 mm
weight	: 60 kg
motor type	: LOMBARDINI 15LD350, 4-stroke diesel engine
shaft power	: 2.75 kW, 3.75 hp at 3600 rpm
tank capacity	: 4.3 litre, about 2.8 hours



ARTIKELNO	DESCRIPTION	TYPE
<b>94.21.740</b>	CEM bronze fire pump AM-D 40, diesel engine	manual starter
<b>94.21.741</b>	CEM bronze fire pump AM-D 40, diesel engine	electric starter (battery not included)
<b>94.21.749</b>	Carry frame for CEM AM-D 40	



## CEM BRONZE FIRE PUMP AM-D 50, DIESEL ENGINE

no head	: 54,000 litres per hour
at 20 meters	: 54,000 litres per hour
at 25 meters	: 48,000 litres per hour
at 30 meters	: 45,600 litres per hour
at 35 meters	: 39,000 litres per hour
at 40 meters	: 37,200 litres per hour
at 45 meters	: 31,800 litres per hour
at 50 meters	: 27,200 litres per hour
discharge head	: 53.3 meters maximum
suction head	: 5.5 meters
particle size	: 8 mm maximum
connections	: suction : 2" Internal thread
	: discharge : 2.1/2" Internal thread
dimensions	: LxWxH 546 x 397 x 480 mm
weight	: 75 kg
motor type	: LOMBARDINI 15LD440, 4-stroke diesel engine
shaft power	: 4.48 kW, 6.1 hp at 3600 rpm
tank capacity	: 5.0 litre, about 2.8 hours

ARTIKELNO	DESCRIPTION	TYPE
<b>94.21.750</b>	CEM bronze fire pump AM-D 50, diesel engine	manual starter
<b>94.21.751</b>	CEM bronze fire pump AM-D 50, diesel engine	electric starter (battery not included)
<b>94.21.759</b>	Carry frame for CEM AM-D 50	

## TELLARINI POWER DRILL PUMP, SELF-PRIMING

Fill up first!

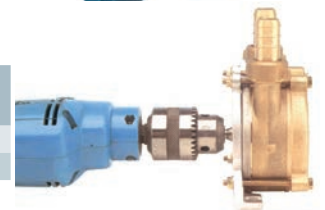
Robust self-priming side channel impeller pump for clean fluids, gas oil, water, wine, fruit juices, etc for power drill drive.

type	: TR
colour	: brass
pump type	: self-priming liquid ring pump, not a centrifugal pump and may therefore NOT be completely sealed off
impeller type	: open star impeller
rotation dirn.	: can rotate in both directions
shaft seal	: nitrile rubber lip seal with stainless steel spring, mechanical seal available and it can be fitted afterwards
materials	: impeller : brass
	: impeller housing : brass
	: pump housing : brass
	: pump shaft : stainless steel AISI 316
liquids	: maximum continuous temperature 90°C water, gas oil and other clean liquids without abrasive particles

## TELLARINI TR-20

	1400 rpm	1900 rpm	2800 rpm
	<b>l/h</b>	<b>l/h</b>	<b>l/h</b>
no head	: 720	1,020	1,920
5 metres head	: 300	660	
10 metres head	:	240	1,080
20 metres head	:		1,200
discharge head	: 7.0 metres	13.0 metres	28.0 metres maximum
suction head	: 6.0 metres		
particle size	: zero		
connections	: 3/4" external thread and 1/2" (TR-14) or 3/4" (TR-20) hose connection		
shaft diameter	: 8 mm		
dimensions	: l x w x h = 83 x 125 x 105 mm		
weight	: 1.2 kg		
speed range	: 1400 through 2800 rpm		

ARTIKELNO	DESCRIPTION
95.15.014	Tellarini TR-14 rotates in both directions 14 MM-1/2"
95.15.019	Tellarini TR-20 rotates in both directions 20 MM-3/4"



## TELLARINI BRASS, SELF-PRIMING

Robust self-priming side channel impeller pump for clean fluids, gas oil, water, wine, fruit juices, etc for power drill drive with V-belt pulley for diesel or petrol engine or electric motor drive.

Can be used as cooling water pump or fuel trim pump in shipping or industry.

type	: I-series
colour	: brass
pump type	: self-priming liquid ring pump, not a centrifugal pump and may therefore NOT be completely sealed off
impeller type	: open star impeller
rotation dirn.	: can be used in both directions
shaft seal	: nitrile rubber lip seal with stainless steel spring, mechanical seal available and it can be fitted afterwards
materials	: impeller : brass
	: impeller housing : brass
	: pump housing : brass
	: pump shaft : stainless steel AISI 316
liquids	: maximum continuous temperature 90°C water, gas oil and other clean liquids without abrasive particles



## TELLARINI I-20

	1400 rpm		1900 rpm		2800 rpm	
	l/h	hp	l/h	hp	l/h	hp
no head	: 750	0.1	1,100	0.1	1,560	0.2
5 metres head	: 350	0.1	730	0.1	1,380	0.2
10 metres head	:		240	0.2	1,080	0.2
15 metres head	:				780	0.3
20 metres head	:				480	0.3
25 metres head	:				180	0.3
discharge head	: 28.0 metres maximum					
suction head	: 6.0 metres					
particle size	: zero					
connections	: 3/4" external thread and 3/4" hose connection					
dimensions	: l x w x h = 160 x 110 x 116 mm					
weight	: 2.0 kg					
shaft power	: 0.1 hp through 0.3 hp					
speed range	: 1400 through 2800 rpm					
V-belt pulley	: 1A71					

ARTIKELNO	DESCRIPTION
95.15.020	Tellarini I-20 rotates in both directions

## TELLARINI I-25

	1400 rpm		1900 rpm		2800 rpm	
	l/h	hp	l/h	hp	l/h	hp
no head	: 3,120	0.3	4,200	0.6	6,300	0.9
5 metres head	: 2,040	0.3	3,420	0.7	5,750	1.0
10 metres head	: 780	0.4	2,400	0.8	5,400	1.0
15 metres head	:		1,500	0.9	4,600	1.1
20 metres head	:		360	1.1	3,900	1.1
25 metres head	:				3,300	1.2
30 metres head	:				2,800	1.2
35 metres head	:				2,200	
40 metres head	:				1,650	
45 metres head	:				1,100	
50 metres head	:				700	
discharge head	: 52.0 metres maximum					
suction head	: 6.0 metres					
particle size	: zero					
connections	: 1" external thread and 1" hose connection					
dimensions	: lwxh = 223 x 126 x 146 mm					
weight	: 3.8 kg					
shaft power	: 0.3 hp through 1.2 hp					
speed range	: 1400 through 2800 rpm					
V-belt pulley	: 1A71					



ARTIKELNO	DESCRIPTION
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95.15.025	Tellarini I-25 rotates in both directions
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## TELLARINI I-30

	1400 rpm		1900 rpm		2800 rpm	
	l/h	hp	l/h	hp	l/h	hp
no head	: 5,400	0.6	7,200	1.0	10,920	2.7
5 metres head	: 3,840	0.7	6,000	1.0	9,990	3.1
10 metres head	: 1,860	0.8	4,500	1.1	9,120	3.1
15 metres head	:		3,120	1.2	8,130	3.7
20 metres head	:		1,380	1.3	7,140	3.7
25 metres head	:				6,150	4.0
30 metres head	:				5,160	4.0
35 metres head	:				4,800	
40 metres head	:				4,100	
45 metres head	:				2,700	
50 metres head	:				1,800	
55 metres head	:				900	
discharge head	: 60.0 metres maximum					
suction head	: 6.0 metres					
particle size	: zero					
connections	: 1.1/4" external thread and 1.1/4" hose connection					
dimensions	: lwxh = 298 x 158 x 180 mm					
weight	: 6.4 kg					
shaft power	: 0.6 hp through 4.0 hp					
speed range	: 1400 through 2800 rpm					
V-belt pulley	: 1A71					



ARTIKELNO	DESCRIPTION
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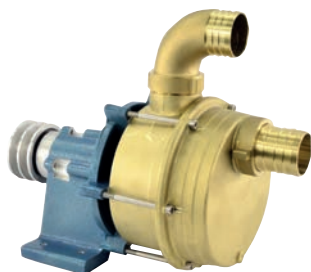
95.15.030	Tellarini I-30 rotates in both directions
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## TELLARINI I-40

	1400 rpm		1900 rpm		2800 rpm	
	l/h	hp	l/h	hp	l/h	hp
no head	: 7,800	0.9	10,500	1.3	15,660	3.5
5 metres head	: 6,000	1.0	9,180	1.4		
10 metres head	: 3,960	1.1	7,620	1.5	13,500	4.0
15 metres head	: 1,740	1.3	6,000	1.6		
20 metres head	:		4,440	1.7	11,460	4.5
25 metres head	:		2,700		10,200	5.0
30 metres head	:		1,200		8,940	5.0
35 metres head	:				7,800	
40 metres head	:				7,200	
45 metres head	:				5,400	
50 metres head	:				4,500	
55 metres head	:				3,900	
op 60 meter	:				2,400	
op 65 meter	:				1,500	
op 70 meter	:				600	
discharge head	: 71.0 metres maximum					
suction head	: 6.0 metres					
particle size	: zero					
connections	: 1.1/2" external thread and 1.1/2" hose connection					
dimensions	: l x w x h = 304 x 158 x 180 mm					
weight	: 7.1 kg					
shaft power	: 0.9 hp through 5.0 hp					
speed range	: 1400 through 2800 rpm					
V belt pulley	: 2A71					

ARTIKELNO	DESCRIPTION
95.15.040	Tellarini I-40 rotates in both directions



## TELLARINI I-50

	1400 rpm		1900 rpm	
	l/h	hp	l/h	hp
no head	: 14,820	1.6	19,440	4.0
5 metres head	: 12,600	1.8	18,120	4.3
10 metres head	: 10,560	2.0	16,320	4.6
15 metres head	: 8,160	2.1	14,280	4.9
20 metres head	: 5,400		12,360	5.2
25 metres head	: 1,500		10,500	
30 metres head	: 1,200		8,400	
35 metres head	:		7,200	
40 metres head	:		4,200	
45 metres head	:		3,000	
50 metres head	:		1,200	
discharge head	: 52.0 metres maximum			
suction head	: 6.0 metres			
particle size	: zero			
connections	: 2" external thread and 2" hose connection			
dimensions	: l x w x h = 325 x 200 x 219 mm			
weight	: 9.4 kg			
shaft power	: 1.6 hp through 5.2 hp			
speed range	: 1400 through 1900 rpm			
V-belt pulley	: 2A71			

ARTIKELNO	DESCRIPTION
95.15.050	Tellarini I-50 rotates in both directions



## STORK PUMP KGE, SELF-PRIMING

Frequently used in shipping as a bilge and deck wash pump.  
Also ideal as a general service pump in industry or as a sprinkling pump in agriculture.

type	: KGE
colour	: blue
pump type	: self-priming centrifugal pump
impeller type	: open impeller or closed impeller
rotation dirn.	: right-hand rotation, but a few types also available as left-hand rotation
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron or bronze+ j133 : bronze for 29Nb 15
	: pump housing : cast iron or bronze+
	: pump shaft : chromed steel
	+ available on request, also completely Ni-Resist
liquids	: contaminated liquids such as water, sea water, diesel, gas oil and fuel oil (maximum temperature +95°C)

## STORK KGEL 11-3

no head	: 13,500 litres per hour
5 metres head	: 13,500 litres per hour
10 metres head	: 11,000 litres per hour
15 metres head	: 3,500 litres per hour
discharge head	: 15.5 metres maximum
suction head	: 8.4 metres maximum
impeller type	: POLYAMIDE open impeller
particle size	: 7.5 mm maximum
connections	: 1.1/4" internal thread
dimensions	: lwxh = 308 x 190 x 255 mm
weight	: 15 kg
shaft diameter	: 16 mm
shaft power	: 0.75 kW, 1 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
<b>95.30.001</b>	Stork KGE 11-3 right-hand rotation
<b>95.30.002</b>	Stork KGEL 11-3 left-hand rotation



## STORK KGE 11-4

no head	: 19,500 litres per hour
5 metres head	: 19,500 litres per hour
10 metres head	: 18,000 litres per hour
15 metres head	: 7,000 litres per hour
discharge head	: 17.5 metres maximum
suction head	: 8.4 metres maximum
impeller type	: POLYAMIDE open impeller
particle size	: 12 mm maximum
connections	: 1.1/2" internal thread
dimensions	: lwxh = 325 x 190 x 290 mm
weight	: 17 kg
shaft diameter	: 16 mm
shaft power	: 1.1 kW, 1.45 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
<b>95.30.003</b>	Stork KGE 11-4 right-hand rotation
<b>95.30.004</b>	Stork KGEL 11-4 left-hand rotation





## STORK KGE 12B-5

no head	: 25,000 litres per hour
5 metres head	: 25,000 litres per hour
10 metres head	: 24,000 litres per hour
15 metres head	: 16,000 litres per hour
20 metres head	: 4,000 litres per hour
discharge head	: 21.0 metres maximum
suction head	: 7.8 metres maximum
impeller type	: open impeller
particle size	: 10 mm maximum
connections	: 2" internal thread
dimensions	: lxwxh = 393 x 225 x 350 mm
weight	: 30 kg
shaft diameter	: 24 mm
shaft power	: 1.5 kW, 2 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
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<b>95.30.005</b>	Stork KGE 12b-5 right-hand rotation
<b>95.30.006</b>	Stork KGEL 12b-5 left-hand rotation



## STORK KGE 12-5

no head	: 34,000 litres per hour
5 metres head	: 34,000 litres per hour
10 metres head	: 30,000 litres per hour
15 metres head	: 20,000 litres per hour
20 metres head	: 8,000 litres per hour
discharge head	: 22.0 metres maximum
suction head	: 7.8 metres maximum
impeller type	: open impeller
particle size	: 13 mm maximum
connections	: 2" internal thread
dimensions	: lxwxh = 393 x 225 x 350 mm
weight	: 30 kg
shaft diameter	: 24 mm
shaft power	: 2.2 kW, 3 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
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<b>95.30.007</b>	Stork KGE 12-5 right-hand rotation
<b>95.30.008</b>	Stork KGEL 12-5 left-hand rotation

### STORK KGE 12-6

no head	: 50,000 litres per hour
5 metres head	: 50,000 litres per hour
10 metres head	: 50,000 litres per hour
15 metres head	: 32,000 litres per hour
20 metres head	: 12,000 litres per hour
discharge head	: 23.0 metres maximum
suction head	: 8.1 metres maximum
impeller type	: open impeller
particle size	: 20 mm maximum
connections	: 2.1/2" internal thread
dimensions	: l x w x h = 434 x 225 x 360 mm
weight	: 40 kg
shaft diameter	: 24 mm
shaft power	: 3.0 kW, 4 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
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<b>95.30.009</b>	Stork KGE 12-6 right-hand rotation
<b>95.30.010</b>	Stork KGEL 12-6 left-hand rotation



### STORK KGE 14-8

no head	: 83,000 litres per hour
5 metres head	: 83,000 litres per hour
10 metres head	: 78,000 litres per hour
15 metres head	: 58,000 litres per hour
20 metres head	: 27,000 litres per hour
discharge head	: 22.0 metres maximum
suction head	: 7.3 metres maximum
impeller type	: open impeller
particle size	: 24 mm maximum
connections	: 80 mm flange connection
dimensions	: l x w x h = 430 x 255 x 375 mm
weight	: 46 kg
shaft diameter	: 24 mm
shaft power	: 4.0 kW, 5.5 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
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<b>95.30.011</b>	Stork KGE 14-8 right-hand rotation
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## STORK KGE 15-6

no head	: 52,000 litres per hour
5 metres head	: 52,000 litres per hour
10 metres head	: 52,000 litres per hour
15 metres head	: 44,000 litres per hour
20 metres head	: 34,000 litres per hour
25 metres head	: 24,000 litres per hour
30 metres head	: 8,000 litres per hour
discharge head	: 32.0 metres maximum
suction head	: 7.5 metres maximum
impeller type	: open impeller
particle size	: 11 mm maximum
connections	: 2.1/2" internal thread
dimensions	: lwxh = 415 x 247 x 380 mm
weight	: 40 kg
shaft diameter	: 24 mm
shaft power	: 4.0 kW, 5 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
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<b>95.30.012</b>	Stork KGE 15-6 right-hand rotation
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## STORK KGE 16-3

no head	: 15,500 litres per hour
5 metres head	: 15,500 litres per hour
10 metres head	: 15,500 litres per hour
15 metres head	: 14,500 litres per hour
20 metres head	: 11,000 litres per hour
25 metres head	: 8,000 litres per hour
30 metres head	: 5,000 litres per hour
discharge head	: 34.0 metres maximum
suction head	: 8.5 metres maximum
impeller type	: closed impeller
particle size	: 6 mm maximum
connections	: 1.1/4" internal thread
dimensions	: lwxh = 372 x 225 x 280 mm
weight	: 26 kg
shaft diameter	: 24 mm
shaft power	: 2.2 kW, 3 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
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<b>95.30.013</b>	Stork KGE 16-3 right-hand rotation
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### STORK KGE 16-6

no head	: 58,000 litres per hour
5 metres head	: 58,000 litres per hour
10 metres head	: 58,000 litres per hour
15 metres head	: 58,000 litres per hour
20 metres head	: 50,000 litres per hour
25 metres head	: 40,000 litres per hour
30 metres head	: 30,000 litres per hour
35 metres head	: 17,000 litres per hour
discharge head	: 37.5 metres maximum
suction head	: 6.5 metres maximum
impeller type	: open impeller
particle size	: 12 mm maximum
connections	: 2.1/2" internal thread
dimensions	: lwxh = 415 x 247 x 380 mm
weight	: 40 kg
shaft diameter	: 24 mm
shaft power	: 5.5 kW, 7.3 hp at 2900 rpm
speed range	: 2800 through 3000 rpm



ARTIKELNO	DESCRIPTION
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<b>95.30.014</b>	Stork KGE 16-6 right-hand rotation
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### STORK KGE 18-4

no head	: 18,000 litres per hour
5 metres head	: 18,000 litres per hour
10 metres head	: 18,000 litres per hour
15 metres head	: 18,000 litres per hour
20 metres head	: 18,000 litres per hour
25 metres head	: 15,500 litres per hour
30 metres head	: 12,500 litres per hour
35 metres head	: 9,000 litres per hour
40 metres head	: 3,500 litres per hour
discharge head	: 40.5 metres maximum
suction head	: 6.5 metres maximum
impeller type	: closed impeller
particle size	: 6.5 mm maximum
connections	: 1.1/2" internal thread
dimensions	: lwxh = 490 x 265 x 370 mm
weight	: 65 kg
shaft diameter	: 24 mm
shaft power	: 4.0 kW, 5.5 hp at 2900 rpm
speed range	: 2800 through 3000 rpm



ARTIKELNO	DESCRIPTION
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<b>95.30.015</b>	Stork KGE 18-4 right-hand rotation
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## STORK KGE 20B-5

no head	: 27,500 litres per hour
5 metres head	: 27,500 litres per hour
15 metres head	: 27,500 litres per hour
20 metres head	: 27,500 litres per hour
25 metres head	: 26,000 litres per hour
30 metres head	: 24,000 litres per hour
35 metres head	: 22,500 litres per hour
40 metres head	: 19,000 litres per hour
45 metres head	: 16,000 litres per hour
50 metres head	: 9,000 litres per hour
discharge head	: 52.0 metres maximum
suction head	: 6.7 metres maximum
impeller type	: closed impeller
particle size	: 3 mm maximum
connections	: 2" internal thread
dimensions	: l x w x h = 515 x 320 x 460 mm
weight	: 90 kg
shaft diameter	: 24 mm
shaft power	: 5.5 kW, 7.3 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
95.30.016	Stork KGE 20b-5 right-hand rotation



## STORK KGE 22-6

no head	: 59,000 litres per hour
5 metres head	: 59,000 litres per hour
10 metres head	: 59,000 litres per hour
15 metres head	: 59,000 litres per hour
20 metres head	: 59,000 litres per hour
25 metres head	: 59,000 litres per hour
30 metres head	: 59,000 litres per hour
35 metres head	: 55,000 litres per hour
40 metres head	: 47,000 litres per hour
45 metres head	: 37,500 litres per hour
50 metres head	: 28,000 litres per hour
55 metres head	: 18,000 litres per hour
discharge head	: 60.0 metres maximum
suction head	: 6.4 metres maximum
impeller type	: closed impeller
particle size	: 10 mm maximum
connections	: 2.1/2" internal thread
dimensions	: l x w x h = 640 x 345 x 550 mm
weight	: 110 kg
shaft diameter	: 32 mm
shaft power	: 11 kW, 15 hp at 2900 rpm
speed range	: 2800 through 3000 rpm

ARTIKELNO	DESCRIPTION
95.30.017	Stork KGE 22-6 right-hand rotation

## ALPHA PUMP, SELF-PRIMING

Used in shipping as a bilge and deck wash pump, and for sprinkling, dewatering, industry, construction and agriculture.

type	: RA
colour	: blue
pump type	: self-priming centrifugal pump
impeller type	: open impeller
rotation dirn.	: right-hand rotation
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : cast iron
	: pump housing : cast iron
	: pump shaft : stainless steel
liquids	: contaminated water, sea water, gas oil etc. maximum temperature 90°C

## ALPHA 01RA-1"

no head	: 4,800 litres per hour
5 metres head	: 3,500 litres per hour
9 metres head	: 1,500 litres per hour
discharge head	: 9.5 metres maximum
suction head	: 7.0 metres
particle size	: 8 mm maximum
connections	: 1" internal thread
dimensions	: lwxhxh = 197 x 160 x 213 mm
weight	: 8.0 kg
shaft diameter	: 20 mm
shaft power	: 0,25 kW, 0,33 hp at 2800 rpm
speed range	: 2800 through 5700 rpm (NOT self-priming at less than 3000 rpm)

ARTIKELNO	DESCRIPTION
95.35.010	Alpha 01RA-1" right-hand rotation



## ALPHA 01½RA-1.1/2"

no head	: 17,500 litres per hour
5 metres head	: 17,500 litres per hour
10 metres head	: 16,000 litres per hour
15 metres head	: 10,000 litres per hour
discharge head	: 18.0 metres maximum
suction head	: 7.0 metres
particle size	: 9 mm maximum
connections	: 1.1/2" internal thread
dimensions	: lwxhxh = 265 x 190 x 288 mm
weight	: 14.5 kg
shaft diameter	: 20 mm
shaft power	: 0.75 kW, 1.0 hp at 2800 rpm
speed range	: 2800 through 4000 rpm

ARTIKELNO	DESCRIPTION
95.35.015	Alpha 01½RA-1.1/2" right-hand rotation





## ALPHA O2RA-2"

no head	: 25,500 litres per hour
5 metres head	: 25,000 litres per hour
10 metres head	: 22,500 litres per hour
15 metres head	: 13,500 litres per hour
discharge head	: 17.0 metres maximum
suction head	: 7.0 metres
particle size	: 14 mm maximum
connections	: 2" internal thread
dimensions	: l x w x h = 294 x 193 x 321 mm
weight	: 17.0 kg
shaft diameter	: 20 mm
shaft power	: 1.5 kW, 2.0 hp at 2800 rpm
speed range	: 2800 through 3600 rpm

ARTIKELNO	DESCRIPTION
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<b>95.35.020</b>	Alpha O2RA-2" right-hand rotation
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## ALPHA O2½RA-2.1/2"

no head	: 35,000 litres per hour
5 metres head	: 35,000 litres per hour
10 metres head	: 31,000 litres per hour
15 metres head	: 18,000 litres per hour
discharge head	: 18.0 metres maximum
suction head	: 7.0 metres
particle size	: 20 mm maximum
connections	: 2.1/2" internal thread
dimensions	: l x w x h = 298 x 193 x 321 mm
weight	: 17.0 kg
shaft diameter	: 20 mm
shaft power	: 2.2 kW, 3.0 hp at 2800 rpm
speed range	: 2800 through 3600 rpm

ARTIKELNO	DESCRIPTION
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<b>95.35.025</b>	Alpha O2½RA-2.1/2" right-hand rotation
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## ALPHA O3RA-S-3"

no head	: 60,000 litres per hour
5 metres head	: 60,000 litres per hour
10 metres head	: 42,000 litres per hour
15 metres head	: 27,000 litres per hour
discharge head	: 18.0 metres maximum
suction head	: 7.0 metres
particle size	: 20 mm maximum
connections	: 3" internal thread
dimensions	: l x w x h = 370 x 193 x 305 mm
weight	: 19.0 kg
shaft diameter	: 20 mm
shaft power	: 3.0 kW, 4.0 hp at 2800 rpm
speed range	: 2800 through 3600 rpm

ARTIKELNO	DESCRIPTION
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<b>95.35.028</b>	Alpha O3RA/S-3" right-hand rotation
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### ALPHA 03RA-3"

no head	: 87,000 litres per hour
5 metres head	: 87,000 litres per hour
10 metres head	: 87,000 litres per hour
15 metres head	: 84,000 litres per hour
20 metres head	: 75,000 litres per hour
25 metres head	: 40,000 litres per hour
27 metres head	: 21,000 litres per hour
discharge head	: 28.0 metres maximum
suction head	: 7.0 metres
particle size	: 24 mm maximum
connections	: 3" internal thread
dimensions	: lxwxh = 377 x 274 x 435 mm
weight	: 43.0 kg
shaft diameter	: 25 mm
shaft power	: 5.6 kW, 7.5 hp at 2800 rpm
speed range	: 2000 through 3000 rpm



ARTIKELNO	DESCRIPTION
<b>95.35.030</b>	Alpha 03RA-3" right-hand rotation

### ALPHA 04RA-4"

no head	: 171,000 litres per hour
5 metres head	: 171,000 litres per hour
10 metres head	: 170,000 litres per hour
15 metres head	: 160,000 litres per hour
20 metres head	: 142,000 litres per hour
25 metres head	: 100,000 litres per hour
30 metres head	: 60,000 litres per hour
discharge head	: 33.0 metres maximum
suction head	: 7.0 metres
particle size	: 39 mm maximum
connections	: 4" internal thread
dimensions	: lxwxh = 715 x 313 x 558 mm
weight	: 92.0 kg
shaft diameter	: 30 mm
shaft power	: 12,75 kW, 17 hp at 2800 rpm
speed range	: 2400 through 3200 rpm



ARTIKELNO	DESCRIPTION
<b>95.35.040</b>	Alpha 04RA-4" right-hand rotation



## ALPHA 04RA-C-4"

no head	: 180,000 litres per hour
5 metres head	: 180,000 litres per hour
10 metres head	: 180,000 litres per hour
15 metres head	: 180,000 litres per hour
20 metres head	: 180,000 litres per hour
25 metres head	: 153,000 litres per hour
30 metres head	: 130,000 litres per hour
35 metres head	: 101,000 litres per hour
40 metres head	: 72,000 litres per hour
discharge head	: 44.5 metres maximum
suction head	: 7.0 metres
particle size	: 39 mm maximum
connections	: 4" internal thread
dimensions	: lwxh = 802 x 313 x 558 mm
weight	: 92.0 kg
shaft diameter	: 30 mm
shaft power	: 18,75 kW, 25 hp at 2600 rpm
speed range	: 2400 through 3200 rpm

ARTIKELNO	DESCRIPTION
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95.35.045	Alpha 04RA-C-4" right-hand rotation
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## ALPHA 06RA-6"

no head	: 324,000 litres per hour
5 metres head	: 324,000 litres per hour
10 metres head	: 324,000 litres per hour
15 metres head	: 300,000 litres per hour
20 metres head	: 276,000 litres per hour
25 metres head	: 215,000 litres per hour
30 metres head	: 60,000 litres per hour
discharge head	: 30.5 metres maximum
suction head	: 7.0 metres
particle size	: 25 mm maximum
connections	: 6" flange connection
dimensions	: lwxh = 675 x 500 x 865 mm
weight	: 253 kg
shaft diameter	: 48 mm
shaft power	: 17 kW, 23 hp at 1800 rpm
speed range	: 1500 through 2000 rpm

ARTIKELNO	DESCRIPTION
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95.35.060	Alpha 06RA-6" right-hand rotation
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## ALPHA 08RA-8"

no head	: 492,000 litres per hour
5 metres head	: 492,000 litres per hour
10 metres head	: 492,000 litres per hour
15 metres head	: 463,000 litres per hour
20 metres head	: 410,000 litres per hour
25 metres head	: 330,000 litres per hour
30 metres head	: 132,000 litres per hour
discharge head	: 31.5 metres maximum
suction head	: 7.0 metres
particle size	: 33 mm maximum
connections	: 8" flange connection
dimensions	: l x w x h = 747 x 500 x 864 mm
weight	: 261 kg
shaft diameter	: 48 mm
shaft power	: 28 kW, 38 hp at 1800 rpm
speed range	: 1500 through 2000 rpm



ARTIKELNO	DESCRIPTION
<b>95.35.080</b>	Alpha 08RA-8" right-hand rotation

## CONDENSATE DRAIN SET LITTLE GIANT

Automatic drain set for condensate and waste water from airco units, humidifiers, ice machines, drinks machines, high efficiency gas stoves etc.

**Reservoir has a level control and a high level alarm switch.**

type	: VCMA-20ST
colour	: blue/white
pump type	: centrifugal/vertical pump
impeller type	: open impeller
motor type	: induction motor
fuse	: inbuilt thermal safeguard
shaft seal	: N.A.
materials	: impeller : polypropylene
	: pump housing : polypropylene
	: pump shaft : stainless steel
	: reservoir : polypropylene
liquids	: waste water, but without dirt or abrasive particles.
voltage	: 230 V



## CONDENSATE DRAIN SET LG VCM-20-ULS

no head	: 5.0 litres per minute
1.5 metres head	: 3.5 litres per minute
2.5 metres head	: 2.4 litres per minute
4.5 metres head	: 1.3 litres per minute
discharge head	: 5.0 metres maximum
particle size	: zero
pumps down to	: N.A.
connections	: inlet : 2 x 28 mm openings
	: discharge : 3/8" hose adaptor with inbuilt non-return valve
dimensions	: lxxh = 260 x 125 x 180 mm
weight	: 2.9 kg
amperage	: 0.6 A
shaft power	: 25 W
cable	: 1.8 metre without plug
reservoir	: capacity of approx. 1.7 litres

ARTIKELNO	DESCRIPTION	VOLT
96.01.120	Condesate drain set LG VCMA-20ST	230 V

## SHOWER DRAIN SET, WITH GRUNDFOS

For removing waste water from washbasins, showers etc. that are below the water line or sewer level.

type	: Grundfos KP 250.1AV
colour	: stainless steel
pump type	: submersible pump
impeller type	: open impeller
motor type	: spec. liquid full motor
fuse	: inbuilt thermal safeguard
shaft seal	: NBR rubber lip seal
materials	: impeller : stainless steel
	: impeller housing : stainless steel
	: motor housing : stainless steel
	: pump shaft : stainless steel
liquids	: domestic waste water from bath, shower, washbasin or washing machine max temperature 50°C
voltage	: 230 V mains

## GRUNDFOS KP LIFTAWAY DRAIN SET (WITHOUT PUMP)

dimensions : lwxwxb= 41 x 28 x 38 cm

ARTIKELNO	DESCRIPTION	VOLT
<b>96.02.621</b>	Grundfos KP liftaway drain set (without pump)	



## GRUNDFOS KP 150.A1 + BALL FLOAT

no head	: 9,000 litres per hour
5 metres head	: 250 litres per hour
discharge head	: 5.2 metres maximum
particle size	: 10 mm, no sand or gravel
connection	: 1.1/4" internal thread
dimensions	: diameter 149 mm, height 225 mm
weight	: 6.3 kg
amperage	: 1.3 A
shaft power	: 0.15 kW, 0.2 hp
cable	: 10 metre neoprene H07-RN-F with earthed plug also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>90.10.120</b>	Grundfos KP 150.A1 + ball float	230 V



## GRUNDFOS KP 250.A1 + BALL FLOAT

no head	: 11,000 litres per hour
5 metres head	: 6,200 litres per hour
discharge head	: 7.5 metres maximum
particle size	: 10 mm, no sand or gravel
connection	: 1.1/4" internal thread
dimensions	: diameter 149 mm, height 225 mm (diam + float : 220 mm)
weight	: 7.2 kg
amperage	: 2.3 A
shaft power	: 0.24 kW, 0.32 hp
cable	: 10 metre neoprene H07 RN F with earthed plug also plug connection on pump side

ARTIKELNO	DESCRIPTION	VOLT
<b>90.10.220</b>	Grundfos KP 250.A1 + ball float	230 V



## DRUM – LIFT PUMP

For pumping out jerry cans and drums, filling bottles, measuring jugs and small jerry cans.

pump type : belows pump with lift option  
 material : polyethylene  
 liquids : petrol, gas oil, petroleum, water, various chemicals, cleaning agents



## JERRY CAN LIFT PUMP PH-10

For pumping out jerry cans and filling bottles, and small oil stoves.

comes as : card with 12  
 colour : red and clear  
 capacity : 6.7 litres per minute  
 discharge : 1/2" hose  
 inlet : 40 cm 1/2" pipe  
 length : 690 mm  
 weight : approx. 50 gram

ARTIKELNO	DESCRIPTION
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96.05.100	Jerry can lift pump PH-10
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## JERRY CAN LIFT PUMP PH-20

For pumping out jerry cans and filling bottles, and small oil stoves.

comes as : card with 10  
 colour : purple and clear  
 capacity : 11.5 litres per minute  
 discharge : 3/4" hose  
 inlet : 40 cm 3/4" pipe  
 length : 840 mm  
 weight : approx. 95 gram

ARTIKELNO	DESCRIPTION
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96.05.120	Jerry can lift pump PH-20
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## JERRY CAN BATTERY PUMP

For pumping out jerry cans and filling bottles, and small oil stoves

power supply : 2 1.5 volt penlight batteries (R06, AA)  
 colour : orange with white and clear  
**fluids : only petroleum and water**  
 capacity : 6.7 litres per minute  
 discharge : 1/2" hose  
 inlet : 40 cm 1/2" pipe  
 length : 514 mm  
 weight : approx. 50 gram

ARTIKELNO	TYPE	DESCRIPTION
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96.05.150	EP-105	standard
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96.05.160	EP-305	autostop
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96.05.164	EP-305BC	autostop + holder to prevent spilling
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## DRUM SIPHON PUMP PP-25

For pumping out drums and filling jerry cans.

colour	: red and clear
capacity	: 20 litres per minute
discharge	: 115 cm 3/4" hose
inlet	: 87 cm 3/4" pipe with drum connection
length	: 1190 mm
weight	: 400 gram

ARTIKELNO	DESCRIPTION
96.05.250	Drum siphon pump PP-25
96.05.252	Drum siphon pump PP-25C, for solvents



### PP-25C Chemical Compatibility Rating Information

Rating Scale	
O	No Effect
Δ	Moderate Effect
X	Not Recommended
N	Information Not Available

Chemical (100% concentration unless noted)	Rating
<b>A</b> Acetone	X
Ammonium Hydroxide	N
<b>C</b> Chlorine	O
<b>D</b> Deionized Water	Δ
Diesel Fuel	O
<b>E</b> Ethanol	O
<b>G</b> Gasoline	Δ
Glycol	N
<b>H</b> Hydrochloric Acid (20%)	O
Hydrochloric Acid (37%)	O
Hydrochloric Acid (100%)	O
<b>I</b> Isopropyl Alcohol	N
<b>K</b> Kerosene	O
<b>L</b> Lacquer Thinner	X
<b>M</b> Methanol	O
Methyl Chloride	X
Methyl Ethyl Ketone	X
Mineral Spirits	N
Motor Oil	O
<b>N</b> Nitric Acid (20%)	Δ
Nitric Acid (50%)	Δ
Nitric Acid (Concentrated)	Δ
<b>O</b> Oil, Hydraulic	O
<b>P</b> Paint	X
Phosphoric Acid (< 40%)	O
Phosphoric Acid (≥ 40%)	O
<b>S</b> Salt Water	O
Seawater	O
Sodium Hypochlorite	N
Sodium Hydroxide (20%)	N
Sodium Hydroxide (50%)	N
Sodium Hydroxide (80%)	N
Sulfuric Acid (<10%)	O
Sulfuric Acid (10-75%)	O
Sulfuric Acid (75-100%)	O
<b>W</b> Water	O
<b>X</b> Xylene	Δ



## ROTARY DRUM PUMP IN CHAMBER

Drum pump with handle.  
Complete with 1 meter PVC spiral hose with hose clamp.  
Used to empty drums in shipping, garages, construction, transport etc.

colour	: red
pump type	: self-priming displacement pump
impeller type	: displacement (baffles)
rotation	: right-hand rotation
shaft seal	: stuffing box
materials	: impeller : cast iron
	: pump housing : cast iron
	: pump shaft : steel
	: discharge elbow : zinc-plated steel
	: suction pipe : zinc-plated steel
liquids	: petroleum, gas oil, engine oil, gearbox oil (not HC25), spindle oil
capacity	: 35 litres per minute (0.25 litre per stroke)
connections	: discharge : 1" internal thread
	: inlet : 1.1/4" internal thread
discharge	: discharge elbow with 1" hose connection and 1" external thread
inlet	: 3-part 980 mm suction pipe, with 2" drum connection and 1.1/4" external thread
length	: 1,250 mm
weight	: 4.8 kg

ARTIKELNO	DESCRIPTION
96.06.126	Rotary drum pump in chamber



## DRUM PUMP LP-32

Drum pump with handle, for large capacities.  
Used to empty drums in shipping, garages, construction, transport etc.

type	: LP
colour	: aluminium
pump type	: self-priming displacement pump
impeller type	: displacement (lobes)
rotation	: right-hand rotation
shaft seal	: stuffing box
materials	: impeller : stainless steel displacement lobes
	: pump housing : aluminium
	: pump shaft : steel
liquids	: petroleum, gas oil
capacity	: 100 litres per minute (1 litre per stroke)
discharge	: 1.1/4" hose connection with 1.1/4" hose, 130 cm long
inlet	: 90 cm suction pipe with drum connection and suction filter and with drum connection
length	: 1350 mm
weight	: 8.0 kg

ARTIKELNO	DESCRIPTION
96.06.132	Drum pump LP-32



## CRANKCASE DRAIN PUMP

A sea water resistant hand pump for emptying the engine crankcase, the reverse clutch etc.

colour	: brass
pump type	: self-priming piston pump
impeller type	: piston
rotation	: vertical movement
shaft seal	: N.A.
material	: brass and neoprene
liquids	: spent engine oil and engine oil
capacity	: 0.1 litres per stroke
discharge	: 20 cm long 10 mm hose
inlet	: 55 cm long 8 mm hose
length	: 220 mm
weight	: 0.2 kg

ARTIKELNO	DESCRIPTION
<b>96.10.510</b>	Crankcase drain pump



## CRANKCASE VACUUM PUMP

For removing sump oil.  
Handy tool, works quickly and without mess.  
No battery acid!

ARTIKELNO	CAPACITY	MODEL	HEIGHT	DIAMETER	ACCESSORIES
<b>48.08.706</b>	6 L	ball model (water sports / hobby)	60 cm	26 cm	2 hoses of approx. 100 cm
<b>48.08.714</b>	14 L	cylinder model (professional)	65 cm	22 cm	3 hoses of approx. 100 cm



## DRUM PUMP PRESSOL, WITH VERTICAL MOVEMENT

Used to empty drums in shipping, garages, construction, transport etc.

colour	: red
pump type	: self-priming piston pump
impeller type	: piston
rotation	: vertical movement
shaft seal	: stuffing box
material	: light metal
liquids	: see specification with pump



## DRUM PUMP PRESSOL 13010

capacity	: 20 litres per minute
discharge	: curved plastic discharge
inlet	: 84 cm steel suction pipe with drum connection
length	: 960 mm
weight	: 1.4 kg
liquids	: petroleum, gas oil, engine oil, spindle oil, drill oil, PER, TRI, antifreeze, degreaser, flushing oil

ARTIKELNO	DESCRIPTION
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<b>96.13.010</b>	Drum Pump Pressol 13010
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## DRUM PUMP PRESSOL 13015

capacity	: 10 litres per minute
discharge	: curved plastic discharge
inlet	: 84 cm steel suction pipe with drum connection
length	: 960 mm
weight	: 1.9 kg
liquids	: engine oil, gearbox oil, spindle oil, drill oil

ARTIKELNO	DESCRIPTION
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<b>96.13.015</b>	Drum Pump Pressol 13015
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## DRUM PUMP PRESSOL 13020, WITH SIPHON ACTION

capacity	: 12 litres per minute
discharge	: 100 cm PVC hose
inlet	: 120 cm plastic suction pipe with drum connection
length	: 1370 mm
weight	: 1.5 kg
liquids	: gas oil, engine oil, spindle oil and antifreeze

ARTIKELNO	DESCRIPTION
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<b>96.13.020</b>	Drum Pump Pressol 13,020 with siphon action
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## DRUM PUMP PRESSOL 13030, WITH SIPHON ACTION

capacity	: 18 litres per minute
discharge	: 100 cm PVC hose
inlet	: 120 cm plastic suction pipe with drum connection
length	: 1400 mm
weight	: 1.5 kg
liquids	: petroleum, gas oil, engine oil, spindle oil, drill oil, antifreeze, degreaser, flushing oil

ARTIKELNO	DESCRIPTION
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<b>96.13.030</b>	Drum Pump Pressol 13,030 with siphon action
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## DRUM PUMP PRESSOL 13042

capacity	: 35 litres per minute
discharge	: 100 cm PVC hose
inlet	: 84 cm steel suction pipe with drum connection
length	: 1300 mm
weight	: 2.5 kg
liquids	: petroleum, gas oil, engine oil, spindle oil, drill oil, antifreeze, degreaser, flushing oil

ARTIKELNO	DESCRIPTION
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<b>96.13.040</b>	Drum Pump Pressol 13,042
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## WING PUMP

For pumping out drums, bilge pump for lifeboats and engine rooms, flushing pump for toilets etc.

type	: Sigma
colour	: green
pump type	: self-priming double action wing pump if filled
impeller type	: wing
rotation	: horizontal movement
shaft seal	: stuffing box
materials	: wing : brass
	: valves : brass
	: pump housing : cast iron
	: pump shaft : steel
liquids	: water, sea water, gas oil, petrol, petroleum and oils with a maximum viscosity of 10, as well as other clean and low viscosity media.
comes with	: wooden handle and flanges (except K-00)
comment	: capacity was measured with water at 20°C and suction and discharge heights of 100 cm

## WING PUMP SIGMA K-00, 3/8"

**Supplied without flange!**

capacity	: 7 litres per minute (80 strokes per minute)
discharge head	: 25 metres maximum
suction height	: 7 metres
connections	: 3/8" internal thread
installed length	: 105 mm without flanges
weight	: 3.2 kg

ARTIKELNO	DESCRIPTION
96.15.108	Wing pump Sigma K-00, 3/8"



## WING PUMP SIGMA K-0, 1/2"

capacity	: 11 litres per minute (65 strokes per minute)
discharge head	: 25 metres maximum
suction height	: 7 metres
connections	: 1/2" internal thread
installed length	: 175 mm without flanges
weight	: 5.1 kg

ARTIKELNO	DESCRIPTION
96.15.110	Wing pump Sigma K-0, 1/2"



## WING PUMP SIGMA K-1, 3/4"

capacity	: 17 litres per minute (60 strokes per minute)
discharge head	: 25 metres maximum
suction height	: 7 metres
connections	: 3/4" internal thread
installed length	: 205 mm without flanges
weight	: 6.1 kg

ARTIKELNO	DESCRIPTION
96.15.111	Wing pump Sigma K-1, 3/4"



## WING PUMP SIGMA K-2, 1"

capacity	: 22 litres per minute (55 strokes per minute)
discharge head	: 25 metres maximum
suction height	: 7 metres
connections	: 1" internal thread
installed length	: 230 mm without flanges
weight	: 8.8 kg

ARTIKELNO	DESCRIPTION
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<b>96.15.112</b>	Wing pump Sigma K-2, 1"
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## WING PUMP SIGMA K-3, 1.1/4"

capacity	: 29 litres per minute (50 strokes per minute)
discharge head	: 22 metres maximum
suction height	: 7 metres
connections	: 1.1/4" internal thread
installed length	: 275 mm without flanges
weight	: 11.5 kg

ARTIKELNO	DESCRIPTION
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<b>96.15.113</b>	Wing pump Sigma K-3, 1.1/4"
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## WING PUMP SIGMA K-4, 1.1/4"

capacity	: 43 litres per minute (50 strokes per minute)
discharge head	: 22 metres maximum
suction height	: 7 metres
connections	: 1.1/4" internal thread
installed length	: 295 mm without flanges
weight	: 12.6 kg

ARTIKELNO	DESCRIPTION
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<b>96.15.114</b>	Wing pump Sigma K-4, 1.1/4"
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## WING PUMP SIGMA K-5, 1.1/2"

capacity	: 53 litres per minute (45 strokes per minute)
discharge head	: 20 metres maximum
suction height	: 7 metres
connections	: 1.1/2" internal thread
installed length	: 320 mm without flanges
weight	: 16 kg

ARTIKELNO	DESCRIPTION
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<b>96.15.115</b>	Wing pump Sigma K-5, 1.1/2"
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## WING PUMP SIGMA K-7, 2"

capacity	: 90 litres per minute (40 strokes per minute)
discharge head	: 15 metres maximum
suction height	: 7 metres
connections	: 2" internal thread
installed length	: 360 mm without flanges
weight	: 32 kg

ARTIKELNO	DESCRIPTION
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96.15.117	Wing pump Sigma K-7, 2"
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## WING PUMP, CRANK HANDLE

Separate crank handle for wing pump Sigma.



ARTIKELNO	TYPE
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96.15.899	K-00, 3/8"
96.15.910	K-0, 1/2" / K-1, 3/4"
96.15.911	K-2, 1"
96.15.913	K-3, 1 1/4"
96.15.914	K-4, 1 1/4"
96.15.915	K-5, 1 1/2"
96.15.917	K-7, 2"



## WING PUMP, OVAL FLANGE

Separate oval flange for wing pump Sigma.

ARTIKELNO	TYPE
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96.15.920	K-0, 1/2"
96.15.921	K-1, 3/4"
96.15.922	K-2, 1"
96.15.923	K-3, 1 1/4" / K-4, 1 1/4"
96.15.925	K-5, 1 1/2"
96.15.927	K-7, 2"



## WING PUMP, PACKING NUT

Separate packing nut for wing pump Sigma.

ARTIKELNO	TYPE	THICKNESS OF GREASE PACKING	NUMBER	LENGTH	TOTAL LENGTH
96.15.929	K-00, 3/8"	4 mm	4	65 mm	260 mm
96.15.930	K-0, 1/2"	4 mm	5	65 mm	325 mm
96.15.931	K-1, 3/4"	4 mm	4	65 mm	260 mm
96.15.932	K-2, 1"	5 mm	4	75 mm	300 mm
96.15.933	K-3, 1 1/4"	5 mm	4	80 mm	320 mm
96.15.934	K-4, 1 1/4"	5 mm	5	85 mm	425 mm
96.15.935	K-5, 1 1/2"	5 mm	5	95 mm	475 mm
96.15.937	K-7, 2"	5 mm	6	110 mm	660 mm

**BEYER HAND MEMBRANE PUMP 1.1/2"**

For transporting clean or contaminated liquids containing oil in shipping, industry and domestic activities.

colour	: green
pump type	: self-priming hand membrane pump
impeller type	: membrane
rotation	: horizontal movement
shaft seal	: N.A.
materials	: membrane : oil resistant rubber
	: valves : rubber with steel core
	: pump housing : cast iron
	: pump shaft : N.A.
liquids	: clean and dirty water, sea water
capacity	: 45 litres per minute (50 strokes per minute)
discharge head	: 12 metres maximum
suction height	: 6 metres
connections	: 1.1/2" internal thread
installed length	: 375 mm between the flanges
weight	: 12.5 kg

**Reducing rings are available in stock for smaller connections.**

**Article : 86.24.119 through 86.24.123**

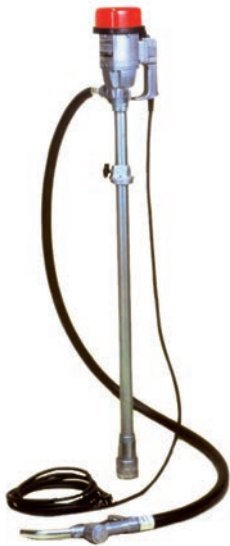


ARTIKELNO	DESCRIPTION
<b>96.16.200</b>	Hand membrane pump 1.1/2" type Beyer

## KOSHIN DRUM PUMP

Ideal for rapidly pumping small quantities of liquid from drums, jerry cans etc.  
For use in industry, laboratories and wherever needed.

type	: FA
colour	: aluminium
pump type	: centrifugal pump
impeller type	: open impeller
motor type	: brush motor
fuse	:
shaft seal	: double Viton lip seal
materials	: impeller : aluminium
	: impeller chamber : aluminium
	: pump housing : aluminium
	: pump shaft : steel
liquids	: gas oil, kerosene, petroleum ( <b>not petrol or lubricating oil</b> )
voltage	: 230 V mains



## KOSHIN DRUM PUMP FA-100

no head	: 3,000 litres per hour
2 metres head	: 2,600 litres per hour
4 metres head	: 1,800 litres per hour
6 metres head	: 750 litres per hour
discharge head	: 7.0 metres maximum
viscosity	: milliPascal maximum
suction head	: N.A.
particle size	: approx. 2 mm maximum, not abrasive
pumps down to	: 10 mm
connection	: 3/4" internal thread and 2 metre oil resistant rubber hose with nozzle
inlet	: 900 mm steel suction pipe with drum connection
dimensions	: diameter mm, height 1170 mm
weight	: 10.5 kg
amperage	: 1.0 A
shaft power	: 0.1 kW, 0.15 hp, 7500 rpm
cable	: 5 metre oil resistant rubber cable without plug

ARTIKELNO	DESCRIPTION	VOLT
96.20.100	Koshin drum pump FA-100	230 V



## PNEUMATIC DRUM PUMP

Ideal for rapidly pumping liquid from vats.  
For use in engine rooms, industry, laboratories and wherever needed.

type	: BP	
colour	: galvanized steel	
pump type	: plunger pump	
impeller type	: plunger (piston)	
motor type	: air motor with 1/4" internal thread	
fuse	: N.A.	
shaft seal	: O-ring	
materials	: piston	: steel
	: cylinder	: steel
	: pump housing	: galvanized steel
	: pump shaft	: steel
liquids	: clean gas oil, kerosene, petroleum, lubricating oil ( <b>not petrol</b> )	

## PNEUMATIC DRUM PUMP BP10 AIR MAX. 7 BAR

transmission	: 1:1
viscosity	: has a very substantial effect on capacity
capacities	: measured with water
no head	: 2,700 litres per hour
5 metres head	: 2,700 litres per hour
10 metres head	: 2,520 litres per hour
15 metres head	: 2,400 litres per hour
20 metres head	: 2,280 litres per hour
25 metres head	: 2,170 litres per hour
30 metres head	: 1,950 litres per hour
35 metres head	: 1,800 litres per hour
40 metres head	: 1,620 litres per hour
45 metres head	: 1,440 litres per hour
50 metres head	: 1,200 litres per hour
55 metres head	: 960 litres per hour
60 metres head	: 720 litres per hour
65 metres head	: 360 litres per hour
discharge head	: 66.0 metres maximum
viscosity	: milliPascal maximum
suction head	: N.A.
particle size	: approx. 2 mm maximum, not abrasive
pumps down to	: 10 mm
connections	: discharge : 3/4" internal thread
air supply	: 1/4 internal thread
inlet	: 910 mm steel suction pipe with drum connection
dimensions	: diameter 85/50 mm, height 1177 mm
weight	: 5.0 kg
air pressure	: 1.5 through 7.0 bar
air consumption	: 3.8 through 7 litres air per litre liquid to be pumped



ARTIKELNO	DESCRIPTION
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<b>96.40.852</b>	Pneumatic drum pump BP10 air max. 7 bar
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## PAR-MAX PRESSURIZED WATER SYSTEM, SELF-PRIMING

For water sports. Comes with pressure vessel, non-return valve, manometer, pressure switch and electric pump. Insensitive to running dry.

type	: Par-Max		
colour	: black		
pump type	: membrane pump (double action)		
motor type	: brush motor (permanent magnet)		
fuse	: recommended built in thermal safety 12 V: 6 A, 24 V: 3 A		
shaft seal	: N.A.		
materials	: membrane	:	Santoprene
	: valves	:	Santoprene
	: pump housing	:	glass fibre reinforced polypropylene
liquids	: clean water without floating solids and without oil or oil residues		
voltage	: 12 and 24 V DC		



## PAR-MAX PRESSURIZED WATER SYSTEM

capacity	: 12 V : 780 litres per hour or 13 litres per minute
	: 24 V : 960 litres per hour or 16 litres per minute
suction head	: 1.2 metres
type pressure vessel	: horizontal 20 l membrane vessel with approx. 8 litres useful water capacity
switch on pressure	: 1.3 bar
switch off pressure	: 2.4 bar
connections	: 1/2" hose connection and 1/2" external thread
dimensions	: l x w x h = 650 x 350 x 450 mm
weight	: 11 kg
amperage	: 12 V : 6.0 A at 0.7 bar
	: 24 V : 3.0 A at 0.7 bar
shaft power	: 50 W

ARTIKELNO	DESCRIPTION	VOLT	ARTICLE NUMBER OF THE PUMP IN THIS SET
<b>97.11.510</b>	Par-Max 3 pressurized water system	12 V	93.27.112
<b>97.11.520</b>	Par-Max 4 pressurized water system	24 V	93.27.124

## JET PRESSURIZED WATER SYSTEM, SELF-PRIMING

For commercial shipping and pleasure craft.  
Comes with pressure vessel, non-return valve, manometer, pressure switch and electric pump.

type	: JET
colour	: blue and stainless steel
pump type	: self-priming centrifugal pump with jet system
impeller type	: closed impeller
motor type	: brush motor
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : Noryl
	: impeller housing : Noryl
	: pump housing : stainless steel 304
	: pump shaft : stainless steel
liquids	: clean water
voltage	: 24 V DC

## JET PUMP PRESSURIZED WATER SYSTEM

capacity	: 1,200 litres per hour at 2.5 bar
suction height	: 8.0 metres when using foot valve
type pressure vessel	: horizontal 20 l membrane vessel with approx. 8 litres useful water capacity
switch on pressure	: 1.5 bar
switch off pressure	: 2.5 bar
suitable for	: geyser and 2 draw off points
connections	: 1" hose connection
dimensions	: lxwxh = 650 x 280 x 540 mm
weight	: 16 kg
amperage	: 19 A
shaft power	: 0.525 kW, 0.7 hp, 2350 rpm



ARTIKELNO	DESCRIPTION	VOLT	ARTICLE NUMBER OF THE PUMP IN THIS SET
<b>97.27.010</b>	Jet pump pressurized water system	24 V	93.28.060

## SPECK MINI PRESSURIZED WATER SYSTEM, SELF-PRIMING

For commercial shipping and pleasure craft.  
Comes with pressure vessel, non-return valve, manometer pressure switch and electric pump.

type	: PY
colour	: olive green with brass
pump type	: self-priming centrifugal pump
impeller type	: open peripheral impeller
motor type	: brush motor
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : brass
	: impeller housing : brass
	: pump housing : brass
	: pump shaft : stainless steel 1.4122
liquids	: clean water
voltage	: 24 V DC



## SPECK PY2071-24DC PRESSURIZED WATER SYSTEM

capacity	: 360 litres per hour at 2.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 20 l membrane vessel with approx. 8 litres useful water capacity
switch on pressure	: 1.0 bar
switch off pressure	: 3.0 bar
suitable for	: geyser and 2 draw off points
connections	: suction : 1/2" hose connection
	: discharge : 3/4" hose connection
dimensions	: l x w x h = 530 x 280 x 460 mm
weight	: 16 kg
amperage	: 24.4 A
shaft power	: 0.37 kW, 0.5 hp



ARTIKELNO	DESCRIPTION	VOLT	ARTICLE NUMBER OF THE PUMP IN THIS SET
<b>97.29.010</b>	Speck PY2071-24DC pressurized water system	24 V	93.29.510
<b>97.29.030</b>	Speck PY2071-24DC pressurized water system, stainless steel vessel	24 V	93.29.510

## COMPACT ULEX SENSOR PRESSURIZED WATER SYSTEM UB, SELF-PRIMING

Automatic thanks to unique microprocessor.  
 Very quiet pump for drinking water system.  
 Highly suitable for installation in small spaces due to the lack of a pressure tank.  
 Pump starts when the tap is opened and stops when it is closed.  
**Fitted with built-in non-return valve!**

type : UB  
 colour : black with stainless steel  
 pump type : self-priming centrifugal pump  
 impeller type : closed  
 motor type : induction motor  
 fuse : built-in thermal protection  
 shaft seal : mechanical seal (ceramic on carbon)  
 materials : impeller : plastic  
                   : pump housing : plastic (UB-0525) or cast iron (UB-125)  
                   : pump shaft : stainless steel  
 liquids : clean water  
 voltage : 230 V AC

## COMPACT ULEX SENSOR PRESSURIZED WATER SYSTEM UB-0525

suction head : 8.0 meters  
 pressure tank type : membrane (built-in)  
 switch-on pressure : 1.6 bar : 2,580 litres per hour  
 switch-off pressure : 2.0 bar : 1,800 litres per hour  
 suitable for : water heater and 2 taps  
 connections : 1" inner thread  
 dimensions : LxWxH 370 x 190 x 265 mm  
 weight : 11.0 kg  
 current : 4.0 A  
 shaft power : 0.4 kW, 0.5 hp, 2,850 rpm



ARTIKELNO	DESCRIPTION	VOLT
97.33.505	Compact Ulex sensor pressure-water system UB-0525	230 V

## COMPACT ULEX SENSOR PRESSURIZED WATER SYSTEM UB-125

suction head : 8.0 meters  
 type pressure tank : membrane (built-in)  
 switch-on pressure : 2.2 bar : 3,120 litres per hour  
 switch-off pressure : 3.2 bar : 2,100 litres per hour  
 suitable for : water heater and 4 taps  
 connections : 1" inner thread  
 dimensions : LxWxH 457 x 188 x 261 mm  
 weight : 16.0 kg  
 current : 7.0 A  
 shaft power : 0.75kW, 1.0 hp, 2,950 rpm



ARTIKELNO	DESCRIPTION	VOLT
97.33.512	Compact Ulex sensor pressure-water system UB-125	230 V

## COMPACT E.SYBOX SENSOR PRESSURIZED WATER SYSTEM, SELF PRIMING

A modern pressurised water system.  
 Very quiet pump for drinking water systems.  
 Highly suitable for installation in small spaces thanks to lack of a pressure tank.  
 Pump starts when the tap is opened and stops when it is closed.

The E.SYBOX is a fully integrated system in which the hydraulic components are controlled by a fully programmable frequency regulator.  
 Each component is designed to deliver maximum performance with minimum energy consumption.  
 The entire system is hermetically sealed in a typically Italian-styled housing.  
 The newly developed frequency regulator ensures a constant pressure in the system, related to the amount of water required.  
 Using a regulator greatly reduces noise, vibration and energy consumption, permitting lower operating and maintenance costs.

type	: E.SYBOX
colour	: dark green
pump type	: self-priming centrifugal pump
impeller type	: closed
motor type	: induction motor
fuse	: built-in thermal protection
seal	: mechanical seal (ceramic on carbon)
materials	: impeller : plastic : pump housing : plastic : pump shaft : stainless steel
liquids	: clean water
voltage	: 230 volts AC



## COMPACT E.SYBOX MINI SENSOR PRESSURIZED WATER SYSTEM

suction head	: 8.0 meters when using foot valve
pressure tank type	: built-in 1-litre membrane tank
switch-on pressure	: 2.7 bar : 3,300 litres per hour, default setting
switch-off pressure	: 1.0 to 6.0 bar, adjustable via display : (1.0 bar : 4,500 litres per hour) : (5.5 bar : 1,300 litres per hour)
suitable for	: water heater and 6 taps
connections	: 1" inside thread
dimensions	: LxWxH = 236 x 263 x 439 mm
weight	: 14.6 kg
insulation class	: IPX4
current	: 4.8 A, depending on setting
shaft power	: 0.85 kW, 1.2 hp, 3000 rpm

ARTIKELNO	DESCRIPTION	VOLT
97.33.608	Compact E.SYBOX mini sensor pressurized water system	230 V



## COMPACT E.SYBOX SENSOR PRESSURIZED WATER SYSTEM

suction head	: 8.0 meters when using foot valve
pressure tank type	: built-in 2-litre membrane tank
switch-on pressure	: 3.0 bar : 5,100 litres per hour, default setting
switch-off pressure	: 1.0 to 6.0 bar, adjustable via display : (1.0 bar : 6,600 litres per hour) : (6.0 bar : 1,600 litres per hour)
suitable for	: water heater and 6 taps
connections	: 1" inside thread
dimensions	: LxWxH = 355 x 265 x 580 mm
weight	: 27.0 kg
insulation class	: IPX4
current	: 10.0 A, depending on setting
shaft power	: 1.55 kW, 2.1 hp, 3000 rpm

ARTIKELNO	DESCRIPTION	VOLT
97.33.615	Compact E.SYBOX sensor pressurized water system	230 V

## COMPACT WACS SENSOR PRESSURIZED WATER SYSTEM, SELF PRIMING

A modern pressurised water system, with insulation class IP55.  
 Very quiet pump for drinking water system.  
 Ideally suited for installation in tight spaces thanks to the lack of a high-pressure tank.  
 Pump starts when the tap is opened and stops when it is closed.

The frequency regulator ensures a constant pressure in the system, related to the desired amount of water.  
 Using a regulator greatly reduces noise, vibration and energy consumption and leads to lower operating and maintenance costs.

type	: WACS	
colour	: dark green and stainless steel	
pump type	: self-priming centrifugal pump	
impeller type	: closed	
motor type	: induction motor	
fuse	: built-in thermal protection	
seal	: mechanical seal (ceramic on carbon)	
materials	impeller	: plastic
	pump housing	: plastic
	pump shaft	: stainless steel
liquids	: clean water	
voltage	: 230 volts AC	

## COMPACT WACS / PWM SENSOR PRESSURIZED WATER SYSTEM

suction head	: 8.0 meters when using foot valve
pressure tank type	: separately-supplied water hammer arrester 2 litres
switch-on pressure	: 2.5 bar 3,500 litres per hour, default setting
switch-off pressure	: 3.0 bar
suitable for	: water heater and 6 taps
connections	: 1" inner thread
dimensions	: LxWxH 520 x 175 x 560 mm
weight	: 13.0 kg
<b>insulation class</b>	<b>: IP55</b>
current	: 2.8 amp, depending on setting
shaft power	: 0.87 kW, 1.16 hp, 3000 rpm
voltage	: pump Is 400 volt, 3x230V (3 phases)



ARTIKELNO	DESCRIPTION	VOLT
97.33.708	Compact WACS / PWM sensor pressure-water system	230 V

## COMPACT PRESSURIZED WATER SYSTEM J-MINI, SELF PRIMING

A modern water pressure installation.

Very low-noise pump for drinking water system.

Extremely suitable for installing in small areas thanks to the absence of a large pressure vessel; is, however, available with 2 or 20 litre pressure vessel in stainless steel.

Pump starts when tap opens and stops when tap closes.

Including non-return valve.

type	: J-Mini
colour	: blue, white and stainless steel
pump type	: self-priming centrifugal pump
impeller type	: closed
fuse	: built-in thermal fuse at 230 volt, not at 24 volt!
shaft seal	: carbon ceramic mechanical seal and NBR
materials	: impeller : Noryl
	: pump housing : Stainless steel 304
	: pump shaft : Stainless steel 316
liquids	: clean water, maximum 40 °C
voltage	: 24 volt and 230 volt mains, 12 volt on demand
suction height	: 8.0 metre on using foot valve
pressure vessel type	: none, 2 litre stainless steel, or 20 litre stainless steel



## COMPACT PRESSURIZED WATER SYSTEM J-MINI 24

cut-in pressure	: 2.0 bar : 3,300 L/h, standard setup
cut-out pressure	: 3.0 bar
suitable for	: geyser and 3 tapping points
connections	: suction 1" : female thread
	: pressure 1" : male thread
dimensions	: l x w x h = 430 x 160 x 331 mm, without boiler
weight	: 7.0 kg, without boiler
insulation class	: IP23
motor type	: permanent magnet motor
amperage	: 16.0 A
shaft power	: 0.4 kW, 0.5 hp, 2,600 rpm

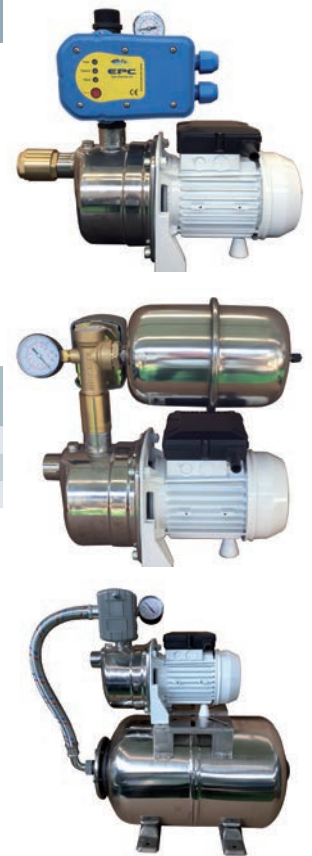
ARTIKELNO	DESCRIPTION	TYPE	VOLT
97.34.024	Compact pressurized water system J-Mini 24/EPC	no boiler	24 V
97.34.025	Compact pressurized water system J-Mini 24/2X	2 litre stainless steel boiler	24 V
97.34.026	Compact pressurized water system J-Mini 24/20X	20 litre stainless steel boiler	24 V



## COMPACT PRESSURIZED WATER SYSTEM J-MINI 230M

cut-in pressure : 2.0 bar : 3,300 L/h, standard setup  
 cut-out pressure : 3.0 bar  
 suitable for : geyser and 3 tapping points  
 connections : suction : 1" female thread  
                   : pressure : 1" male thread  
 dimensions : l x w x h = 380 x 160 x 331 mm, without boiler  
 weight : 8.5 kg, without boiler  
 insulation class : IP55  
 motor type : induction motor  
 amperage : 3.6 A  
 shaft power : 0.55 kW, 0.75 hp, 2,800 rpm

ARTIKELNO	DESCRIPTION	TYPE	VOLT
<b>97.34.231</b>	Compact pressurized water system J-Mini 230M/EPC	no boiler	230 V
<b>97.34.232</b>	Compact pressurized water system J-Mini 230M/2X	2 litre stainless steel boiler	230 V
<b>97.34.233</b>	Compact pressurized water system J-Mini 230M/20X	20 litre stainless steel boiler	230 V



## CITY JET PRESSURIZED WATER SYSTEM, SELF-PRIMING

Pressurization system for homes or where mains voltage is present.  
Comes with pressure vessel, manometer, non-return valve, pressure switch and electric pump.

type	: JET
colour	: blue
pump type	: self-priming centrifugal pump
impeller type	: closed
motor type	: induction motor
shaft seal	: ceramic on carbon mechanical seal
materials	: impeller : plastic
	: pump housing : cast iron
	: pump shaft : stainless steel
liquids	: clean water
voltage	: 230 V mains

## CITY JET PRESSURIZED WATER SYSTEM

capacity	: 1,320 litres per hour at 3.0 bar
suction height	: 9.0 metres when using foot valve
type pressure vessel	: horizontal 20 l membrane vessel with approx. 8 litres useful water capacity
switch on pressure	: 1.5 bar
switch off pressure	: 3.0 bar
suitable for	: geyser and 2 draw off points
connections	: 1" internal thread
dimensions	: l x w x h = 480 x 285 x 500 mm
weight	: 17.1 kg
amperage	: 3.7 A
shaft power	: 0.6 kW, 0.8 hp, 2850 rpm



ARTIKELNO	DESCRIPTION	VOLT	ARTICLE NUMBER OF THE PUMP IN THIS SET
97.34.650	City Jet pressurized water system	230 V	93.34.020

## LOWARA PRESSURIZED WATER SYSTEM, SELF-PRIMING

Pressurization system for homes or where mains voltage is present.

Comes with a steel or stainless steel butyl membrane pressure vessel, manometer, non-return valve, pressure switch and electric pump.

type	: BGM-5	
colour	: white or stainless steel	
pump type	: self-priming centrifugal pump	
impeller type	: closed	
motor type	: induction motor	
shaft seal	: ceramic on carbon mechanical seal	
materials	: impeller	: stainless steel
	: pump housing	: stainless steel
	: pump shaft	: stainless steel
	: vessel	: steel or stainless steel
	: other	: brass
liquids	: clean water	
voltage	: 230 V mains	

## LOWARA BGM-5 PRESSURIZED WATER SYSTEM

capacity	: 1,560 litres per hour at 3.0 bar	
suction height	: 8.0 metres when using foot valve	
type pressure vessel	: horizontal 20 l steel or stainless steel butyl membrane vessel with approx. 8 litres useful water capacity	
switch on pressure	: 1.5 bar	
switch off pressure	: 3.5 bar	
suitable for	: geyser and 2 draw off points	
connections	: discharge	: 1" internal thread
	: suction	: 1.1/4" internal thread
dimensions	: lxwxh = 660 x 290 x 610 mm	
weight	: 21.0 kg	
amperage	: 4.3 A	
shaft power	: 0.55 kW, 0.75 hp, 2800 rpm	



ARTIKELNO	DESCRIPTION	VOLT	ARTICLE NUMBER OF THE PUMP IN THIS SET
<b>97.37.010</b>	Lowara BGM-5 pressurized water system, steel membrane vessel	230 V	93.37.420
<b>97.37.020</b>	Lowara BGM-5 stainless pressurized water system, steel membrane vessel	230 V	93.37.420

## PRESSURIZED WATER SYSTEM WITH SPECK PLUNGER PUMP, SELF-PRIMING

Professional water pressurization system for inland shipping, seagoing shipping and recreational craft.  
For many years the top selling pressurized water system in inland shipping.  
Comes with pressure vessel, non-return valve, manometer, pressure switch and if required electric pump.

type	: PM (Pumpmeister)
colour	: light green
pump type	: self-priming plunger pump
impeller type	: plunger (piston)
motor type	: brush motor or induction motor
shaft seal	: stop bush
materials	: plunger : Simrit
	: cyl. bus : stainless steel (PM10) or brass (PM15/20/30)
	: pump housing : cast iron
	: pump shaft : stainless steel
liquids	: clean water
voltages	: 12 V DC
	: 24 V DC (2 year IDEEAL guarantee)
	: 230 V mains
	: 400 V three phase

**Must be connected up by an accredited installer.**

Most dimensions relate to 24 volt motor.

\* Not in use simultaneously.

\*\* Dimensions and weight depend on motor type.



## SPECK PM10 + 50 L STAINLESS STEEL MEMBRANE VESSEL

capacity	: 1,000 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 50 l <b>stainless steel membrane vessel</b> with approx. 7 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 or 3 draw off points*
connections	: 1" internal thread
dimensions	: l x w x h = 675 x 350 x 775 mm**
weight	: 57 kg**
amperage	: 12 V, 35.0 A
	: 24 V, 17.4 A (Ideeal 15.0 A)
	: 230 V, 3.1 A
	: 400 V, 0.8 A
shaft power	: <b>0.25 kW, 0.33 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.62.002</b>	50 L Speck PM10	without motor
<b>97.62.005</b>	50 L Speck PM10-24DC	24 V Ideeal, 250 W
<b>97.62.008</b>	50 L Speck PM10-230AC	230 V
<b>97.62.010</b>	50 L Speck PM10-400T	400 V

## SPECK PM10 + 100 L STAINLESS STEEL MEMBRANE VESSEL

capacity	: 1,000 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 100 l <b>stainless steel membrane vessel</b> with approx. 14 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 or 3 draw off points*
connections	: 1" internal thread
dimensions	: l x w x h = 886 x 450 x 885 mm**
weight	: 57 kg**
amperage	: 12 V, 35.0 A
	: 24 V, 17.4 A (Ideaal 15.0 A)
	: 230 V, 3.1 A
	: 400 V, 0.8 A
shaft power	: <b>0.25 kW, 0.33 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.63.002</b>	100 L Speck PM10	without motor
<b>97.63.005</b>	100 L Speck PM10-24DC	24 V Ideaal, 250 W
<b>97.63.008</b>	100 L Speck PM10-230AC	230 V
<b>97.63.010</b>	100 L Speck PM10-400T	400 V



## SPECK PM10 + 60 L GALVANIZED VESSEL

capacity	: 1,000 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 60 l <b>galvanized vessel</b> with approx. 9 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 or 3 draw off points*
connections	: 1" internal thread
dimensions	: l x w x h = 790 x 430 x 760 mm**
weight	: 57 kg**
amperage	: 12 V, 35.0 A
	: 24 V, 17.4 A (Ideaal 15.0 A)
	: 230 V, 3.1 A
	: 400 V, 0.8 A
shaft power	: <b>0.25 kW, 0.33 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.65.002</b>	60 L Speck PM10	without motor
<b>97.65.005</b>	60 L Speck PM10-24DC	24 V Ideaal, 250 W
<b>97.65.008</b>	60 L Speck PM10-230AC	230 V
<b>97.65.010</b>	60 L Speck PM10-400T	400 V





## SPECK PM10 + 100 L GALVANIZED VESSEL

capacity	: 1,000 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 100 l. <b>galvanized vessel</b> with approx. 15 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 or 3 draw off points*
connections	: 1" internal thread
dimensions	: l x w x h = 1000 x 430 x 760 mm**
weight	: 57 kg**
amperage	: 12 V, 35.0 A : 24 V, 17.4 A (Ideaal 15.0 A) : 230 V, 3.1 A : 400 V, 0.8 A
shaft power	: <b>0.25 kW, 0.33 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.66.002</b>	100 L Speck PM10	without motor
<b>97.66.005</b>	100 L Speck PM10-24DC	24 V Ideaal, 250 W
<b>97.66.008</b>	100 L Speck PM10-230AC	230 V
<b>97.66.010</b>	100 L Speck PM10-400T	400 V



## SPECK PM10 + 200 L GALVANIZED VESSEL

capacity	: 1,000 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 200 l. <b>galvanized vessel</b> with approx. 30 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 to 4 draw off points*
connections	: 1" internal thread
dimensions	: l x w x h = 1300 x 520 x 880 mm**
weight	: 75 kg**
amperage	: 12 V, 35.0 A : 24 V, 17.4 A (Ideaal 15.0 A) : 230 V, 3.1 A : 400 V, 0.8 A
shaft power	: <b>0.25 kW, 0.33 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.68.002</b>	200 L Speck PM10	without motor
<b>97.68.005</b>	200 L Speck PM10-24DC	24 V Ideaal, 250 W
<b>97.68.008</b>	200 L Speck PM10-230AC	230 V
<b>97.68.010</b>	200 L Speck PM10-400T	400 V

## SPECK PM15 + 100 L GALVANIZED VESSEL

capacity	: 1,500 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 100 l. <b>galvanized vessel</b> with approx. 15 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 to 5 draw off points*
connections	: 1" internal thread
dimensions	: l <sub>w</sub> xh = 1000 x 430 x 760 mm**
weight	: 57 kg**
amperage	: 24 V, 17.4 A, 250 watt
	: 230 V, 4.4 A
	: 400 V, 1.1 A
shaft power	: 24V : <b>0.25 kW, 0.33 hp</b> at 1,450 rpm
	: 230V, 400V : <b>0.37 kW, 0.50 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.69.002</b>	100 L Speck PM15	without motor
<b>97.69.008</b>	100 L Speck PM15-230AC	230 V
<b>97.69.010</b>	100 L Speck PM15-T400	400 V



## SPECK PM15 + 200 L GALVANIZED VESSEL

capacity	: 1,500 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 200 l. <b>galvanized vessel</b> with approx. 30 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 to 5 draw off points*
connections	: 1" internal thread
dimensions	: l <sub>w</sub> xh = 1300 x 550 x 920 mm**
weight	: 83 kg**
amperage	: 24 V, 17.4 A, 250 watt
	: 230 V, 4.4 A
	: 400 V, 1.1 A
shaft power	: 24V : <b>0.25 kW, 0.33 hp</b> at 1,450 rpm
	: 230V, 400V : <b>0.37 kW, 0.50 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.70.002</b>	200 L Speck PM15	without motor
<b>97.70.008</b>	200 L Speck PM15-230AC	230 V
<b>97.70.010</b>	200 L Speck PM15-400T	400 V



## SPECK PM20 + 300 L GALVANIZED VESSEL

capacity	: 2,000 litres per hour at 3.5 bar
suction height	: 8.0 metres
type pressure vessel	: horizontal 300 l. <b>galvanized vessel</b> with approx. 40 litres useful water capacity
switch on pressure	: 2.0 bar
switch off pressure	: 3.5 bar
suitable for	: geyser and 2 to 6 draw off points*
connections	: 1" internal thread
dimensions	: l <sub>w</sub> xh = 1400 x 580 x 980 mm**
weight	: 97 kg**
amperage	: 230 V, 4.4 A
	: 400 V, 1.7 A
shaft power	: <b>0.37 kW, 0.50 hp</b> at 1,450 rpm

ARTIKELNO	DESCRIPTION	VOLT
<b>97.72.002</b>	300 L Speck PM20	without motor
<b>97.72.008</b>	300 L Speck PM20 230AC	230 V
<b>97.72.010</b>	300 L Speck PM20 400T	400 V



## SPECK PLUNGER PUMP, SELF-PRIMING

Professional plunger pump for pressurized water systems for commercial shipping, recreational craft, homes, farms and businesses. For many years the top selling pressurized water system plunger pump in inland shipping.

type	: PM (Pumpmeister)
colour	: light green
pump type	: self-priming plunger pump
impeller type	: plunger (piston)
rotation	: left-hand, visible on pulley
shaft seal	: stop bush
materials	: plunger : Simrit
	: cyl. bus : stainless steel (PM10) or brass (PM15/20/30)
	: pump housing : cast iron or bronze
	: pump shaft : stainless steel
liquids	: clean water
operating pressure	: 6 bar maximum
voltage	: depends on separate motor

**Must be connected up by an accredited installer.**

## SPECK PUMPMEISTER PM10

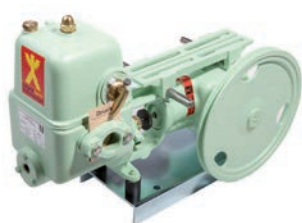
capacity	: 1,000 litres per hour at 4.0 bar
suction height	: 8.0 metres
connections	: 1" internal thread
dimensions	: lxwxh = 510 x 250 x 340 mm
weight	: 23 kg
shaft power	: 0.25 kW, 0.33 hp at 1450 rpm

ARTIKELNO	DESCRIPTION	TYPE
<b>97.80.002</b>	Speck Pumpmeister PM10	without motor
<b>97.80.004</b>	Speck Pumpmeister PM10	without motor + seawater resistant by means of bronze valves etc. (pump still cast iron)

## SPECK PUMPMEISTER PM15

capacity	: 1,500 litres per hour at 4.0 bar
suction height	: 8.0 metres
connections	: 1" internal thread
dimensions	: lxwxh = 510 x 250 x 355 mm
weight	: 24 kg
shaft power	: 0.37 kW, 0.5 hp at 1450 rpm

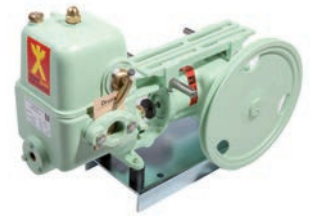
ARTIKELNO	DESCRIPTION	TYPE
<b>97.82.002</b>	Speck Pumpmeister PM15	without motor





## SPECK PUMPMEISTER PM20

capacity : 2,000 litres per hour at 4.0 bar  
 suction height : 8.0 metres  
 connections : discharge : 1" internal thread  
 : suction : 1.1/4" internal thread  
 dimensions : lwxh = 619 x 270 x 416 mm  
 weight : 33 kg  
 shaft power : 0.37 kW, 0.5 hp at 1450 rpm



ARTIKELNO	DESCRIPTION	TYPE
<b>97.84.002</b>	Speck Pumpmeister PM20	without motor

## SPECK PUMPMEISTER PM30

capacity : 3,000 litres per hour at 4.0 bar  
 suction height : 8.0 metres  
 connections : 1.1/4" internal thread  
 dimensions : lwxh = 690 x 320 x 510 mm  
 weight : 55 kg  
 shaft power : 0.55 kW, 0.75 hp at 1450 rpm



### LARGER MODELS AVAILABLE ON REQUEST!

ARTIKELNO	DESCRIPTION	TYPE
<b>97.85.002</b>	Speck Pumpmeister PM30	without motor

## HIGH PRESSURE MARINE CLEANER, SPECK

Professional equipment for cleaning holds, aluminium hatches, ship's shells and engine rooms. The use of a non-return valve is recommended as the pump is not self-priming.

type	: Speck NP16/15-210
colour	: grey with bronze
pump type	: triple plunger pump
drive	: indirect via camshaft
impeller type	: plunger (piston)
motor type	: short circuit motor
fuse	: NONE, but no guarantee without
seal	: plunger seal : Perbunan sealing rings
materials	: plungers : stainless steel with ceramic top layer
	: valves : high-grade steel.4305
	: valve guide : brass cuzn-39pb3
	: pump housing : brass cuzn-39pb3
	: pump shaft : toughened stainless steel
liquids	: clean water
voltage	: 400 V three phase

## HIGH PRESSURE MARINE CLEANER, SPECK NP16/15-210

output	: 900 litres per hour, 15 litres per minute
operating pressure	: 10/200 bar, continuously adjustable
chemicals	: chemicals injector available as extra
water temp.	: feed water max. 70°C
inlet pressure	: max. 10 bar
connections	: suction : 1/2" internal thread
	: discharge : external thread M22
dimensions	: l x w x h = 500 x 350 x 270 mm
weight	: 40 kg
amperage	: 13.0 A
shaft power	: 5.5 kW, 7.3 hp, 1410 rpm
accessories	: 100 cm spray lance with adjustable head and sprinkler head, pistol with dead man safeguard, 10 metre high pressure hose

ARTIKELNO	DESCRIPTION	VOLT
97.94.198	Speck HD marine cleaner NP16/15-210	400 V

## HIGH PRESSURE HOSE, CONNECTOR

For connecting two high pressure hoses.  
For hot or cold water.

connection	: 2 x external thread M22
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ARTIKELNO	DESCRIPTION
97.94.901	Connection for high pressure hose

## HIGH PRESSURE HOSE

operating pressure	: 250 bar
temperature	: 100°C
material	: rubber with steel braid
connection	: 2 x internal thread M22

Other lengths available on request, but available quickly.

ARTIKELNO	LENGTH
97.94.910	10 m
97.94.920	20 m
97.94.930	30 m
97.94.940	40 m
97.94.950	50 m



## AIRMEC KA, AIR COMPRESSOR

Mobile air compressor with pressure switch, safety valve, motor safety switch, air filter, pressure vessel, 2 manometers, various valves and pressure reduction valve with 2 hose connections.

running time	: 10 minutes, 5 minutes pause
version	: mobile model
inlet flow	: 200 l/min, 12 m <sup>3</sup> /h
tank contents	: 25 litres
air pressure	: 8 bar maximum
working pressure	: 6 bar
noise	: 95 dB (A)
connection	: universal
lubrication	: oil lubricated
dimensions	: LxWxH 560 x 250 x 560 mm
weight	: 25 kg
current	: 5.0 A
cylinders	: 1-piece, cast iron
drive	: mounted on motor
power	: 1.5 kW, 2.0 hp, 2,850 rpm
thermally protected	: yes
cable	: 2 m with earthed plug
suitable for	: small tools, air horn, etc. <b>NOT FOR air hammer.</b>



ARTIKELNO	DESCRIPTION	VOLT
97.95.402	Airmec KA 25200 E, 25 L	230 V

## AIRMEC KF, AIR COMPRESSOR

Mobile air compressor with pressure switch, safety valve, motor safety switch, air filter, pressure vessel, 2 manometers, various valves and pressure reduction valve with 2 hose connections.

version	: mobile model
inlet flow	: 350 l/min, 21 m <sup>3</sup> /hour
pressure tank contents	: 50 or 100 litres
air pressure	: 8 bar maximum
working pressure	: 6 bar
noise	: 72 dB (A)
connection	: universal
lubrication	: oil lubricated
dimensions	: LxWxH 1,010 x 360 x 730 mm, 50 litres : LxWxH 1,100 x 400 x 830 mm, 100 litres
weight	: 50 kg, 50 litres : 62 kg, 100 litres
current	: 9.0 A
cylinders	: 2-piece
drive	: via v-belt
power	: 1.8 kW, 2.5 hp, 1250 rpm
thermally protected	: yes
cable	: 2 m with earthed plug
suitable for	: 2 air hammers 23(K) maximum



ARTIKELNO	DESCRIPTION	VOLT
97.95.403	Airmec KF 050350 M, 50 L	230 V
97.95.404	Airmec KF 100350 M, 100 L	230 V



## AIRMEC KP, AIR COMPRESSOR

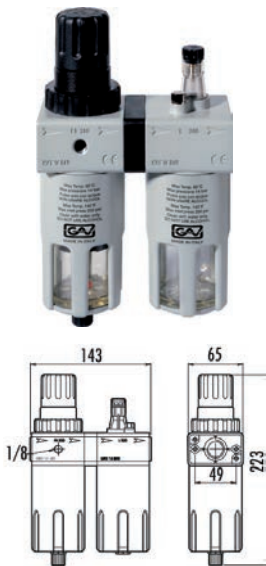
This line has a very low rotational speed, which significantly extends the lifetime.

All cast iron compressor, absolutely top quality.

Mobile air compressor with pressure switch, safety valve, motor safety switch, air filter, pressure vessel, 2 manometers, various valves and pressure reduction valve with 2 hose connections.

special feature	: mechanical valve lifter for unpressurised running
version	: mobile model
inlet flow	: 400 l/min, 24 m <sup>3</sup> /hour
pressure tank contents	: 100 or 150 litres
air pressure	: 8 bar maximum
working pressure	: 6 bar
noise	: 78 dB (A)
connection	: universal
lubrication	: oil lubricated
dimensions	: LxWxH 1,200 x 510 x 850 mm, 100 litres : LxWxH 1,490 x 510 x 850 mm, 150 litres
weight	: 86 kg, 100 litres : 95 kg, 150 litres
current	: 13.0 A
cylinders	: 2-piece, cast iron
drive	: via v-belt
flywheel diameter	: 265 mm
fan belt	: A44
power	: 2.2 kW, 3.0 hp, <b>850 rpm</b>
thermally protected	: yes
cable	: 2 m with earthed plug
suitable for	: 2 air hammers 23(K) maximum

ARTIKELNO	DESCRIPTION	VOLT
<b>97.95.410</b>	Airmec KP 100400 M, 100 L	230 V
<b>97.95.415</b>	Airmec KP 150400 M, 150 L	230 V



## FILTER PRESSURE REGULATOR + WATER SEPERATOR + OIL MIST

Filter pressure regulator + water separator + oil mist.

Button with lock function.

Maximum 16 bar Inlet.

Adjustable pressure of 0-12 bar.

Capacity	: 5000 l / min
Maximum pressure	: 12 bar
Connections	: 1/2" Inner thread
Number of connections	: 2
Content	: 2 pcs of reducing ring 3/8" Inner thread Included
Pressure gauge	: yes

ARTIKELNO	DESCRIPTION
<b>97.95.440</b>	Filter pressure regulator + water separator + oil mist





# General conditions of delivery Hoenderop BV

## Boelewerf 3 NL-2987 VD RIDDERKERK

### Article 1 Application

1. These conditions (filed with the Chamber of Commerce of Rotterdam under number 24.131.680) apply to all offers, confirmations of sale, sales, deliveries, products and services of Hoenderop BV (entered in the commercial register of the Chamber of Commerce of Rotterdam under number 24.131.680).
2. The conditions are part of every agreement between the client (which includes both a buyer and a client) and Hoenderop BV, unless something else has been agreed in writing. At the time of conclusion of the agreement the conditions are known to both parties.
3. If the uniform conditions of purchase used by the client and the present conditions of delivery coincide, the latter will prevail. Hoenderop BV may accept deviating conditions. The conditions used by the client will only be applicable for Hoenderop BV, if Hoenderop BV has accepted them explicitly and in writing.
4. In the event of whole or partial voidness or other invalidity of one or more provisions of these conditions, the other provisions will remain in force.

### Article 2 Offers

1. All offers and quotations will be valid during thirty (30) days, unless something else is explicitly stated in the offer. All offers and quotations made by or on behalf of Hoenderop BV, both orally and in writing, are without engagement. Offers will also mean any annexes.
2. In the case of composite prices there is no obligation to deliver a part at the corresponding part of the price given for the whole.
3. If information has only been submitted for part of the work to be performed or to be made, Hoenderop BV will not be bound by the price stated for the whole, if it should appear that the part not shown requires more work proportionally than the part shown.

### Article 3 Conclusion of agreements

1. Agreements will be concluded when, after receipt of the order from the client, Hoenderop BV either acknowledges it or starts its performance.

### Article 4 Change in the order

1. Changes in the original order by or on behalf of the client that cause higher costs than those that could be taken into account at the time of the quotation will be charged to the client additionally. Changes in the order will give no cause for charging a lower amount than has been agreed.
2. Changes desired by the client after giving the order must be communicated by the client to Hoenderop BV in writing. In the event of communication in another way the risk for the performance of the changes will be for the client's account.
3. Changes in an order already given may result in transgression of the originally agreed time of delivery.

### Article 5 Property of the client

1. With regard to keeping and using goods that have been entrusted to it by or on behalf of the client, Hoenderop BV will apply the same care as in the case of its own possessions.
2. Without prejudice to the provisions in the preceding paragraph and elsewhere in these conditions of delivery the client will bear the risk for the said goods. If he wants to have the said risk covered, he must insure it for his own account. The client must exclude the right of recourse by his insurer against Hoenderop BV contractually in the insurance relationship.

### Article 6 The property of Hoenderop BV

1. All the products delivered to the customer will remain the property of Hoenderop BV until all amounts that the customer owes for the products delivered or to be delivered or work performed or to be performed by virtue of the agreement have been fully paid to Hoenderop BV.
2. In the event of damage or loss of the goods made available to the client as referred to in the preceding paragraph, this damage will be charged without prejudice to the right to claim costs and interest.

### Article 7 Payment

1. Payment must be made without deduction or set-off, in such a way that Hoenderop BV has the invoiced amount at its disposal within the agreed term of payment.
2. Unless something else has been agreed the term of payment is 30 days, commencing on the invoice date.
3. Hoenderop BV is entitled to desire adequate security for the payment before delivery and to cease completion of the order if this security cannot be given. If the term of payment is exceeded, the client will be in default by operation of the law.
4. If the term of payment is exceeded, the client will be charged interest on the invoice amount in accordance with the statutory commercial interest. Parts of months will be regarded as full months for the calculation of this interest.
5. The ownership of goods and rights will remain with Hoenderop BV and will only pass to the client on the day on which he has paid the payable principal amount, interests, costs and compensations with regard to all goods delivered and services rendered.
6. All costs, both judicial and extrajudicial, in connection with the collection of the amounts payable by the client and not paid in time are for the client's account. These costs amount at least to 15% of the amount payable.

### Article 8 Price changes

1. Changes in the costs of services, materials and/or semi-manufactures required for the order that commence after acceptance of the order may be passed on to the client.
2. Changes of the offered or agreed price, which Hoenderop BV is obliged or empowered to make on the basis of statutory provisions, such as those about import duties, turnover tax, wage increase and the like will always be permitted.

### Article 9 Delivery

1. Unless something else has been agreed explicitly, delivery will always be made "EXW, ex Works, in the sense of the Incoterms 2010". Delivery will be made at the time at which the goods are offered in the agreed and/or customary place and time.
2. If products are delivered carriage paid the cheapest method of dispatch or transport will be followed, unless something else has been agreed in advance. In the case of any other method of dispatch the additional costs with regard to transport, packaging and other handling costs will be for the client's account.
3. The client will be obliged to take receipt of the goods on first presentation. If the client does not fulfil this obligation, all costs resulting from this may be charged to him.

### Article 10 Partial delivery

1. Every partial delivery, also including the delivery of parts of a composite order, may be charged to the client.

### Article 11 Term of delivery

1. The time of delivery will be the period that has been agreed between the parties. A term of delivery is not a deadline but is a target date. Hoenderop BV is always entitled to an additional delivery period of 30 days, commencing on the first day after the end of the agreed time of delivery. Before Hoenderop BV can be in default, the client must first hold Hoenderop BV in default in writing with a period of at least 14 days.

### Article 12 Client's default

1. If progress in the rendering of services or the delivery of products is delayed as a result of the client's default or force majeure on his part, Hoenderop BV may charge the complete amount agreed, without prejudice to its right to claim further costs, damage and interest.
2. In the event of the client's default Hoenderop BV may invoke all corresponding legal consequences, and all claims of Hoenderop BV on the client will be payable immediately and in full.

### Article 13 Force majeure

1. If, through any cause whatsoever, in spite of reminders, a supplier of Hoenderop BV fails to make delivery or a timely or proper delivery, this will serve as force majeure with regard to the client for Hoenderop BV from the date that the (additional) delivery period as mentioned in article 11 has passed. Bankruptcy of the supplier will be regarded as force majeure for the performance. Hoenderop BV is entitled to supply a replacement product from another supplier to the client. The additional costs relating to the delivery of an alternative will be for the client's account to 10% of the agreed purchase price. In the event that the offered price is more than 10% higher than the purchase price agreed between the client and Hoenderop BV, the client will be entitled to dissolve the agreement, without Hoenderop BV or the client becoming liable for damage in respect of each other as a result of this dissolution. This possibility of dissolution must be used by the client within 14 days after this higher price was offered to him, on pain of forfeiture of the right of dissolution.
2. Any independent or unforeseeable circumstance beyond the control of the parties, as a result of which performance of the agreement by Hoenderop BV cannot be desired in reason anymore by the client, will be considered force majeure. Force majeure will at any rate mean strike of work, bankruptcy of the supplier of Hoenderop BV, transport difficulties, insufficient supply of raw materials and/or fuels, fire, government measures including import and export prohibitions, natural disasters, war, mobilization and contingencies.

### Article 14 Termination by Hoenderop BV

1. The client will be deemed to be culpably in default without further notice if he does not, not fully or not in time fulfil one or several obligations from the agreement or these conditions, and/or in the event of the client's suspension of payment or bankruptcy.
2. In any of the cases referred to in paragraph 1 Hoenderop BV will be entitled, after demand and/or judicial intervention either to suspend the performance of the agreement in full or in part or to dissolve the agreement in full or in part, without being obliged to make any compensation.
3. In the event of the client's suspension of payment or bankruptcy the client will be in default by operation of the law and Hoenderop BV will be empowered to dissolve the agreement without notice of default.

### Article 15 Cancellation by the client

1. If the client wishes to cancel the order in full or in part and Hoenderop BV honours that request, Hoenderop BV will be entitled to charge a cancellation fee of 15% of the purchase price and to set it off with a possible down payment already made, without prejudice to the right of Hoenderop BV to claim additional compensation and loss of profit, if and in so far as they jointly exceed a percentage of 15 above the purchase price. Hoenderop BV is not obliged to accept the request for cancellation by the client.

### Article 16 Complaints

1. The client must inspect the goods immediately after completion of the order. Complaints concerning defects that were discovered or should reasonably have been discovered at the time of inspection must have been notified to Hoenderop BV in writing within 8 days after the delivery.
2. Complaints concerning defects that were not discovered or should reasonably have been discovered during the inspection as mentioned in paragraph 1 must have been notified to Hoenderop BV in writing within 8 days after they were reported to the client or could reasonably have appeared to the client.
3. After prior notice return shipments may be sent back to Hoenderop BV, but only CARRIAGE PAID. At the same time a copy of the sales invoice must have been added, the goods must be clean, without stickers, unused, undamaged and provided with the original packaging.

4. Damage to and/or short delivery of goods sent by Hoenderop BV may only be taken into consideration by us if this was recorded on the waybill at the time of arrival.
5. The complaints mentioned in the paragraphs 1, 2 and 3 can at any rate not be submitted anymore after 1 month after the date of completion of the order has expired.
6. Complaints as referred to in the preceding paragraph will only be possible in so far as the client has not taken the goods delivered into use, treated or processed them or has disposed of them in another way.
7. The liability of Hoenderop BV on the basis of any agreed delivery will be limited to the amount involved in the order.
8. Hoenderop BV is not liable for the consequences of errors in the order, information or materials that have been supplied by the client.
9. Any factory warranty will be passed on by Hoenderop BV to the buyer. Cable break in the case of submersible pumps will always be outside the warranty.
10. The client's right to suspension or set-off of his obligation of payment or obligation of return delivery is excluded.

### Article 17 Liability

1. In the event of late, incorrect or improper delivery or defects to the goods delivered and/or the packaging Hoenderop BV will not be liable in any respect for the damage caused as a result of this, except in so far as it is a matter of wilfulness or deliberate recklessness of the management board of Hoenderop BV.
2. If the tenor of this or other exclusions of liability should be considered unacceptable according to standards of reason and fairness, it will at any rate hold that Hoenderop BV is not liable for indirect (consequential and other immaterial) damage suffered by the client and it will at any rate hold that the liability of Hoenderop BV is not higher than the size of the purchase price paid by the client.
3. The liability for warranty and repair of defective goods will for that matter not extend beyond the rights to warranty and repair that Hoenderop BV has in respect of its supplier. Hoenderop BV undertakes, in return for discharge from its possible liability and/or obligation to give a warranty to its client, to assign the claims on its supplier to the client or his insurer.

### Article 18 Confidential information

1. Hoenderop BV is obliged to carefully store and keep secret keep all confidential information that has been given to it by the client. Confidential information will only be that information that was clearly designated as "confidential" when supplied by the client.

### Article 19 Applicable law

1. The agreement in all its components is governed by Dutch law.

### Article 20 Competent court

1. Any disputes between Hoenderop BV and the client will in the first instance be submitted exclusively to the competent court in the district where Hoenderop BV is established, except if Hoenderop BV as plaintiff or claimant chooses the competent court of the client's place of residence or establishment.



# HOENDEROP

Technische groothandel

## Hoenderop BV

Boelewerf 3  
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The Netherlands

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**Tel:** +31 (0)180 - 460 760

**E-mail:** [info@hoenderop.nl](mailto:info@hoenderop.nl)

## Business hours

**Monday:** 8.00 am - 5.00 pm

**Tuesday:** 8.00 am - 5.00 pm

**Wednesday:** 8.00 am - 5.00 pm

**Thursday:** 8.00 am - 5.00 pm

**Friday:** 8.00 am - 4.30 pm