

PREFACE

DOSE – Innovative and Aware of Traditions

Our recipe for success is a mixture of two important values – innovation and tradition – they are the foundation on which we build, now and in the future.

Despite all tradition, which we can refer to, we never forget to move forward – as tradition does not mean standstill.

Despite all innovation which we pursue, we never forget what enables us to take these new paths – as innovation does not mean forgetting the tried and trusted.

Expertise – High Quality – Established Service – Approved Quality

- We assure **expertise** in the supervision and technical support on site – worldwide.
- The **high quality** of our product range is self-explaining and the primary concern of our company, because at the end of the day you will be judged by what you are offering to your customers.
- For us **established service** means customer care in all situations – from the friendly support over the phone right up to the delivery - we're happy to help you.
- **Approved Quality** – with every new order we take up the challenge of proving our quality requirements once more, not just concerning service but also product quality.

New Design – New Catalogue – New Naming – New Layout

- We have the finger on the pulse of time and an open ear for our customers. Our newly designed website conveys that visually.
- A **new catalogue** offers our customers an even more appealing and clear overview of our range.
- We want to simplify the access to our products – for this purpose we have introduced new product names. Names allow associations and hence are easy to remember.
- The catalogue's **new layout** – a clear tripartition in image, description and technical illustration allows you to capture relevant data at a glance and makes the order process easier.

The new DOSE catalogue represents the company's next evolutionary step towards transparency and more customer friendliness.

...and best of all: further developments are in progress...

Thank you for your attention and enjoy our new catalogue.

Thorsten Marquardt

DOSE VISION

Quality with tradition for over 90 years

For over 90 years our family business has been developing durable and resistant products for a secure electricity and light supply on the high seas.

Founded 1920 as specialists for ships electrics, we consequently expanded our product range to other maritime areas. Nowadays it ranges from marine lighting, spotlights and searchlights to container sockets and electric installation material and is orientated towards potentially explosive areas.

Professional advice, dependable delivery, fast order processing as well as a high safety standard are guaranteed through our qualified employees and the latest manufacturing technology.

Quality guarantee: Close contact to the customer

The close contact to our customers, partners and employees plays an important role – especially for us as a family business. It ensures that we can provide practical products on which you can rely when it comes down to it.

Next to our comprehensive standard product range we also develop solutions together with our customers, which fulfil more individual requirements. Starting with special series in brass and red brass through to spotlights or searchlights, made to suit your needs. Feel free to contact us, we are happy to help.



**Our focus: Quality products
for your safety**

DOSE stands for quality: Since our foundation, crew complement from all over the world have been able to rely on the quality of the DOSE products, one hundred per cent. We put our trust in ongoing quality controls, from the production to the delivery and beyond. Only when you are satisfied, we are satisfied.

Modern technology is principally used in our products, however it has to meet our high quality requirements and offers an added value in terms of usability or durability.

Absolute reliability in every phase of the cooperation is guaranteed by our quality management system, according to DIN EN ISO 9001.

Your efficient partner - worldwide

Our head office in Hamburg is amongst other things responsible for the areas quality management, product development, marketing and customer service. Modern manufacturing facilities are located in Portugal and Czech Republic. Our company representatives in over 26 shipyards location all over the world take care of the personal contact on site.

Specialists of today and tomorrow

Offering qualitative products doesn't just mean optimising production processes, it also means guiding and training employees properly. That's why it is important for us to offer the specialists of tomorrow apprenticeships.



International Agencies



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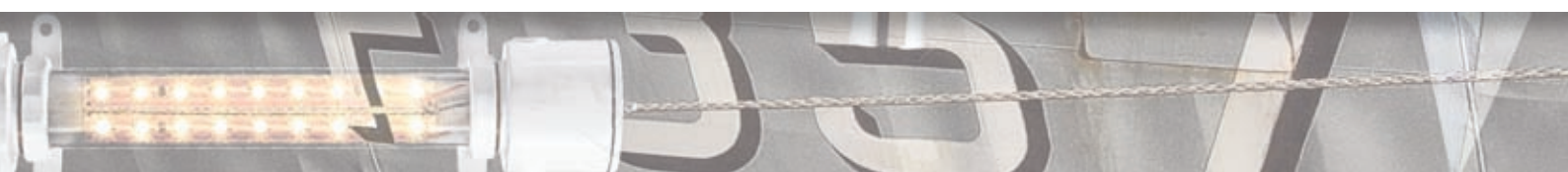
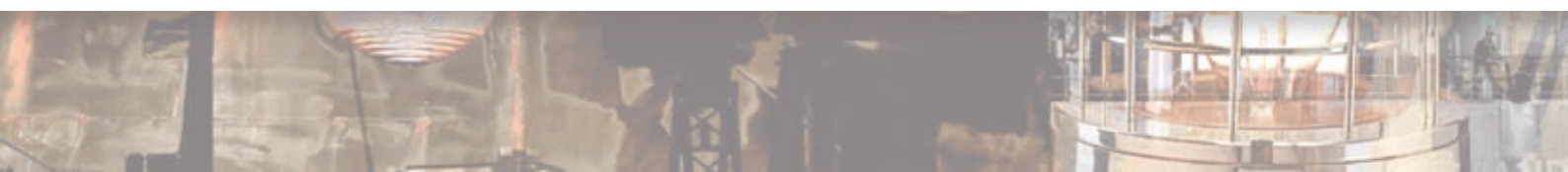
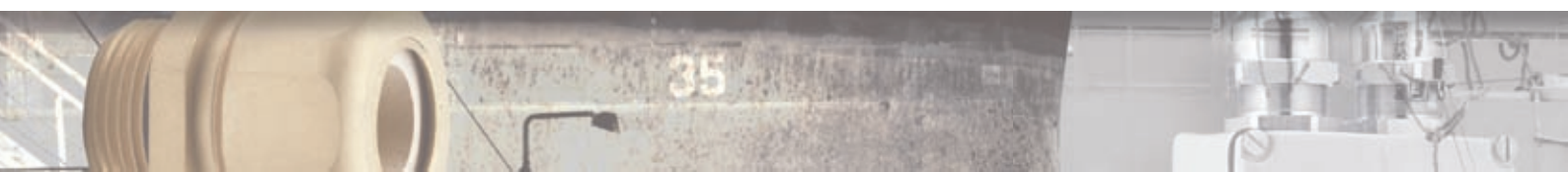
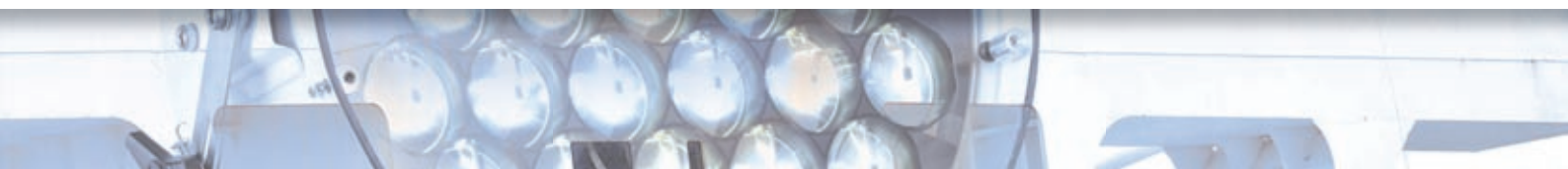
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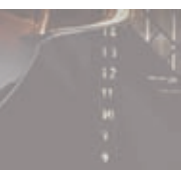
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LIGHTING FOR SHIPS



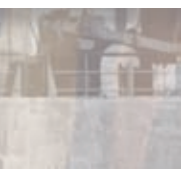
EQUIPMENT FOR
ELECTRICAL INSTALLATIONS



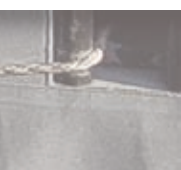
CONTAINER SOCKETS



CABLE INSTALLATION



EQUIPMENT FOR
HAZARDOUS AREAS



NAVY EQUIPMENT

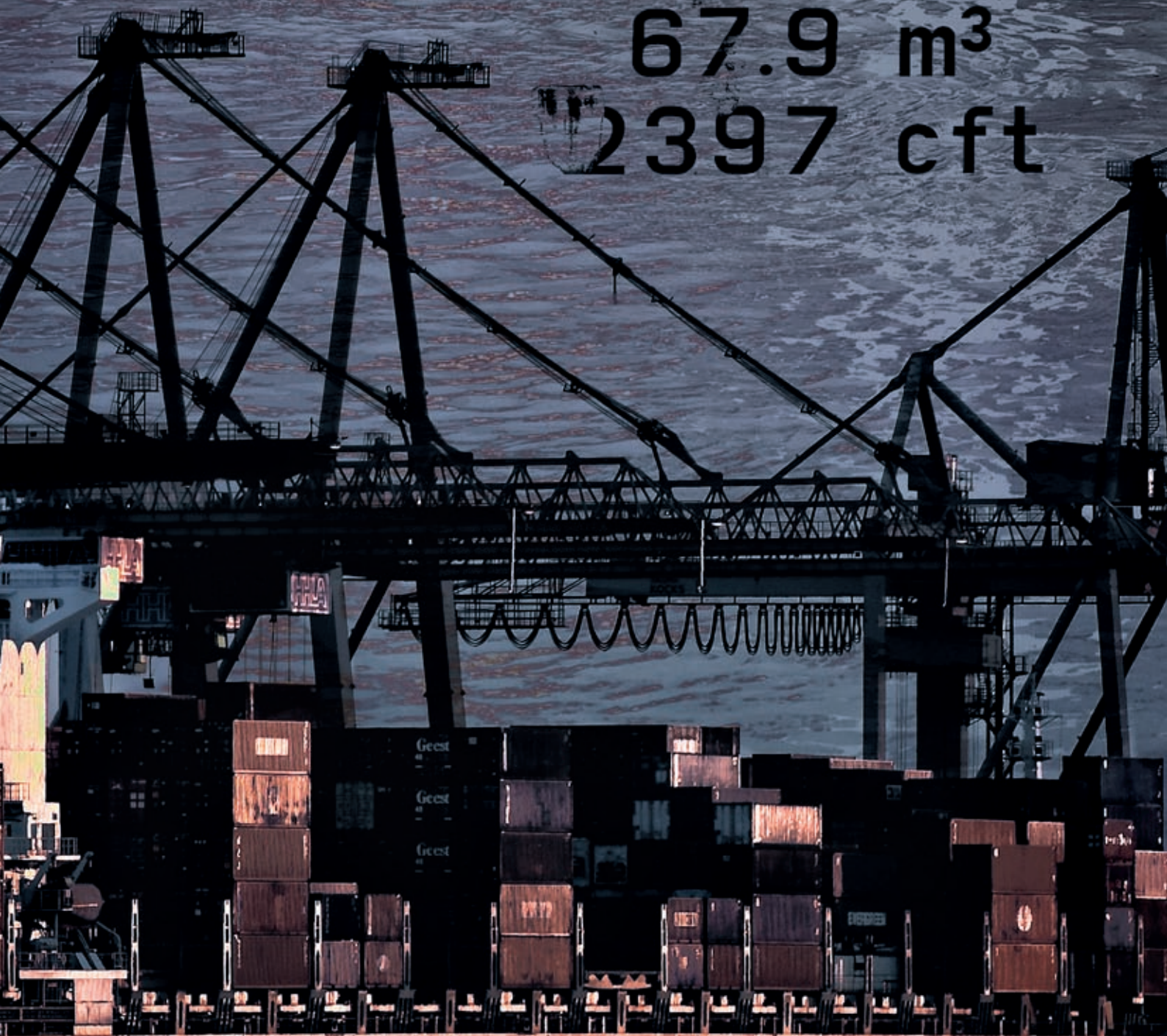
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26910 kg

59330 lbs

67.9 m³

2397 cft



CMA CGM

LIGHTING FOR SHIPS
EQUIPMENT FOR ELECTRICAL INSTALLATIONS
CONTAINER SOCKETS
CABLE INSTALLATION
EQUIPMENT FOR HAZARDOUS AREAS
NAVY EQUIPMENT



Daylight in the depth of the seven seas

Since 1920 DOSE has been known as a loyal partner in the shipping industry. Their high quality level has established itself in the world market and proved itself during various operating conditions, even when the sea is rough. Flexibility and an innovative spirit, a certified quality management system according to DIN EN ISO 9001, a worldwide sales network and long-term experience make DOSE an esteemed and accepted business partner, especially for navy equipment. Specifically for the high requirements on boats

and ships of the Navy, Dose produces equipment according to the defence technology standards. For decades, Dose has actively been involved in the design of the regulations that were issued by the marine standards office at the DIN (German Institute for Standardization).

Next to the established product range for the navy supply a new generation of installation devices, radar optimised





exterior lamps as well as a new range of naval lamps were developed. Of course also in LED technology. An outstanding innovation is DOSE's LED daylight illumination, designed for submarines, as well as the bus-controlled LED signal lamp. The DOSE LED daylight illumination is the first of its kind, which allows submarine's crews to enjoy

important „artificial“ daylight and thus gain physical and psychological wellbeing despite the absence of sunlight. Other application areas are imaginable. The DOSE LED signal lamp allows the use of light signals during the day from every location. Linking the lamp to an optical and/or electronic hand control is possible via a data bus control.



LED economical
durable
powerful

The realm of the gods

The navy equipment
has a special status

in our product range. In this chapter the products stand for latest technology, materials and their processing. The strictest standards worldwide are met or even exceeded, truly „giant requirements“.

So what could be more suitable for the choice of the names, than the world of the maritime gods!



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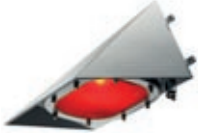
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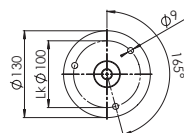
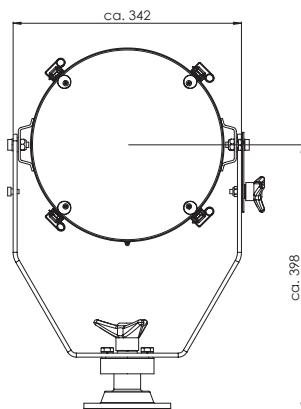
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Virgo
SS 250 LED D



Technical Data

Name & No.	kg	Description
Virgo SS 250 LED D	15,00	<ul style="list-style-type: none"> • IP 56 • barrel, black plate and crutch made of stainless steel, base made of corrosion-resistant LM6 aluminium, toughened soda-lime glass lens, parabolically lead coated silver glass mirror
Virgo SS 250 LED DP	22,50	<ul style="list-style-type: none"> • all outside surfaces are silver-grey powdercoated RAL 7001, internal surfaces are optical matt black
Virgo SS 250 LED C	20,00	<ul style="list-style-type: none"> • incl. shock absorber
Virgo SS 250 LED CP	27,50	<ul style="list-style-type: none"> • 7 LED modules • input voltage: 85-264V AC/120-370V DC or 24V DC
Virgo SS 250 LED R	34,00	<ul style="list-style-type: none"> • illuminated area in 100m: 5 x 5m • luminous flux: approx. 2.100 lm • luminosity: approx. 9,5 x 105 cd • light intensity in 100m: approx. 52 lx
Virgo SS 250 LED RC	41,50	<ul style="list-style-type: none"> • beam angle: 1,5° • certification: German Lloyd • durability diode: 50.000 hours in continuous operation (manufacturer's data)

Variations

Name & No.	Mounting Variations	Pan	Tilt	Description
Virgo SS 250 LED D	Deck	370°	-35°/+30°	<ul style="list-style-type: none"> • manual operation of searchlight
Virgo SS 250 LED DP	Deck / Pedestal	370°	-35°/+30°	<ul style="list-style-type: none"> • as for ...D, but searchlight on pedestal 1m high • special heights on request
Virgo SS 250 LED C	Cabin	370°	-35°/+20°	<ul style="list-style-type: none"> • manual operations from below by control mechanism
Virgo SS 250 LED CP	Cabin / Pedestal	370°	-35°/+20°	<ul style="list-style-type: none"> • as for ...C, but searchlight on pedestal
Virgo SS 250 LED R	Remote Control	370°	-35°/+20°	<ul style="list-style-type: none"> • searchlight mounted on electric remote control unit complete with joystick control panel for flush console installation
Virgo SS 250 LED RC	Remote Control / Pedestal	370°	-35°/+20°	<ul style="list-style-type: none"> • as for ...R, but searchlight on pedestal

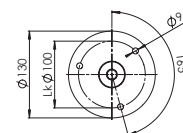
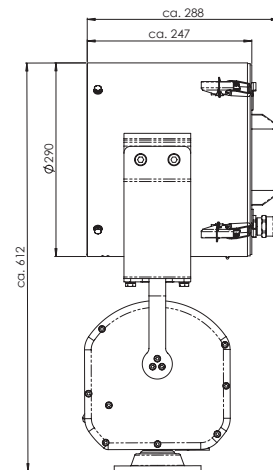
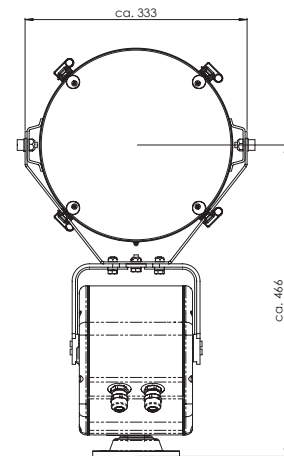


Optical Performance

Voltage	Wattage	Peak Beam Candle Power	Range M 1 Lux	Divergence
24V DC	29W	9,5 x 10 ⁶	900 m	3°
85-264V AC	29W	9,5 x 10 ⁶	900 m	3°
120-370V DC	29W	9,5 x 10 ⁶	900 m	3°

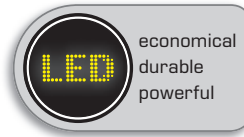
Spare Parts

No.	Item
2200648	lens
2200647	sealing for lens
2201276	lock wheel (cabin)
2200868	lock wheel (for deck base)
2200883	joystick for control panel
2200879	panel gasket
2200705	tilt motor 24V DC
2200705	pan motor 24V DC
2201420	tilt motor 230V
2201392	pan motor 230V
2201746	tilt motor 110V
2201746	pan motor 110V
2200729	snap switch
2200591	push button blue
2200887	contact element
2202154	LED-modul, contains LED, parabolic mirror and housing
2202155	constant current regulator
9201158	ballast unit, item 2+3
9201162	ballast unit, item 1



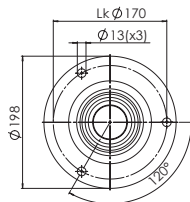
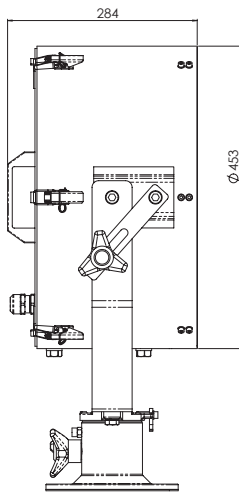


Virgo
SS 350 LED D



Technical Data

Name & No.	kg	Description
Virgo SS 350 LED D	31,00	<ul style="list-style-type: none"> • IP 56 • barrel black plate and crutch made of stainless steel, base made of corrosion-resistant LM6 aluminium, toughened soda-lime glass lens, parabolically lead coated silver glass mirror
Virgo SS 350 LED DP	43,50	<ul style="list-style-type: none"> • all outside surfaces are silver-grey powdercoated RAL 7001, internal surfaces are optical matt black
Virgo SS 350 LED C	36,50	<ul style="list-style-type: none"> • incl. shock absorber
Virgo SS 350 LED CP	49,00	<ul style="list-style-type: none"> • 19 LED modules • input voltage: 85-264V AC/120-370V DC or 24V DC • illuminated area in 100m: 5 x 5m
Virgo SS 350 LED R	80,00	<ul style="list-style-type: none"> • luminous flux: approx. 5.700 lm • luminosity: approx. 2,6 x 106 cd • light intensity in 100m: approx. 140 lx
Virgo SS 350 LED RP	113,00	<ul style="list-style-type: none"> • beam angle: 1,5° • certification: German Lloyd • durability diode: 50.000 hours in continuous operation (manufacturer's data)



Variations

Name & No.	Mounting Variations	Pan	Tilt	Description
Virgo SS 350 LED D	Deck	370°	-40°/+30°	• manual operation of searchlight
Virgo SS 350 LED DP	Deck / Pedestal	370°	-40°/+30°	<ul style="list-style-type: none"> • as for ...D, but searchlight on pedestal 1m high • special heights on request
Virgo SS 350 LED C	Cabin	370°	-35°/+20°	• manual operations from below by control mechanism
Virgo SS 350 LED CP	Cabin / Pedestal	370°	-35°/+20°	• as for ...C, but searchlight on pedestal
Virgo SS 350 LED R	Remote Control	370°	-35°/+20°	• searchlight mounted on electric remote control unit complete with joystick control panel for flush console installation
SS 350 LED RP	Remote Control / Pedestal	370°	-35°/+20°	• as for ...R, but searchlight on pedestal

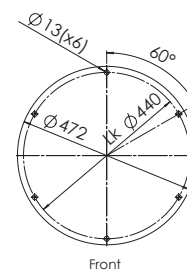
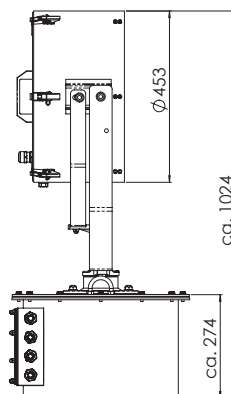
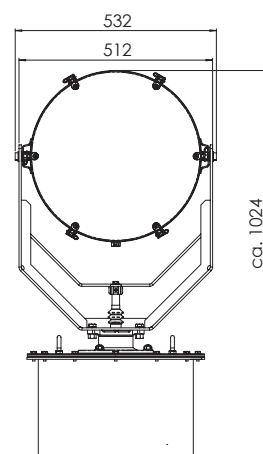


Optical Performance

Voltage	Wattage	Peak Beam Candle Power	Range M 1 Lux	Divergence
24V DC	80W	2,6 x 10 ⁶	1.400 m	3°
85-264V AC	80W	2,6 x 10 ⁶	1.400 m	3°
120-370V DC	80W	2,6 x 10 ⁶	1.400 m	3°

Spare Parts

No.	Item
2200820	lens
2200805	sealing for lens
2200671	reflector
2225004	lampholder GX9,5
2245004	lampholder GY16
2201276	lock wheel (cabin)
2200868	lock wheel (for deck base)
2200883	joystick for control panel
2200879	panel gasket
2201836	tilt motor 110V
2202223	tilt motor capacitor 8 µF
2200859	pan motor 110V
2202223	pan motor capacitor 6,3 µF
2201836	tilt motor 230V
2202224	tilt motor capacitor 8 µF
2201841	pan motor 230V
2202223	pan motor capacitor 6,3 µF
2200729	snap switch
2200591	push button blue
2200887	contact element
2202154	LED-modul, contains LED, parabolic mirror and housing
2202155	constant current regulator
9201150	ballast unit, item 2+3
9201163	ballast unit, item 1



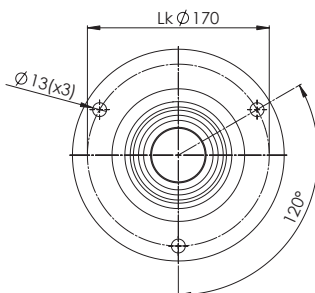
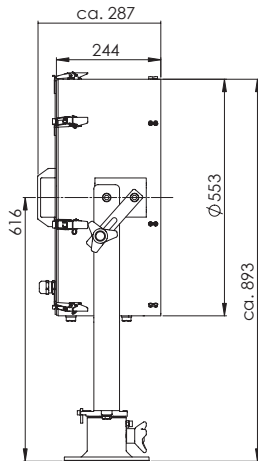


Virgo
SS 450 LED D



Technical Data

Name & No.	kg	Description
Virgo SS 450 LED D	40,50	<ul style="list-style-type: none"> • IP 56 • barrel black plate and crutch made of stainless steel, base made of corrosion-resistant LM6 aluminium, toughened soda-lime glass lens, parabolically lead coated silver glass mirror • all outside surfaces are silver-grey powdercoated RAL 7001, internal surfaces are optical matt black
Virgo SS 450 LED DP	53,00	<ul style="list-style-type: none"> • incl. shock absorber
Virgo SS 450 LED C	45,50	<ul style="list-style-type: none"> • 31 LED modules
Virgo SS 450 LED CP	58,00	<ul style="list-style-type: none"> • input voltage: 85-264V AC/120-370V DC or 24V DC • illuminated area in 100m: 5 x 5m
Virgo SS 450 LED R	89,50	<ul style="list-style-type: none"> • luminous flux: approx. 11.100 lm • luminosity: approx. 5,0 x 106 cd • light intensity in 100m: approx. 228 lx
Virgo SS 450 LED RC	122,50	<ul style="list-style-type: none"> • beam angle: 1,5° • certification: German Lloyd • durability diode: 50.000 hours in continuous operation (manufacturer's data)



Variations

Name & No.	Mounting Variations	Pan	Tilt	Description
Virgo SS 450 LED D	Deck	370°	-40°/+30°	• manual operation of searchlight
Virgo SS 450 LED DP	Deck / Pedestal	370°	-40°/+30°	<ul style="list-style-type: none"> • as for ...D, but searchlight on pedestal 1m high • special heights on request
Virgo SS 450 LED C	Cabin	370°	-30°/+20°	• manual operations from below by control mechanism
Virgo SS 450 LED CP	Cabin / Pedestal	370°	-30°/+20°	• as for ...C, but searchlight on pedestal
Virgo SS 450 LED R	Remote Control	370°	-30°/+20°	• searchlight mounted on electric remote control unit complete with joystick control panel for flush console installation
Virgo SS 450 LED RP	Remote Control / Pedestal	370°	-30°/+20°	• as for ...R, but searchlight on pedestal

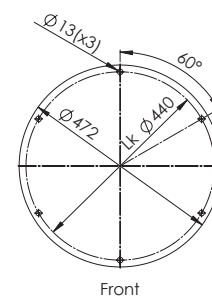
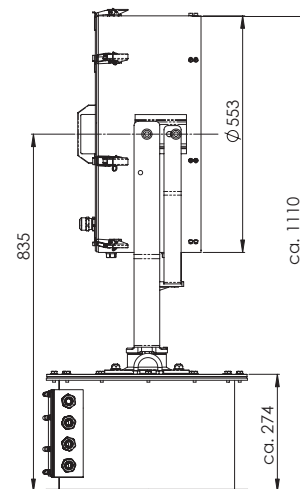
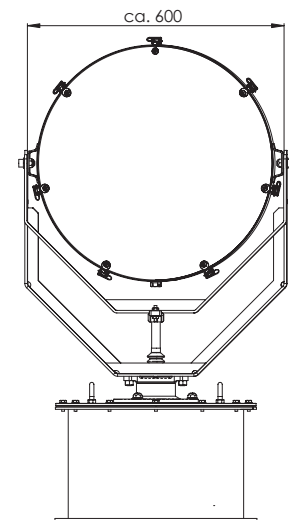


Optical Performance

Voltage	Wattage	Peak Beam Candle Power	Range M 1 Lux	Divergence
24V DC	130W	5,0 x 10 ⁶	2.000 m	3°
85-264V AC	130W	5,0 x 10 ⁶	2.000 m	3°
120-370V DC	130W	5,0 x 10 ⁶	2.000 m	3°

Spare Parts

No.	Item
2200676	lens
2200679	sealing for lens
2201276	lock wheel (cabin)
2200825	lock wheel (for deck base)
2200883	joystick for control panel
2200879	panel gasket
2201836	tilt motor 110V
2202223	tilt motor capacitor 8 µF
2200859	pan motor 110V
2202223	pan motor capacitor 6,3 µF
2201836	tilt motor 230V
2202224	tilt motor capacitor 8 µF
2201841	pan motor 230V
2202223	pan motor capacitor 6,3 µF
2200729	snap switch
2200591	push button blue
2200887	contact element
2202154	LED-modul, contains LED, parabolic mirror and housing
2202155	constant current regulator
2202222	ballast unit, item 2+3
9201164	ballast unit, item 1



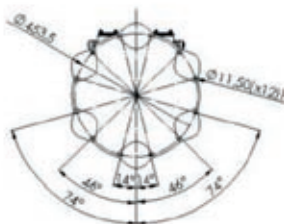
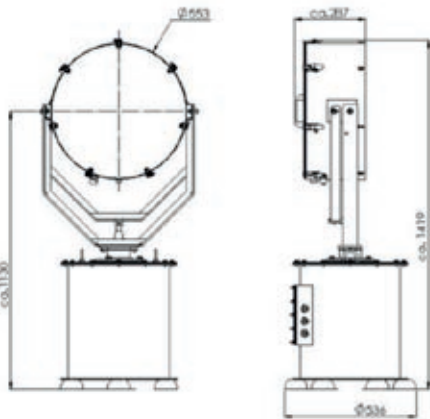


Virgo
SS 450 RVLED



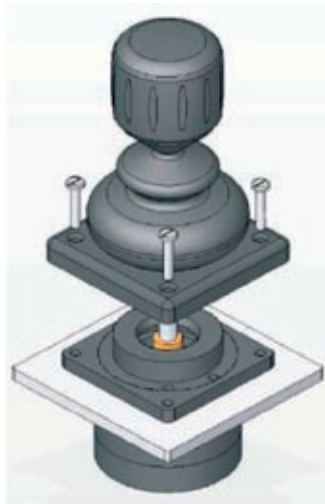
Technical Data

Name & No.	kg	Description
Virgo SS450RVLED	40,50	<ul style="list-style-type: none"> • LED searchlight IP 56 • drive unit IP 56 • touch panel IP 65 frontwards • joystick IP 65 above panel seal • rotary encoder IP 67 • 31 high power LED module • input voltage: 88 - 132V/176 - 264V AC(47-63Hz)/248 - 370V DC • power input: 130 Watt • range: 1 lx in approx. 2.000m • for more searchlight details see SS450 LED searchlight (page 230) • Ethernet 10/100-interface, CANopen, as well as RS232-interface are standard. No additional costs develop, if you want to access an application via web browser from anywhere in the world. Cost intensive services can be dropped in many cases on-site. The RS232 is designed as an alternative programming access and can also be used for the communication with peripheral devices.
DOSE-BUS Drive Unit:	49,00	<ul style="list-style-type: none"> • AC-synchron-servo-motors • supply voltage 24...36V • temperature range: -25°C to 50°C no dew, 50°C to 65°C with power reduction by 2% per Kelvin, max. temperature of the motor 105°C • The intelligent compact drives consist of motor, transmission and control electronics. The unit is controlled through a field bus interface. These drives are used in engineering and automation. Combined with a SPS complex positioning and automation tasks can be solved easily and at low costs. Motor and electronics are one device with small measurements. The integration of motor and electronics reduces the installation effort and simplifies the EMV concept.
Touch-Panel		<ul style="list-style-type: none"> • diagonal 5,7", TFT, analog resistive, 320 x 240 pixel, IEC/EN 61131-2, EN 50178 • operating temperature 0 to +50°C • size: 211 x 156 x 54mm • For the visualisation and the SPS-application a hardware independent software at world standard in accordance with IEC 61131-3 is used.
Joystick		<ul style="list-style-type: none"> • contact-free scanning, durability > 10 mio. cycles, operating temperature -20 to +55°C • size: 107 x 42mm
Sighting Rotary Encoder		<ul style="list-style-type: none"> • contact-free measuring system, high shock resistance (>500 g) and vibration resistance (>30 g), EN 60529/ DIN 40050-9, operating temperature -40 to +85°C • size: Ø 36mm, length 43,6mm



Spare Parts on Request

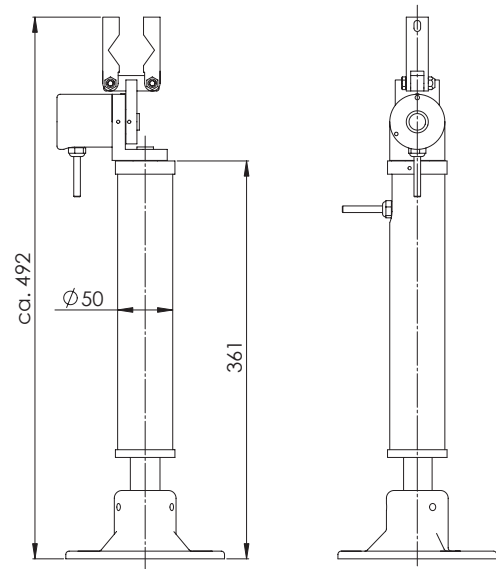
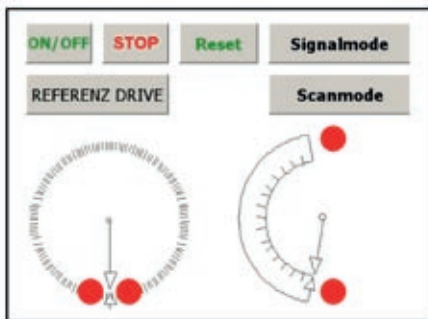
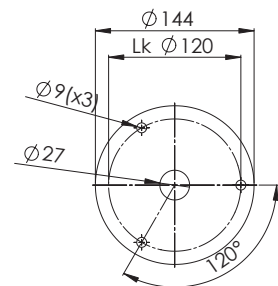


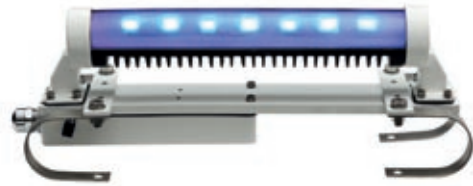
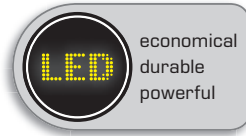
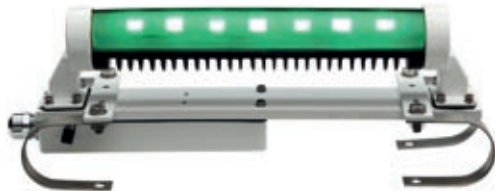


Virgo
SS 450 BUS Joystick



Virgo
SS 450 BUS sighting mechanism

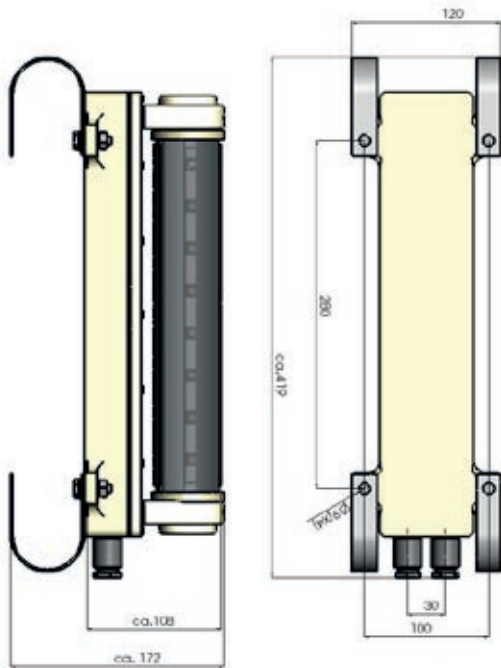




Nereus
NLLED RGBW

Technical Data

Name & No.	Wattage	kg	Description
NEREUS NLLED RGBW	30W	3,00	<ul style="list-style-type: none"> • IP 56 • casing AlMg3, powdercoated, polycarbonate covering with special light diffusion film • incl. LED carrier and 7 x 4-colour LED • durability: up to 100.000 hrs (manufacturer's data) depends on operating temperature • beam angle: 115° • ambient temperature: -40°C to 40°C • central control acc. to the DMX512 protocol • optimized thermal management • Dose attaches great importance to the thermal management in lighting, so the LED-modules can operate under the critical temperature level and that they can deliver their full performance throughout their whole durability.



Spare Parts on Request



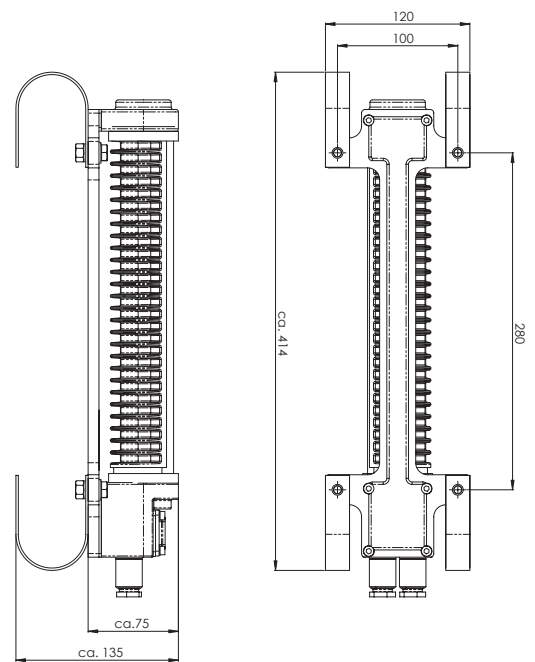


Nereus
NLLED 8P4

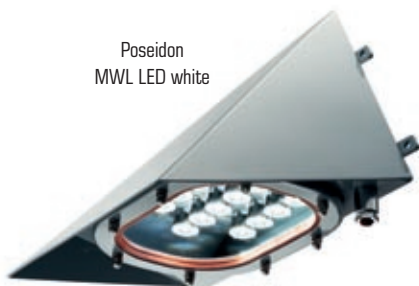
Technical Data

Name & No.	Wattage	kg	Description
Nereus NLLED 8P4	30W	3,00	<ul style="list-style-type: none"> • IP 56 • casing AlMg3, powdercoated polycarbonate covering with special light diffusion film • incl. LED carrier and 8 x P4 LED • durability: up to 100.000 hrs (manufacturer's data) depends on operating temperature • beam angle: 130° • ambient temperature: -20°C to 45°C • with integrated ballast or external ballast, with external ballast up to 6 lamps (18 available) • dimmable • optimized thermal management • Dose attaches great importance to the thermal management in lighting, so the LED-modules can operate under the critical temperature level and that they can deliver their full performance throughout their whole durability.

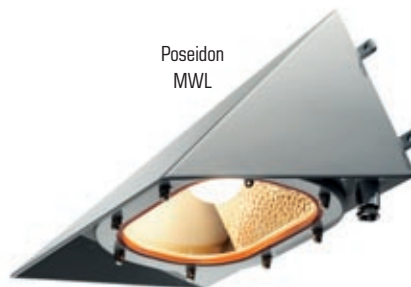
Spare Parts on Request



Poseidon
MWL LED white



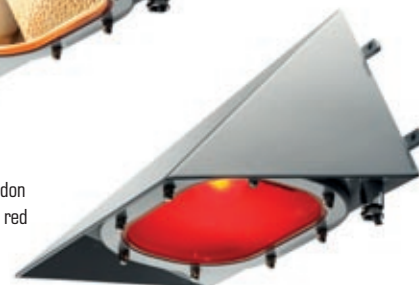
Poseidon
MWL



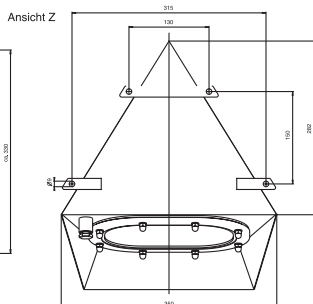
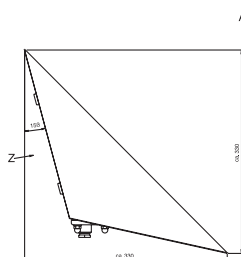
Poseidon
MWL LED green



Poseidon
MWL red



Poseidon
MWL 831

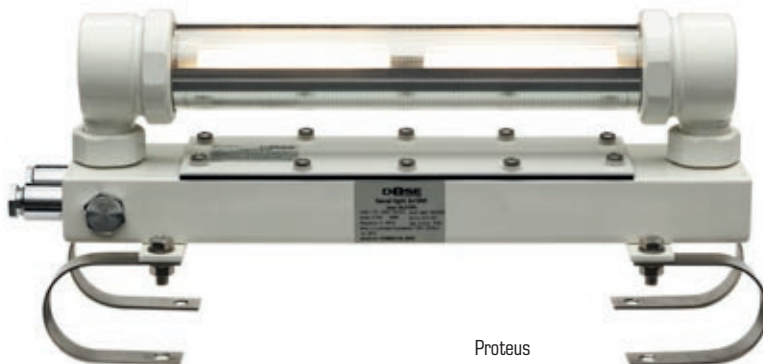


Technical Data

Name & No.	Wattage	kg	Description
Poseidon MWL831 LED white	20W	4,40	<ul style="list-style-type: none"> • IP 56 • casing, glass-holding frame, latches and brackets made out of stainless steel • casing powdercoated (RAL 7001), clear hard glass pane, resistant against temperature changes • radar optimized • optional cable glands acc. VG, DIN 89280 (max. IP56) or with CVKS cable glands (IP68) • special wall mounting design for walls with 15° incline • ambient temperature: -20°C to +40°C • 14 x high power LED • input voltage: 85-264VAC / 120-375V DC
Poseidon MWL831 LED green	20W	4,40	<ul style="list-style-type: none"> • as MWL831 LED white • 14 x High Power LED, green (other colours on request)
Poseidon MWL831/ E27	60W	4,40	<ul style="list-style-type: none"> • as MWL831 LED white • but lampholder shake protected E27 acc. to VG 88838
Poseidon MWL831/red	60W	4,40	<ul style="list-style-type: none"> • as MWL831 LED white • but lampholder shake protected E27 acc. to VG 88838 • but with red glass
Poseidon MWL831/ TE26	26W	4,40	<ul style="list-style-type: none"> • as MWL831 LED white • but with electrical ballast for PLL lamp T/E 26W • optional in 110V or 230V available
Poseidon MWL831/ TE32	32W	4,40	<ul style="list-style-type: none"> • as MWL831 LED white • but with electrical ballast for PLL lamp T/E 32W • optional in 110V or 230V available

Spare Parts on Request

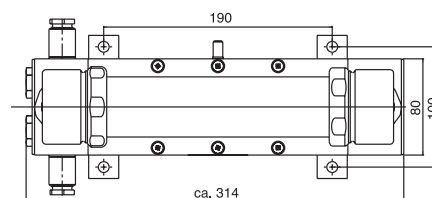
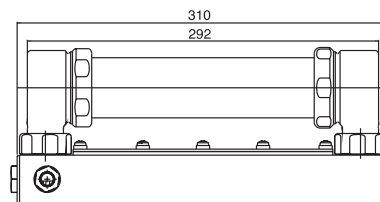
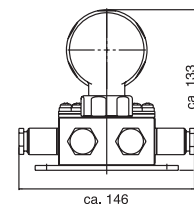




Proteus
NL213PL

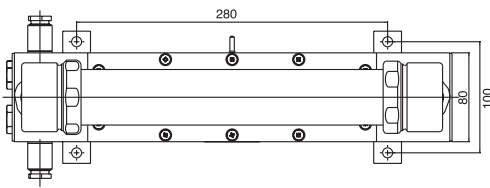
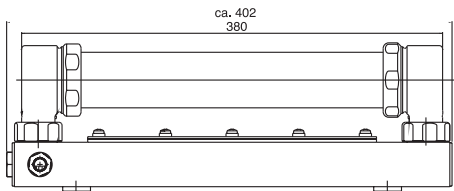
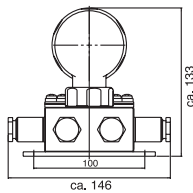
Technical Data

Name & No.	Wattage	kg	Description
Proteus NL213PL	2 x 13W	4,20	<ul style="list-style-type: none"> • IP56 • casing made of stainless steel 1.4571 and red cast brass, glass tube made of borosilikat • casing powdercoated RAL 9010 • cable gland: cable gland: M18x1.5 brass chromium plated acc. VG 88773 and VG 88812 • electronic ballast unit for cable gland: 13W • compact-fluorescent lamps with socket G24q1 • lightcolour 827, 830 or 840 optional • input voltage: 115V - 350V • light is amagnetic, shock- (acc. to BV 043) and EMI-proofed • 6 additional blind plugs M18x1.5 can be changed to cable glands M18x1.5 (option, max. 8 cable glands M18x1.5). Loop through wiring (single ended). • ambient temperature: 45°C
Proteus NL213PLD	2 x 13W	4,20	<ul style="list-style-type: none"> • as NL213PL • with dimmable electronic (analog or digital)
Proteus NL213PLDP	2 x 13W	4,20	<ul style="list-style-type: none"> • as NL213PL • with dimmable electronic and potentiometer
Proteus NL213PLDPK	2 x 13W	4,20	<ul style="list-style-type: none"> • as NL213PL • with dimmable electronic and potentiometer for commander room



No.	kg	Description
DLX13DE	0,06	energy saving lamp for electronic ballast unit, 18W, socket G24q2 (4-pin), standard tone: 41-827 (softtone light standard bulb)
FAG24q1	0,02	lampholder FAG24q1 for energy saving lamp 13W
EVG-UBL-113	0,22	electronic ballast unit for NL113PL 1x13W, 115-350V, no dimmable
GL313K	0,30	casing (tube cover) complete with reflector and RFI-sleeve for naval light

Other voltage and frequency on request.

Proteus
NL218PL**Technical Data**

Name & No.	Wattage	kg	Description
Proteus NL218PL	2 x 18W	4,26	<ul style="list-style-type: none"> • IIP56 • casing made of stainless steel 1.4571 and red cast brass, glass tube made of borosilikat • casing powdercoated RAL 9010 • cable gland: M18x1.5 brass chromium plated acc. VG 88773 and VG 88812 • electronic ballast unit for 2x18W compact-fluorescent lamps with socket G24q2 • lightcolour 827, 830 or 840 optional • input voltage: 115V - 350V • light is amagnetic, shock- (acc. to BV 043) and EMI-proofed • 6 additional blind plugs M18x1.5 can be changed to cable glands M18x1.5 (option, max. 8 cable glands M18x1.5). Loop through wiring (single ended) • ambient temperature: 45°C
Proteus NL218PLD	2 x 18W	4,26	<ul style="list-style-type: none"> • as NL218PL • with dimmable electronic (analog or digital)
Proteus NL218PLDP	2 x 18W	4,26	<ul style="list-style-type: none"> • as NL218PL • with dimmable electronic and potentiometer
Proteus NL218PLDPK	2 x 18W	4,26	<ul style="list-style-type: none"> • as NL218PL • with dimmable electronic and potentiometer for commander room

Spare Parts

No.	kg	Description
DLX18DE	0,07	energy saving lamp for electronic ballast unit, 13W, socket G24q1 (4-pin), standard tone: 41-827 (softtone light standard bulb)
FAG24q2	0,02	lampholder FAG24Q2 for energy saving lamp 18W
EVG-UBL-218	0,22	electronic ballast unit for NL218PL 2x18W, 115-350V, no dimmable
GL313K	0,30	casing (tube cover) complete with reflector and RFI-sleeve for naval light

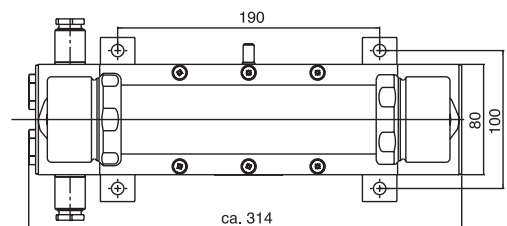
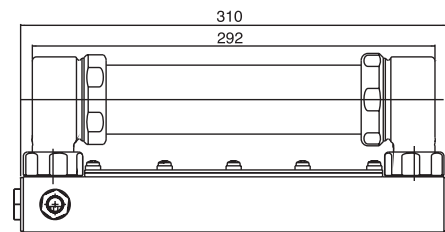
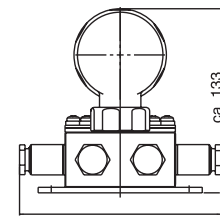
Other voltage and frequency on request.



Proteus
NL113PL

Technical Data

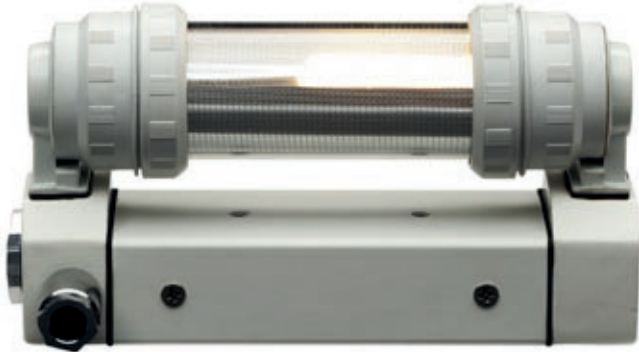
Name & No.	Wattage	kg	Description
Proteus NL113PL	1 x 13W	3,66	<ul style="list-style-type: none"> • IP56 • casing made of stainless steel 1.4571 and red cast brass, glass tube made of borosilikat • casing powdercoated RAL 9010 • cable gland: M18x1.5 brass chromium plated acc. VG 88773 and VG 88812 • electronic ballast unit for 1x13W compact-fluorescent lamps with socket G24q2 • lightcolour 827, 830 or 840 optional • input voltage: 115V - 350V • light is amagnetic, shock- (acc. to BV 043) and EMI-proofed • 6 additional blind plugs M18x1.5 can be changed to cable glands M18x1.5 (option, max. 8 cable glands M18x1.5). Loop through wiring (single ended) • ambient temperature: 45°C



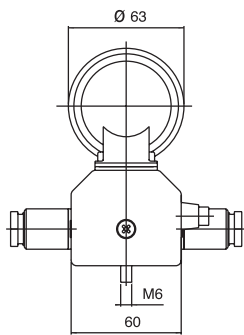
Spare Parts

No.	kg	Description
DLX13DE	0,06	energy saving lamp for electronic ballast unit, 18W, socket G24q2 (4-pin), standard tone: 41-827 (softtone light standard bulb)
FAG24q1	0,02	lampholder FAG24Q1 for energy saving lamp 13W
EVG-UBL-113	0,22	electronic ballast unit for NL113PL 1x13W, 115-350V, no dimmable
GL226K	0,25	casing (tube cover) complete with reflector and RFI-sleeve for naval light

Other voltage and frequency on request.



Proteus
NL105PL



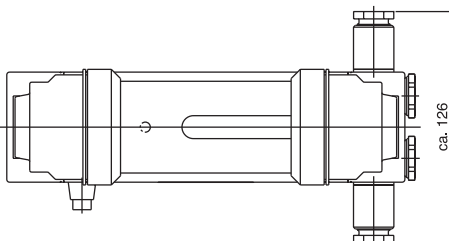
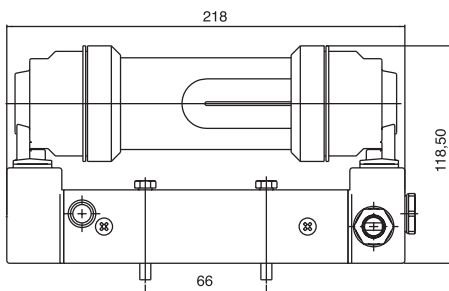
Technical Data

Name & No.	Wattage	kg	Description
Proteus NL105PL	1 x 5W	1,70	<ul style="list-style-type: none"> • IP56 • casing made of stainless steel 1.4571 and red cast brass, glass tube made of borosilikat • casing powdercoated RAL 9010 • cable gland: M18x1.5 brass chromium plated acc. VG 88773 and VG 88812 • electronic ballast unit for 1x5W compact-fluorescent lamps with socket 2G7 • lightcolour 827, 830 or 840 optional • input voltage: 115V - 350V • light is amagnetic, shock- (acc. to BV 043) and EMI-proofed • 6 additional blind plugs M18x1.5 can be changed to cable glands M18x1.5 (option, max. 4 cable glands M18x1.5) • loop through wiring (single ended) • ambient temperature: 45°C

Spare Parts

No.	kg	Description
DLX5SE	0,03	energy saving lamp for electronic ballast unit, 5W, 2-pin socket, standard tone: 41-827 (softtone light standard bulb)
GL150K	0,20	casing (tube cover) complete with reflector and RFI-sleeve for naval light

Other voltage and frequency on request.





Palux
BRL20

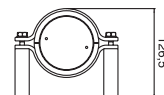
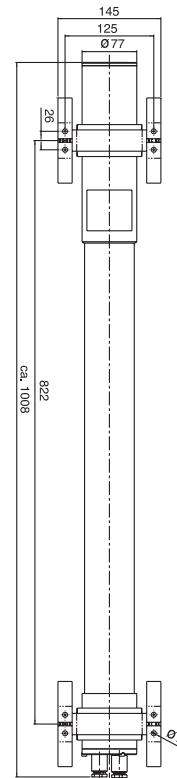
Technical Data

Name & No.	Diagram	Wattage	kg	Description
Palux BRL20	-O	18W	3,60	<ul style="list-style-type: none"> • IP68 • housing made of aluminum, powdercoated RAL 9010, light cover made of a temperature change-steady polycarbonate pipe • cable gland: M18x1.5 brass chromium plated acc. VG 88773 and VG 88812 • with single socket flourescent lamp Fa6 • incl. pipe clamps and tossing handles • input voltage: 115V - 350V • light is amagnetic, shock- (acc. to BV 043) and EMI-examined • Ex-protection class: EEx ed IIC T4, PTB-No.: PTB 03 ATEX 2156 • ambient temperature 45°C
Palux BRL20Y	=O	18W	3,70	<ul style="list-style-type: none"> • as Palux BRL20 • but with 2 cable entries

Spare Parts

No.	kg	Description
EVG-BRL-1x18W	0,22	electronic ballast unit for BRL20 1x18W, 115-350V, no dimmable

Palux
BRL20Y

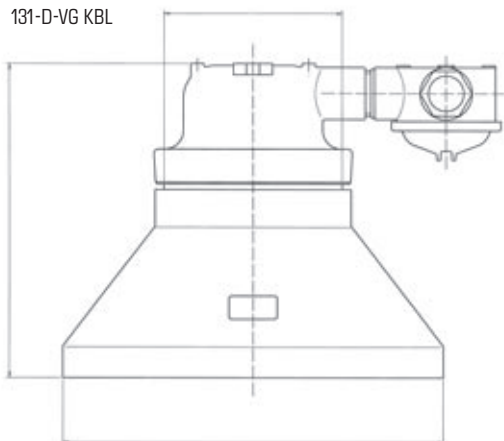


Ceiling Light E27 VG 88911-A2 and B2



Ahto
131-2-VG KBL

Ahto
131-D-VG KBL

**Technical Data**

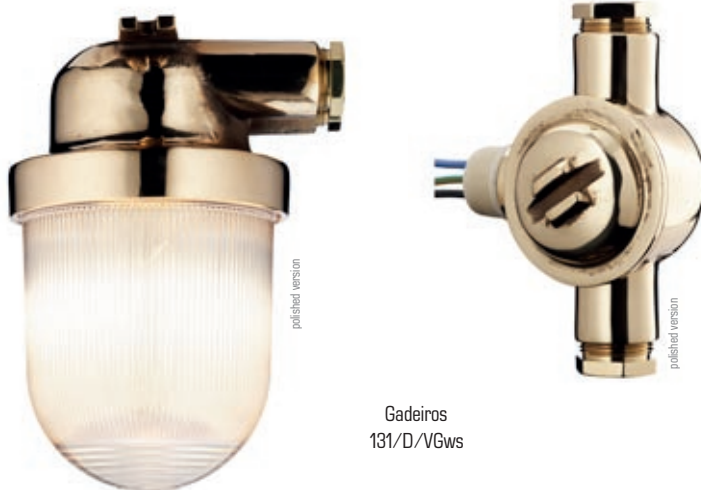
Name & No.	Diagram	Wattage	kg	Description
Ahto 131-2-VG KBL	O=	60W	2,52	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88911-B2 • with conical screen
Ahto 131-D-VG KBL	-O-	60W	2,52	

Spare Parts

No.	kg	Description
254-VG KBL	1,36	conical screen acc. to VG 88911-5 NSN: 6210-12-164-1518 / SAK-No.: 3511-09

Polished products available for an extra charge.

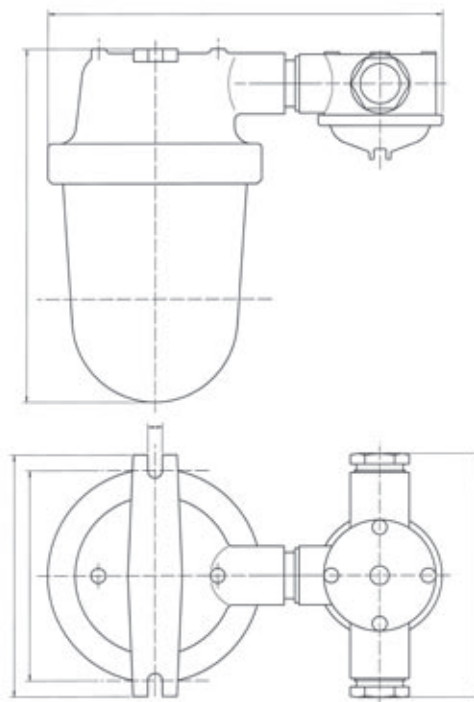




Gadeiros
131/D/VGws

Technical Data

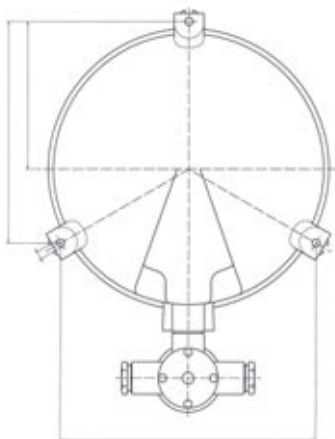
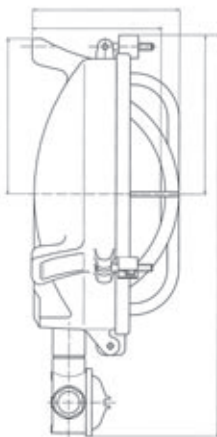
Name & No.	Wattage	kg	Description
Gadeiros 131/D/VGws	60W	1,30	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88911-A1 • covering white • NSN: 6210-12-164-1168 / SAK-No.: 3511-08
Gadeiros 131/D/VGrt	60W	1,30	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88911-A1 • covering red • NSN: 6210-12-193-1635 / SAK-No.: 3511-08
Gadeiros 131/2/VGws	60W	1,30	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88911-B1 • covering white • NSB: 6210-12-197-1877 / SAK-No.: 3511-08
Gadeiros 131/2/VGrt	60W	1,30	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88911-B1 • covering red • SAK-No.: 3511-08



Spare Parts

No.	kg	Description
154/VG ws	0,11	covering acc. to VG 88911-4-rt (red) NSN: 6210-12-157-8568 / SAK-No.: 3511-08

Polished products available for an extra charge.

**Technical Data**

Name & No.	Wattage	kg	Description
Yam 105/D/BM/kis	60W	5,80	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88913-kis • clear glass, inside sandfrosted • NSN: 6220-12-191-2501 / SAK-No.: 3511-12
Yam 105/D/BM/krt	60W	5,80	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88913-krt • clear glass, red coloured
Yam 105/D/BM/krs	60W	5,80	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88913-krs • clear glass, red coloured and inside sandfrosted

Polished products available for an extra charge.

Spare Parts on Request



polished version

Pontos
568/VG

Technical Data

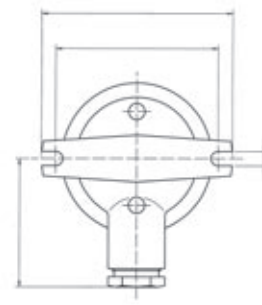
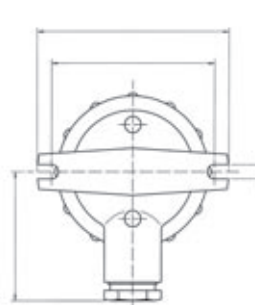
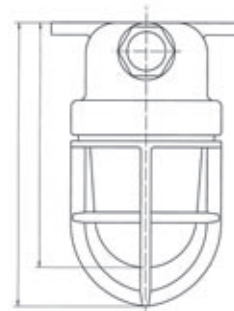
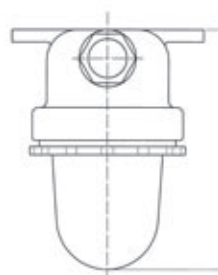
Name & No.	Diagram	kg	Description
Pontos 568/VG	-O	0,63	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88810-B-kis • clear glass, inside sandfrosted • NSN: 6210-12-137-3403 / SAK-No.: 3524-02
Pontos 568 VG/krt	-O	0,63	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88810-B-krt • clear glass, red coloured • SAK-No.: 3524-02
Pontos 569/VG	-O	0,77	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88810-A-kis • clear glass, inside sandfrosted • NSN: 6210-12-186-6907 / SAK-No.: 3524-02
Pontos 569 VG/krt	-O	0,77	<ul style="list-style-type: none"> • IP56 • ceiling light acc. to VG 88810-A-krt • clear glass, red coloured • SAK-No.: 3524-02

Polished products available for an extra charge.

Spare Parts on Request

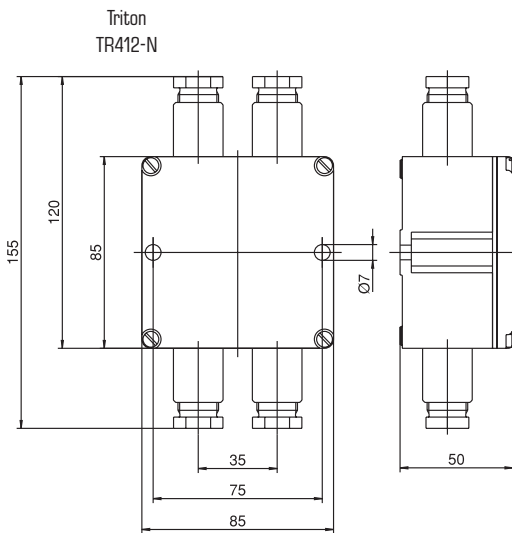
Pontos
568/VG

Pontos
569/VG





Triton
TA412-N



Triton
TR412-N

Technical Data

Name & No.	Diagram	kg	Description
Triton TA410-N	-O-	0,51	• IIP 56 • aluminium casing and cover, powder coated RAL 9018
Triton TA410a-N	O=	0,51	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TA411-N	-O=	0,57	• steatite terminal block acc. to DIN 89300 with 4 terminals up to 2.5mm ²
Triton TA412-N	=O=	0,64	
Triton TR410-N	-O-	1,13	• IP 56 • red cast brass casing and cover
Triton TR410a-N	O=	1,13	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TR411-N	-O=	1,19	• steatite terminal block acc. to DIN 89300 with 4 terminals up to 2.5mm ²
Triton TR412-N	=O=	1,26	

Spare Parts

No.	kg	Description
431	0,15	steatite terminal block acc. to DIN 89300 with terminals up to 2.5mm ²

Polished products available for an extra charge.

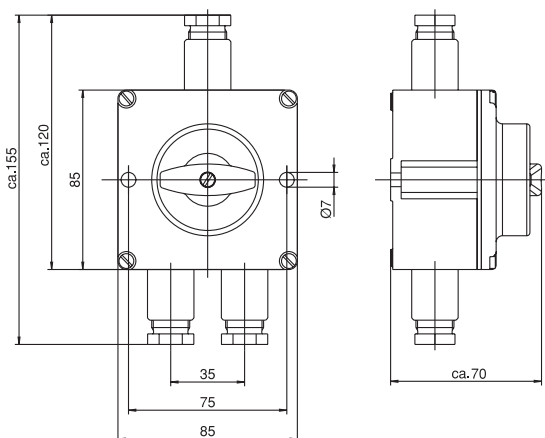
Other cable glands available upon request.

Optional with shielded device.



Triton
TA418/3-N

Triton
TA418/3-N



Technical Data

Name & No.	Diagram	kg	Description
Triton TA417-N	-O	0,54	<ul style="list-style-type: none"> IP 56 aluminium casing and cover, powder coated RAL 9018
Triton TA418-N	O=	0,61	<ul style="list-style-type: none"> cable gland: M18x1,5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TA418/3-N	-O=	0,68	<ul style="list-style-type: none"> HNA-switch interior, 2-pole cut-out acc. to DIN 89322-1/2 10A AC/DC max. 250V
Triton TA419-N	-O-	0,74	
Triton TR417-N	-O	1,16	<ul style="list-style-type: none"> IP 56 red cast brass casing and cover
Triton TR418-N	O=	1,23	<ul style="list-style-type: none"> cable gland: M18x1,5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TR418/3-N	-O=	1,29	<ul style="list-style-type: none"> HNA-switch interior, 2-pole cut-out acc. to DIN 89322-1/2 10A AC/DC max. 250V
Triton TR419-N	-O-	1,36	

Spare Parts

No.	kg	Description
406	0,10	switch interior 2-pole cut-out acc. to DIN 89322-1/2 10A AC/DC max. 250V
407	0,10	switch interior 1-pole change-over type without off-position acc. to DIN 89322-6/1 10A AC/DC max. 250V
408	0,10	switch interior 1-pole multi circuit type acc. to DIN 89322-5/1 10A AC/DC max. 250V
409	0,10	switch interior 1-pole reversing type acc. to DIN 89322-7/1 10A AC/DC max. 250V

Polished products available for an extra charge.

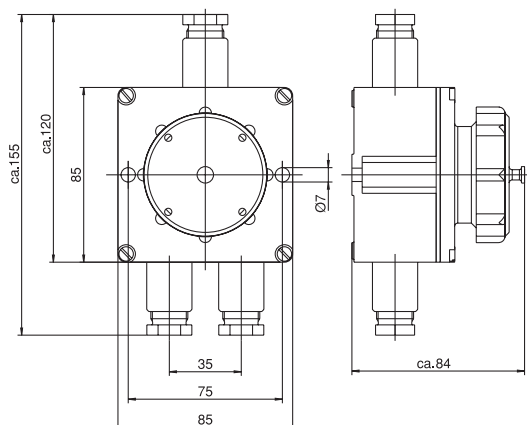
Other cable glands and switch interiors available upon request.

Optional with shiled device.

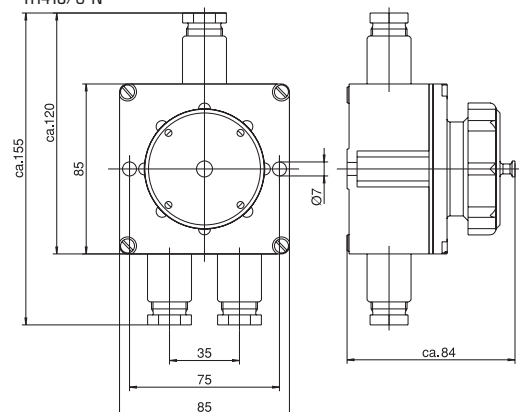


Triton
TA413/3-N

Triton
TA413/3-N



Triton
TR415/3-N



Technical Data

Name & No.	Diagram	kg	Description
Triton TA413-N	-O	0,60	• IP 56 • aluminium casing and cover, powdercoated RAL 9018
Triton TA413/D-N	-O-	0,67	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TA413/2-N	O=	0,67	• HNA steatite socket interior acc. to DIN 89320, 16A AC / 10A DC max. 150V
Triton TA413/3-N	-O=	0,74	
Triton TR413-N	-O	1,27	• IP 56 • red cast brass casing and cover
Triton TR413/D-N	-O-	1,34	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TR413/2-N	O=	1,34	• HNA steatite socket interior acc. to DIN 89320, 16A AC / 10A DC max. 150V
Triton TR413/3-N	-O=	1,40	
Triton TA415-N	-O	0,60	• IP 56 • aluminium casing and cover, powdercoated RAL 9018
Triton TA415/D-N	-O-	0,67	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TA415/2-N	O=	0,67	• HNA steatite socket interior acc. to DIN 89320, 16A AC / 10A DC max. 250V
Triton TA415/3-N	-O=	0,74	
Triton TR415-N	-O	1,27	• IP 56 • red cast brass casing and cover
Triton TR415/D-N	-O-	1,34	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TR415/2-N	O=	1,34	• HNA steatite socket interior acc. to DIN 89320, 16A AC / 10A DC max. 250V
Triton TR415/3-N	-O=	1,40	

Spare Parts

No.	kg	Description
430	0,05	plastic screw cap R1 3/4"
430/Ms	0,12	brass screw cap R1 3/4"
159TO	0,08	socket interior DIN 89320 16A AC/10A DC, max. 150V
160TO	0,08	socket interior DIN 89320 16A AC/10A DC, max. 250V

Polished products available for an extra charge.
Other cable glands and socket interiors available upon request.
Optional with shielded device.



Triton
TA518/3-N

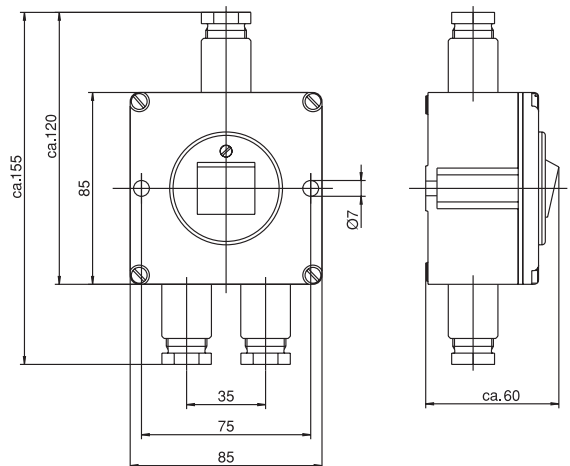
Technical Data

Name & No.	Diagram	kg	Description
Triton TA517-N	-O	0,60	<ul style="list-style-type: none"> • IP 41 • aluminium casing and cover, powdercoated RAL 9018
Triton TA518-N	O=	0,67	<ul style="list-style-type: none"> • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • rocker switch interior 2-pole cut-out, 10A AC/DC max. 250V
Triton TA518/3-N	-O=	0,74	
Triton TA519-N	-O-	0,67	
Triton TR517-N	-O	1,18	<ul style="list-style-type: none"> • IP 41 • red cast brass casing and cover
Triton TR518-N	O=	1,24	<ul style="list-style-type: none"> • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • rocker switch interior 2-pole cut-out, 10A AC/DC max. 250V
Triton TR518/3-N	-O=	1,31	
Triton TR519-N	-O-	1,24	

Spare Parts

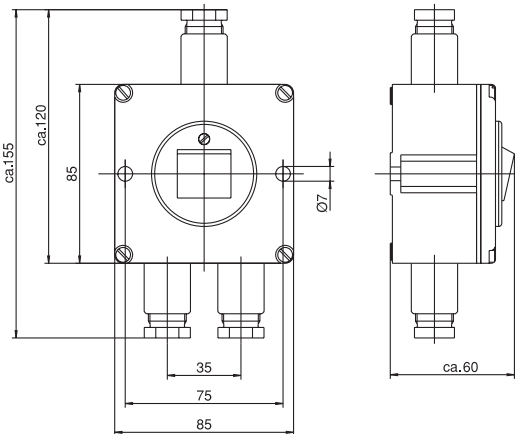
No.	kg	Description
166	0,10	rocker switch interior 2-pole cut-out 10A AC/DC max. 250V

Polished products available for an extra charge.
Other cable glands and switch interiors available upon request.
Optional with shielded device.





Triton
TA528/3-N



Technical Data

Name & No.	Diagram	kg	Description
Triton TA527-N	-O	0,60	• IP 41 • aluminium casing and cover, powdercoated RAL 9018
Triton TA528-N	O=	0,67	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • rocker push button contact interior 10A AC 250V
Triton TA528/3-N	-O=	0,74	
Triton TA529-N	-O-	0,67	
Triton TR527-N	-O	1,17	• IP 41 • red cast brass casing and cover
Triton TR528-N	O=	1,24	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • rocker push button contact interior 10A AC 250V
Triton TR528/3-N	-O=	1,31	
Triton TR529-N	-O-	1,24	

Spare Parts

No.	kg	Description
134	0,10	rocker push button contact interior 10A AC max. 250V

Polished products available for an extra charge.

Other cable glands available upon request.

Optional with shielded device.





Triton
TR515-N

Technical Data

Name & No.	Diagram	kg	Description
Triton TA515-N	-O	0,41	<ul style="list-style-type: none"> IP 41 aluminium casing and cover, powdercoated RAL 9018
Triton TA515/D-N	-O-	0,47	<ul style="list-style-type: none"> cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 schuko-socket interior 16A AC / 10A DC, max. 250V
Triton TA515/2-N	O=	0,47	
Triton TA515/3-N	-O=	0,54	
Triton TR515-N	-O	1,02	<ul style="list-style-type: none"> IP 41 red cast brass casing and cover
Triton TR515/D-N	-O-	1,08	<ul style="list-style-type: none"> cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 schuko-socket interior 16A AC / 10A DC, max. 250V
Triton TR515/2-N	O=	1,08	
Triton TR515/3-N	-O=	1,15	

Spare Parts

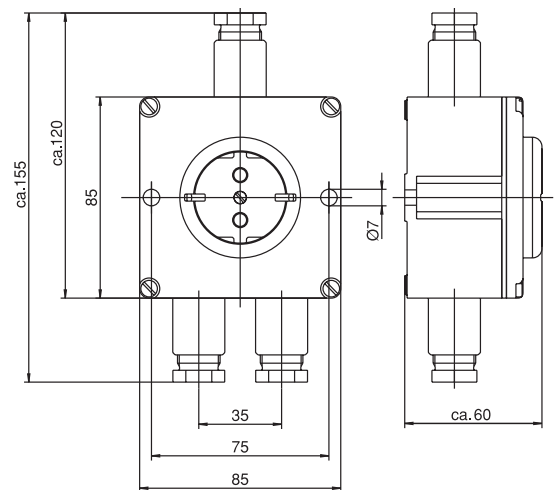
No.	kg	Description
165	0,05	schuko-socket interior 16A AC/DC max. 250V

Polished products available for an extra charge.

Other cable glands available upon request.

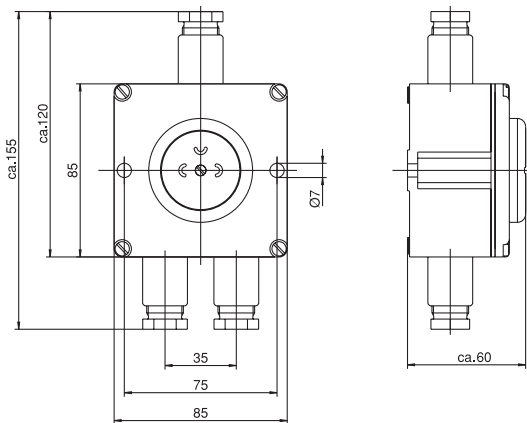
Optional with shielded device.

Triton
TA515/3-N





Triton
TA525/3-N



Technical Data

Name & No.	Diagram	kg	Description
Triton TA525-N	-O	0,42	• IP 56 • aluminium casing and cover, powdercoated RAL 9018
Triton TA525/D-N	-O-	0,49	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • nema-socket interior 15A
Triton TA525/2-N	O=	0,49	• optional 125V, 250V or 277V • distinctive, twistlock
Triton TA525/3-N	-O=	0,55	
Triton TR525-N	-O	1,02	• IP 56 • red cast brass casing and cover
Triton TR525/D-N	-O-	1,08	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • nema-socket interior 15A
Triton TR525/2-N	O=	1,08	• optional 125V, 250V or 277V • distinctive, twistlock
Triton TR525/3-N	-O=	1,15	

Spare Parts

No.	kg	Description
157	0,05	nema-socket interior 15A, 125V AC, twistlock
145	0,05	nema-socket interior 15A, 250V AC, twistlock
147	0,05	nema-socket interior 15A, 277V AC, twistlock

Polished products available for an extra charge.

Other cable glands available upon request.

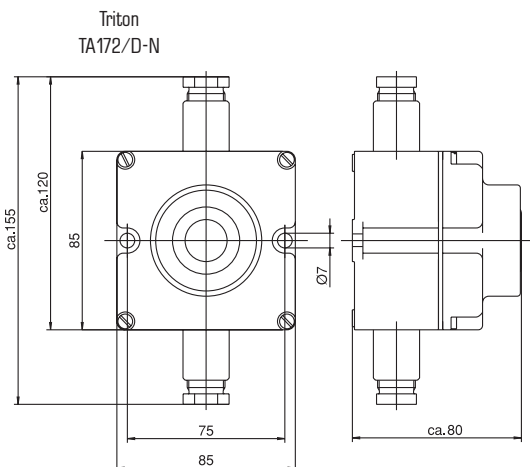
Optional with shielded device.



Triton
TA172-N

Technical Data

Name & No.	Diagram	kg	Description
Triton TA172-N	-O	1,28	<ul style="list-style-type: none"> • IP 56 • aluminium casing and cover, powdercoated RAL 9018
Triton TA172/D-N	-O-	1,35	<ul style="list-style-type: none"> • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • contact interior 16A AC 115V / 1A DC 220V
Triton TA172/2-N	O=	1,35	
Triton TA172/3-N	-O=	1,41	
Triton TR172-N	-O	0,49	<ul style="list-style-type: none"> • IP 56 • red cast brass casing and cover
Triton TR172/D-N	-O-	0,56	<ul style="list-style-type: none"> • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • contact interior 16A AC 115V / 1A DC 220V
Triton TR172/2-N	O=	0,56	
Triton TR172/3-N	-O=	0,63	



Spare Parts

No.	kg	Description
T-E	0,03	contact interior 1-pole working current
TAR-E	0,03	contact interior 1-pole working current and closed circuit current
TAA-E	0,03	contact interior 2-pole working current
TRR-E	0,03	contact interior 2-pole closed circuit current

Polished products available for an extra charge.

Other cable glands available upon request.

Optional with shielded device.

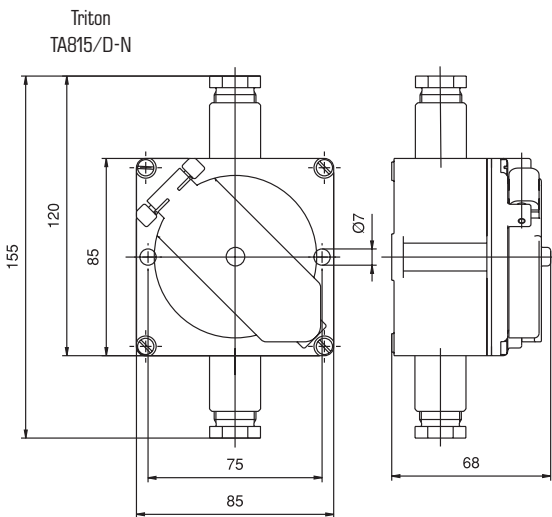




Triton
TA815/3-N

Technical Data

Name & No.	Diagram	kg	Description
Triton TA815-N	-O	0,45	<ul style="list-style-type: none"> IP 56 aluminium casing and cover, powdercoated RAL 9018
Triton TA815/D-N	-O-	0,55	<ul style="list-style-type: none"> cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 schuko-socket interior 16A AC / 10A DC, max 250V
Triton TA815/2-N	O=	0,55	<ul style="list-style-type: none"> with securable hinged lid
Triton TA815/3-N	-O=	0,62	
Triton TR815-N	-O	1,33	<ul style="list-style-type: none"> IP 56 red cast brass casing and cover
Triton TR815/D-N	-O-	1,40	<ul style="list-style-type: none"> cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 schuko-socket interior 16A AC / 10A DC, max 250V
Triton TR815/2-N	O=	1,40	<ul style="list-style-type: none"> with securable hinged lid
Triton TR815/3-N	-O=	1,46	



Triton
TA815/D-N

Spare Parts

No.	kg	Description
165	0,05	schuko-socket interior 16A AC/DC max. 250V

Polished products available for an extra charge.

Other cable glands available upon request.

Optional with shielded device.

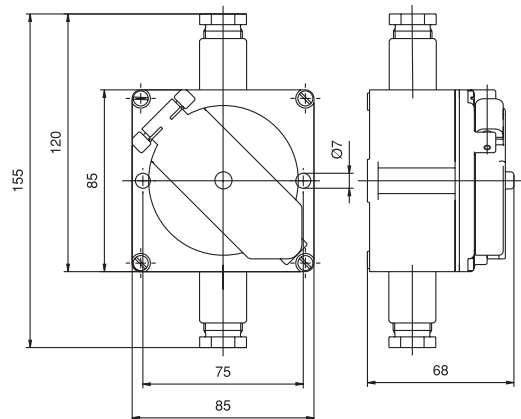


Triton
TA715/3-N

Technical Data

Name & No.	Diagram	kg	Description
Triton TA715-N	-O	0,49	<ul style="list-style-type: none"> • IP 56 • aluminium casing and cover, powdercoated RAL 9018
Triton TA715/D-N	-O-	0,55	<ul style="list-style-type: none"> • cable gland: M18x1,5 brass chromium plated acc. to VG 88773 and VG 88812 • nema-socket interior 15A
Triton TA715/2-N	O=	0,55	<ul style="list-style-type: none"> • optional 125V, 250V or 277V • distinctive, twistlock • with securable hinged lid
Triton TA715/3-N	-O=	0,62	
Triton TR715-N	-O	1,33	<ul style="list-style-type: none"> • IP 56 • red cast brass casing and cover
Triton TR715/D-N	-O-	1,40	<ul style="list-style-type: none"> • cable gland: M18x1,5 brass chromium plated acc. to VG 88773 and VG 88812 • nema-socket interior 15A
Triton TR715/2-N	O=	1,40	<ul style="list-style-type: none"> • optional 125V, 250V or 277V • distinctive, twistlock • with securable hinged lid
Triton TR715/3-N	-O=	1,47	

Triton
TA715/D-N



Spare Parts

No.	kg	Description
157	0,05	nema-socket interior 15A, 125V AC, twistlock
145	0,05	nema-socket interior 15A, 250V AC, twistlock
147	0,05	nema-socket interior 15A, 277V AC, twistlock

Polished products available for an extra charge.

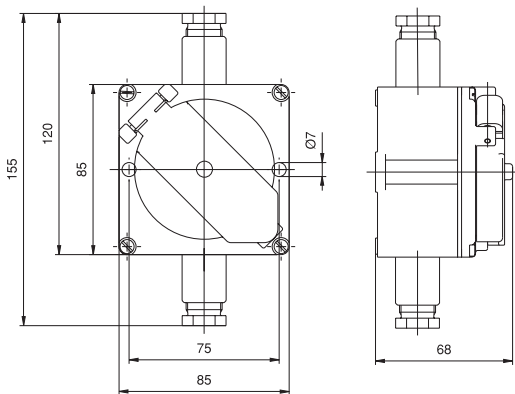
Other cable glands available upon request.

Optional with shielded device.



Triton
TA915/3-N

Triton
TA915/D-N



Technical Data

Name & No.	Diagram	kg	Description
Triton TA915-N	-O	0,46	<ul style="list-style-type: none"> • IP 56 • aluminium casing and cover, powdercoated RAL 9018
Triton TA915/D-N	-O-	0,52	<ul style="list-style-type: none"> • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • Sub-D jack
Triton TA915/3-N	-O=	0,59	<ul style="list-style-type: none"> • with securable hinged lid
Triton TA915/2-N	O=	0,52	
Triton TR915-N	-O	1,25	<ul style="list-style-type: none"> • IP 56 • red cast brass casing and cover
Triton TR915/D-N	-O-	1,31	<ul style="list-style-type: none"> • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • Sub-D jack
Triton TR915/2-N	O=	1,31	<ul style="list-style-type: none"> • with securable hinged lid
Triton TR915/3-N	-O=	1,38	

Spare Parts

No.	kg	Description
158	0,10	Sub-D interior

Polished products available for an extra charge.
Other cable glands available upon request.
Optional with shielded device.





Triton
TA137/2-N

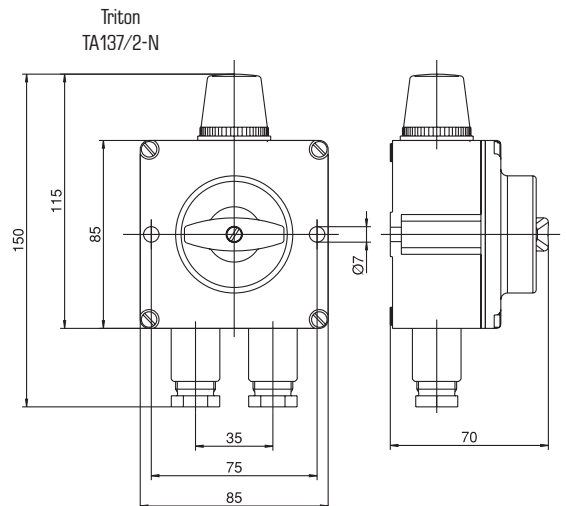
Technical Data

Name & No.	Diagram	kg	Description
Triton TA137/2-N	O=	0,60	<ul style="list-style-type: none"> • IP 56 • aluminium casing and cover, powdercoated RAL 9018 • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • with lampholder E14, glow lamp and red plastic-lampcover • HNA-switch interior 2-pole cut-out acc. to DIN 89322-1/2 10A AC/DC max. 250V
Triton TR137/2-N	O=	1,29	<ul style="list-style-type: none"> • IP 56 • red cast brass casing and cover • cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812 • with lampholder E14, glow lamp and red plastic-lampcover • HNA-switch interior 2-pole cut-out acc. to DIN 89322-1/2 10A AC/DC max. 250V

Spare Parts

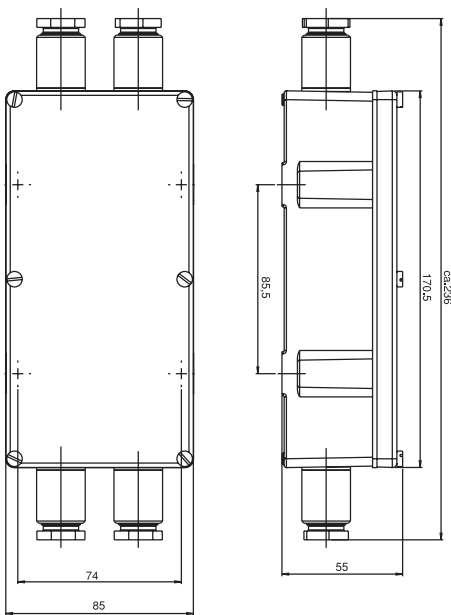
No.	kg	Description
406	0,10	switch interior 2-pole cut-out acc. to DIN 89322-1/2 10A AC/DC max. 250V,

Polished products available for an extra charge.
Other cable glands and switch interiors available upon request.
Optional with shiled device.





Triton
TA212-N



Technical Data

Name & No.	Diagram	kg	Description
Triton TA210-N	-O-	0,95	• IP 56 • aluminium casing and cover, powdercoated RAL 9018
Triton TA210a-N	O=	0,95	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TA212-N	=O=	1,15	• 2 steatite terminal blocks acc. to DIN 89300 with 4 terminals up to 2.5mm ² each
Triton TA212-N	=O=	1,15	
Triton TA212/8-N		1,35	
Triton TA212/12-N		2,40	
Triton TR210-N	-O-	1,95	• IIP 56 • red cast brass casing and cover
Triton TR210a-N	O=	1,95	• cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TR211-N	-O=	2,05	• 2 steatite terminal blocks acc. to DIN 89300 with 4 terminals up to 2.5mm ² each
Triton TR212-N	=O=	2,15	
Triton TR212/8-N	≡O≡	2,35	
Triton TR212/12-N	≡O≡	2,50	

Polished products available for an extra charge.

Other cable glands and terminal block systems available upon request.

Optional with shielded device.



Triton
TA312-N

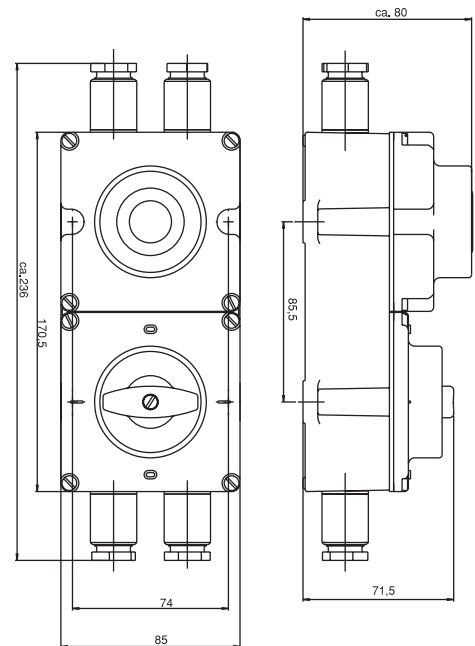
Technical Data

Name & No.	Diagram	kg	Description
Triton TA310-N	-O-	1,00	<ul style="list-style-type: none"> IP 56 aluminium casing and cover, powdercoated RAL 9018 cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TA310a-N	O=	1,00	<ul style="list-style-type: none"> combination of push button interior 16A AC / 1A DC and HNA-switch interior 2-pole cut-out acc. to DIN 89322 1/3 upon request the Triton Tri-One combination can be equipped with almost all Triton Tri-One interiors and with max. 4 cable glands acc. to VG 88773 and VG 88812.
Triton TA311-N	-O=	1,10	<ul style="list-style-type: none"> IP 56 red cast brass casing and cover cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TA312-N	=O=	1,15	<ul style="list-style-type: none"> combination of push button interior 16A AC / 1A DC and HNA-switch interior 2-pole cut-out acc. to DIN 89322 1/2 upon request the Triton Tri-One combination can be equipped with almost all Triton Tri-One interiors and with max. 4 cable glands acc. to VG 88773 and VG 88812.
Triton TR310-N	-O-	2,55	<ul style="list-style-type: none"> IP 56 red cast brass casing and cover cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TR310a-N	O=	2,55	<ul style="list-style-type: none"> combination of push button interior 16A AC / 1A DC and HNA-switch interior 2-pole cut-out acc. to DIN 89322 1/3 upon request the Triton Tri-One combination can be equipped with almost all Triton Tri-One interiors and with max. 4 cable glands acc. to VG 88773 and VG 88812.
Triton TR311-N	-O=	2,65	<ul style="list-style-type: none"> IP 56 red cast brass casing and cover cable gland: M18x1.5 brass chromium plated acc. to VG 88773 and VG 88812
Triton TR312-N	=O=	2,70	<ul style="list-style-type: none"> combination of push button interior 16A AC / 1A DC and HNA-switch interior 2-pole cut-out acc. to DIN 89322 1/2 upon request the Triton Tri-One combination can be equipped with almost all Triton Tri-One interiors and with max. 4 cable glands acc. to VG 88773 and VG 88812.

Polished products available for an extra charge.

Other cable glands available upon request.

Optional with shielded device.





Lighting for Ships

Cat. No.	NSN No.	SAK No.	VG No.
221 S	6220-12-191-4954		
222	6220-12-191-2502		
222 W	6240-AB-007-1641		
380	6220-12-334-9538		
380 + 381	6220-12-358-0878		
380 jedoch mit 452 Zweifüßfassung E27 und Leuchtmittel 100W/230V + 381	6220-12-358-0879		
101	6210-12-191-9604		
102	6210-12-137-1479		
102/2	6210-12-306-1889		
102/2 A24VG 88812	6210-AB-005-8013		
102/D	3279-30-19-0000		
105/2	6220-12-158-2313		
131-D-VGws	6210-12-164-1168		
131-D-VGrt	6210-12-193-1635		
131 + 452	6210-12-315-9427		
131-D-VG-KBL	6210-12-352-6621		
131/KBL	6210-12-358-0876		
131-2-VG KBL, A24, rote Scheibe	6210-12-335-6523		
131-2-VG KBL, A24, rote Scheibe	6210-12-358-0874		
154	6210-12-334-7149		
154 gelb m.L.	6210-12-329-3639		
154 G	6210-12-133-5448		
154/VG ws	6210-12-155-7637		
154/VG rt	6210-12-157-8568		
226	6210-12-306-1888		
232/1	5940-AB-007-7278		
232/D, VG 88822	"5940-12-193-1842		
5940-12-163-9065"	3573-01	88822	
232/2, VG 88822	5940-12-180-7442	3573-01	88822
398	6210-12-155-7642		
398 gelb	6210-12-140-1276		
398 matt	6210-12-164-1514		
398 VG	6210-12-175-7552		88810
398 rot	6210-12-164-1515		88810
399 gelb	6210-12-155-7649		
399 grün	6210-12-140-1279		
399 blau	6210-12-133-9591		
399 rot	6210-12-155-7638		
400	6210-12-155-7644		
402	6210-12-191-6487		
432	6210-AB-11-1374		
435	6210-12-191-6497		
461	3279-30-180-0000		
465	6250-12-127-4701		
531/2 inkl. E27-Fassung 453	6210-12-335-0321		
532	6210-12-155-7636		



Lighting for Ships

Cat. No.	NSN No.	SAK No.	VG No.
532 Rot	6240-12-F14-3208		
532/2	6210-12-155-7636		
Form B VG 88810: 568VG	6210-12-137-3403	3524-02	88810
Form A VG 88810: 569VG	6210-12-186-6907	3524-02	88810
568/2	6240-12-A00-4151		
569	6210-12-186-6906		
569/2	6210-12-155-7641		
569/D rot	6210-12-158-1506		
569/D	6210-12-344-6454		
"SLF218-236 (Paar Fassung G13) Art. 1200707"	6250-12-155-7634		

Equipment for Electrical Installations

Cat. No.	NSN No.	SAK No.	VG No.
100	5940-12-340-4757		
107	5940-AB-010-1962		
110	5940-12-138-3588		
110a	5940-12-145-0969		
111	5940-12-138-3592		
111a	5940-12-138-3590	3573-02	
112	5940-12-138-3589	3573-02	
112a	5940-12-188-7500	3573-02	
112 Einsatz VG 88812	5940-AB-000-8211		
113/L	5999-12-138-4126		
113/R Ms-Kappe 16A	5999-12-334-9082		
113/2/L 1/2 Ms	5999-12-195-4484	3572-06	
113/2/L Ms-Kappe 16A	5999-12-334-9079		
113/2/R 1/2 Ms	5999-12-195-4486	3572-06	
113/2/R Ms-Kappe 16A	5999-12-334-9080		
113 1/2 Ms	5999-12-195-4481	3572-06	
113/2/L Fs	5999-12-191-8574		
114	5935-12-150-5908	3572-02	
114/P	5935-12-192-0161		
115 links 1/2Ms	5999-12-138-4129		
115 rechts 1/2Ms	5999-12-138-4125		
115/2 links 1/2Ms	5999-12-195-4482	3572-06	
115/2 rechts 1/2Ms	5999-12-195-4485	3572-06	
115/D/1/2Ms	5999-12-195-4483		
116	5935-12-150-5909		
117 /1/2	5930-12-138-4073	3571-02	
118 /1/2	5930-12-136-8066	3571-02	
118 /1/2 VG 88812	5930-12-155-7657		
118/3 /1/2	5930-12-321-2664		
119 /1/2	5930-12-195-3726	3571-02	
119 /S 5/1	5930-12-136-8068		
121 Knopf rot	5930-AB-003-7437		



Equipment for Electrical Installations

Cat. No.	NSN No.	SAK No.	VG No.
124 BM	5935-12-193-5637	3572-14	
129	5935-12-191-4719		
130	5805-AB-007-1689		
135 mit Fassung B15d	5930-12-358-0877		
135 mit Fsg. B15d / Kabeleinf. D24	5930-12-334-8744		
135 2pol	5999-12-191-6093	3571-01	
136 2pol	5999-12-301-0246		
159	5940-12-169-0111	3572-01	
159	5935-12-169-0111	3572-06	
160	-	3572-01	
160	5935-12-138-3545	3572-06	
159K	-	3572-03	
160K	-	3572-03	
161	5935-12-195-7961	3572-02	
162		3572-02	
168	5930-12-321-5852		
173	5930-12-189-0337		
177	5975-12-340-0905		
178	5975-AB-007-5042		
201	5935-12-191-5681		
207	5935-12-138-3583		
207/R	5935-12-138-3581		
207/D Ms	5935-12-138-3587		
207/2 Ms	5935-12-138-3584		
207/DVG Steckdose A24	-	3572-04	
207L	5935-12-198-8231		
209 Ms	5935-12-303-0336		
210/J	5935-12-152-2969		
Stecker B24 VG 88877 (210J/VG)	-	3572-04	
211/D	5930-AB-010-3792		
211/D Ms 2pol	5999-12-191-4601	3572-05	
211/R Ms 2pol	5999-12-191-4599	3572-05	
211/L Ms 2pol	5999-12-191-4600	3572-05	
213/L Ms	5935-12-137-6514		
213/R Ms	5935-12-155-7654		
213/2/L Ms	5935-12-193-6111	3572-01	
213/2/R Ms	5935-12-193-4464	3572-01	
213/D Ms	5935-12-138-3618	3572-01	
213/D/BM	5935-12-196-8953	3572-14	
213/2/R	5935-12-137-8701		
213/2/L	5935-12-137-8702		
214 Ms	5935-12-138-3593	3572-03	
215/R	5935-12-138-3615		
215/R Ms			
215/L Ms	5935-12-138-3614		
215/2/R Ms	5935-12-193-4466	3572-01	



Equipment for Electrical Installations

Cat. No.	NSN No.	SAK No.	VG No.
215/2/L Ms	5935-12-193-4465	3572-01	
215/D	5935-12-191-6468		
215/D Ms	5935-12-190-0151	3572-01	
215/D/BM	5935-12-196-8237	3572-14	
216 Ms	5935-12-138-3594	3572-03	
228	5935-12-140-3262		
228	5935-12-140-3265		
231	5940-AA-000-6223		
250	5940-AA-000-6212		
262	5935-12-191-5680		
262 mit Unterteil von 117	2163-30-840-0000		
263 mit UT von 117	4217-31-710-0000		
264 rechts	5935-12-164-7240		
264 Einsatz VG 88812	5935-AB-000-8145		
265	5935-12-138-3578		
265E	9292-31-790-0000		
266/D	5930-12-140-5719		
267/3	5930-12-329-7664		
267/3 mit 6/2	5930-12-300-7558		
272/2	5935-12-138-3672		
273	5935-12-138-3674		
275	4316-31-770-0000		
275 roter Knopf	5930-AB-003-7437		
276/2	5930-12-334-1121		
310	5930-12-163-8309		
328/2	5930-12-186-3450		
328/D	5930-12-136-8069		
368	6210-12-190-1855		
368/2	5930-12-340-1744		
406	5930-12-169-0110	3571-02	
419	5935-12-138-3578		
422	5935-12-194-7287		
430	5935-12-340-1278		
430 Ms	5935-12-191-5682		
431	5940-12-169-0112	3573-02	
431	5940-12-169-0112	3572-01	
431/2	5940-12-334-8285		

Container Sockets

Cat. No.	NSN No.	SAK No.	VG No.
2050/St	5935-AB-007-4585		
2063	5935-AB-010-7876		
2050/L 11h RAL3000	5930-12-A03-5397		
2050/P/K 11h	5935-12-A03-4918		
2050GS/L 11h RAL3000	5935-12-A03-5401		



Equipment for Hazardous Areas

Cat. No.	NSN No.	SAK No.	VG No.
400	6210-12-191-6488		
505/2 (505)	6210-12-155-7643	3511-17	
510/3	5940-AB-000-8212		
514/2	5930-12-369-4676		
449	6250-12-172-4499		

Cable Installation

Cat. No.	NSN No.	SAK No.	VG No.
SBL 24	9292-31-820-0000		
Innenteile W10A	9292-31-840-0000		
185S-Z18 vernickelt	5975-12-196-1138		
186/S	5975-AA-004-7817		
186/PG11	5975-12-300-8990		
186/PG16	5975-12-300-8993		
186/PG16-Z10A	5975-12-196-2228		
187/S	5975-12-150-5945		
187/S mit Mutter	5975-12-180-5657		
187/N	5975-AA-004-3854		
484S-A36-galni	5975-AB-010-6137		
486S-Cr-A24	5975-AB-010-2325		
487S-Ni-A18	5975-AB-010-2418		
186S-Z16Ni	5975-12-314-5247		
187S-W8Ni	5975-12-314-7117		
186S-W8ANi	5975-12-314-7119		
186S-W14Ni	5975-12-314-7390		
185S-Z20	5975-12-162-5624		
187S-U Ni+Mu18Ni	5975-12-187-4930		
184S-Z22Ni	5975-12-312-0485		
184S-Z26Ni+Mu36Ni	5975-12-312-0490		
187S-Z10-A1Ni	5975-12-314-7115		
A24 (VG24-9)	5940-12-152-8343		

Navy Equipment

Cat. No.	NSN No.-No.	SAK No.	VG No.
MWL831	6210-12-371-6674		
Glas für MWL rot	6210-12-370-0703		
EVGK2x18WD	6250-12-362-3393		
254-VG KBL	6210-12-164-1518		
569/VG/krt	6210-12-197-1465	3524-02	
BRL20Y (Art. 8123002)	6210-12-370-0699		



Degree of Protection Against Solid Foreign Objects

First Code Number	Definition	Summary
0	-	Non-protected
1	The object probe, sphere of 50mm \varnothing , shall not fully penetrate	Protected against solid foreign objects of 50mm \varnothing and greater
2	The object probe, sphere of 12,5mm \varnothing , shall not fully penetrate	Protected against solid foreign objects of 12,5mm \varnothing and greater
3	The object probe of 2,5mm \varnothing shall not penetrate at all	Protected against solid foreign objects of 2,5mm \varnothing and greater
4	The object probe of 1,0mm \varnothing shall not penetrate at all	Protected against solid foreign objects of 1,0mm \varnothing and greater
5	Ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety	Dust-protected
6	No ingress of dust	Dust-tight

Degree of Protection Against Water

Second Code Number	Definition	Summary
0	-	Non-protected
1	Vertically falling drops shall have no harmful effects	Protected against vertically falling water drops
2	Vertically falling drops shall have no harmful effects when the enclosure is tilted at any angle up to 15° on either side of the vertical	Protected against vertically falling water drops when enclosure tilted up to 15°
3	Water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effects	Protected against spraying water
4	Water splashed against the enclosure from any direction shall have no harmful effects	Protected against splashing water
5	Water projected in jets against the enclosure from any direction shall have no harmful effects	Protected against water jets
6	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects	Protected against powerful water jets
7	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time	Protected against the effects of temporary immersion in water
8	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more severe than for numeral 7	Protected against the effects of continuous immersion in water
	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more severe than for numeral 7	

example IP 54

first code number 5 = dust-protected
second code number 4 = protected against splashing water

Attention: code citation without engagement.

General:

DOSE's products are manufactured in accordance with the relevant standards, regulations and DIN-HNA (German Institute for Standardization e. V. Standardization committee for Shipbuilding) stated in the working sheets in force.

The description on application area, the fixing of basic dimensions as well as allowed materials mentioned in the guidelines of the DIN-HNA, and DOSE's consequent realization and compliance control of the product signifies highest quality standard and precision, safety and reliability for DOSE's products.

DOSE products are internationally approved by all renowned classification societies and are, depending on type, tested where necessary.

DOSE produces and supplies equipment in accordance with defense equipment standards (VG-Norm) specifically for the particular requirements for the Federal Marines' ships and boats.

DOSE has been actively involved for decades in the design organization of the Standards Office Marines (NM) at the DIN (German Institute for Standardization e. V.) published regulations.

If not specifically stated in the text, casings are made of protective type IP 56 brass in accordance with EN 60529.

All dimensions, weights and construction details given in this catalogue are noncommittal. Please contact us if you require our scale drawing for construction purposes.

Rights reserved for technical amendments.

Cable Glands:

Unless otherwise indicated, all cable glands are in accordance with DIN 89280.

Fitted as standard to fittings in Chapter 1 is the M24 x 1,5 thread for use with armoured MGCG 3 x 1,5mm² cable, fitting Z 14, with:

Earthing cones	24-10 DIN 89345
Gasket	24-14 DIN 89349
Washer	24-15 DIN 89347

For exports unless otherwise indicated cable glands, fitting W 14, (non-armoured cable) are used; these are in accordance with the afore-mentioned DIN standards.

All non-metallic products will be equipped with plastic cable glands PG 13,5 or M20 (IP68)

If you have a non-standard requirement please include information about the external cable diameter with your order.

All exceptions are described in the design information.



Seal:

The sealing material used depends on the different operational conditions of the appliance and is chosen for durability.

Lampholder:

In general, unless otherwise indicated in the design information, all lights listed in Chapter 1 are supplied without lampholder. Where required, all lights can be supplied at additional charge with fixed lampholder.

Cylindrical Glasses/Globes:

Unless otherwise stated, all clear cylindrical glasses and structured globes are supplied with drip holes, whilst coloured cylindrical glasses and structured globes are generally supplied without drip holes. Where required, non-standard equipment can of course be supplied.

All lights which can be supplied with coloured glass are indicated in the design information.

Customisation:

The ability to produce customer-specific customisations and the speed with which these are manufactured illustrate the high level of performance of a competent partner.

Spare Parts:

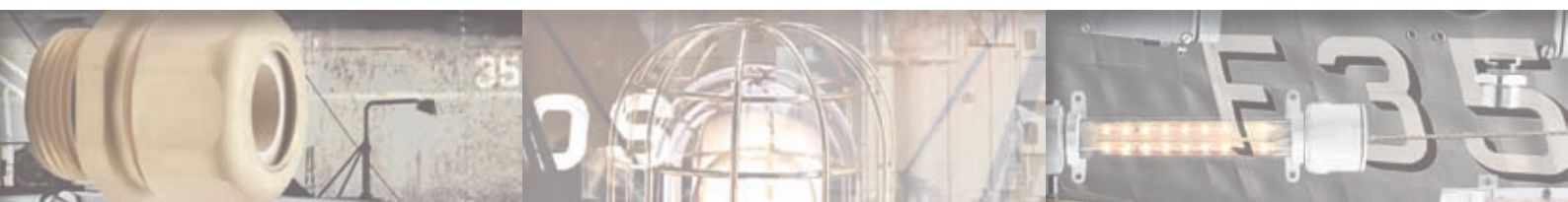
All components of our products can be supplied as spare parts.

All measurements, weights and structural information given in the catalogue are approximate.

For structural purposes please ask for our detail drawings.

We reserve the right to modify technical specifications.

Contact us...!



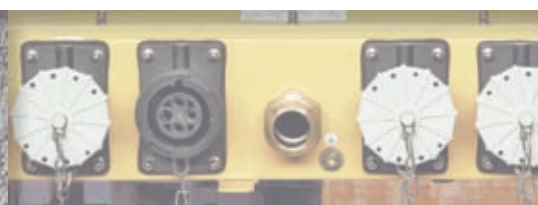






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Terms and Conditions of Delivery and Payment

1. Scope

These Terms and Conditions shall be deemed valid unless otherwise agreed in writing. **Deviating and conflicting Terms and Conditions shall not be deemed binding by us.** This shall also apply if we do not explicitly raise objection or if we carry out delivery without complaint.

2. Conclusion of Agreement

- 2.1. All quotations submitted by us are subject to change at any time.
- 2.2. All agreements, telephone calls, faxes and declarations made in connection with the conclusion of this Agreement must be legally approved and signed off by us in writing in order to assume validity.
- 2.3. Terms and Conditions of Delivery and Payment defined by us shall apply exclusively, even in the event that the contractual partner submits or approves divergent Terms and Conditions. If deviating Terms and Conditions pertaining to the conclusion of this Agreement are negotiated, they must be drawn up in writing and must be approved by us.
- 2.4. As a rule, all documents, weight data, designs, etc. provided by us are deemed **only approximate**.
- 2.5. We shall reserve the right to effect changes in design, material and similar properties at any time before delivery, provided price, delivery and functionality are not impacted to the detriment of the customer.

3. Delivery timelines

- 3.1. Delivery timelines specified in our quotations are generally applicable unless an interim stock clearance is effected.
- 3.2. Unless otherwise specified in writing, our delivery timelines are **non-binding**.
- 3.3. The delivery period specified may be extended by events beyond our control, including delayed collection.
- 3.4. Partial delivery is permissible if deemed reasonable by the contractual partner.

4. Despatch, transfer of risk

- 4.1. In the absence of specific customer instructions, despatch is effected at our considered discretion, but without necessarily guaranteeing the cheapest mode of transportation.
- 4.2. Risk is transferred to the customer once the item is despatched – even in the event of a partial delivery. All transportation, including carriage-paid delivery, is deemed to be at the customer's risk. **Transit insurance is not provided by us.**

5. Prices

- 5.1. As a rule, **prices effective on the date of delivery** apply to all business transactions, even if the quotation specifies other prices. Delivery prices are, thus, aligned with current market prices. Please refer to the respective price list for an explanation of the calculation of metal surcharges.
- 5.2. Prices are quoted ex-works and exclude packaging charges. For orders accepted that are of at least EUR 500.00 net, we undertake delivery within the Federal Republic of Germany carriage paid to the receiving location exclusive of packaging carriage charges. For orders accepted that are of at least EUR 1000.00 net, we undertake delivery within the Federal Republic of Germany carriage paid to the receiving location inclusive of packaging but exclusive of carriage charges. As a rule, we accord consignments with an order value of below EUR 50.00 net a logistic lump sum of EUR 50.00.
- 5.3. All payments by customers are to be remitted to our bank without any deductions whatsoever at the latest **30 days from the date of invoice**. We guarantee a discount of 2% on all payments received within 8 days of the date of invoice (domestic conditions apply). Discounts are not applicable to payments made by means of a bill of exchange, nor in the event of payment arrears. Sums below EUR 30.00 are payable immediately net within 8 days of the invoice being received.
- 5.4. Payments made to our account by cheque and by bills of exchange shall be deemed received only upon the issue of valid credit advice pertinent to the transaction. All bank charges, collection charges and interest rate charges are to be borne by the customer.
- 5.5. In the event of non-adherence to payment timelines, we reserve the right to levy a preferential interest rate of **3%** over and above the prevailing statutory base interest rate, and at the minimum the debit interest rate calculated by our bank.
- 5.6. Customers may be issued a refund only in the case of undisputed or legally established claims, or if defects are glaringly obvious. The customer has the right to compensation only in the case of undisputed or legally established claims.
- 5.7. In the event of an obvious decline in the financial position of the customer, we reserve the right to withdraw from this Agreement if, upon our request, the customer fails to effect a security deposit within an appropriate time period.

6. Warranty for defects

- 6.1. We are liable for defects and for the absence of warranted properties of goods inasmuch as we undertake to rectify the defective goods or to replace them with non-defective goods within an appropriate time span. **The choice between rectification of the defect and replacement delivery shall be retained by us.**
- 6.2. Our seller's warranties apply on the precondition that the customer, if deemed a merchant according to the German Commercial Code (HGB), has lodged a specific and detailed written complaint with us in consequence of visible defects in accordance with § 377 HGB within 10 days of receipt of the goods in question. Complaints pertaining to defects arising thereafter are to be similarly lodged within the same time period, calculated from the time at which they are apprehended.
- 6.3. We are bound by warranty only if the delivered goods are properly installed and put into operation in complete accordance with our instructions.
- 6.4. The customer has the right to withdraw from this Agreement or to request a reduction in prices if we are not prepared or if we are not in a position to correct the defects in question or – above all – if the correction of the defects extends beyond a reasonable time span for reasons occasioned by us.
- 6.5. We are liable for damages only in the event of intent and gross negligence as defined by legal regulations. Liability is limited to gross negligence and typically foreseeable damages, provided no basic contractual obligations are impacted, or bodily damages incurred.
- 6.6. The warranty period effective for claims and rights in respect of defects – irrespective of the legal basis upon which they arise – is one year from delivery.
- 6.7. In the event of bespoke orders, we reserve the right to over-deliver or under-deliver by up to 10%. Returns are explicitly disallowed.

7. Retention of proprietary rights

- 7.1. The delivered goods remain our property until complete payment has been effected. The goods may then be re-sold by the customer in accordance with routine business norms. The customer is, however, to assign to us in advance all claims raised against a buyer or against a third party for the respective invoiced amount arising from the re-sale. The customer is authorised to collect these claims even after their assignment. At our request, the customer is to provide details of the amount of the assigned claim and of the debtor, to provide all information necessary for collection, to submit all associated documents to us immediately and to issue written notice of the assignment to the debtor, notwithstanding our right to issue written notice of the assignment to the debtor ourselves.
- 7.2. The customer is not entitled to transfer delivered goods to a third party as security, nor to pawn them.
- 7.3. In the event that the customer violates the Terms of this Agreement – in particular by delaying payment, we are entitled to re-possess the goods without necessarily issuing notice.
- 7.4. The customer is to inform us immediately of any attachment and other interventions or claims.
- 7.5. If the goods are re-sold in conjunction with other goods that are not ours, the customer's claim against the buyer for the amount agreed between us and the customer as the delivery price is deemed assigned to us upon cessation of the Agreement.
- 7.6. In the event that goods delivered are damaged owing to faulty installation, the customer cedes the resulting claim for replacement to us.

8. Place of fulfillment – place of jurisdiction

- 8.1. Place of fulfillment for all obligations derived from this Agreement is Hamburg, provided the contractual partner is deemed a merchant according to the German Commercial Code (HGB).
- 8.2. The exclusive place of jurisdiction shall be Hamburg, provided the contractual partner is deemed a merchant according to the German Commercial Code (HGB).
- 8.3. German legislation is applicable to the Agreement between the contractual parties with the exception of the reference rules of Private International Law and the UN Convention on Contracts for the International Sale of Goods.

9. Data protection

We reserve the right to process customer data within the parameters of prevailing data protection laws.

10. Final clause

Should a clause within these Terms and Conditions of Delivery and Payment become ineffective, the validity of the remaining provisions is to remain unaffected.

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