



Navy

Searchlights	58
Floodlights	64
Outdoor and indoor lighting	70
Submarine lighting	80
Installation material	88



Searchlights

Specially adapted to the high requirements of the Navy, KARL DOSE produces searchlights that meet the current requirements in the military environment. These products represent the most advanced technology and innovative strength, meeting the highest quality standards at all times. In addition to our many years of experience, these are the qualities that make us a reliable and valued partner.





VIRGO 450 LED

For many years a large number of military fleets have set sail with the VIRGO searchlight from KARL DOSE.

The VIRGO is very popular due to its long range and proven suitability for the high requirements of the Navy.

- + Certified according to DNV and RMRS
- + In military operation in numerous regions worldwide
- + Particularly durable thanks to highest quality materials
- + Highest possible range in the LED sector
- + Individually configurable for project requirements

Technical Data

Material and color	Stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 56
Environmental temperature	-40°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz
Wattage	Max. 150 W
Range at 1lx	Approx. 5,125 m
Luminous flux	Approx. 23,200 lm
CCT (color)	6,500 K
Beam angle	1.5°; 3°; 5°; 8°

Options

Focus function	Camera	Morse function
Stabilization system	Infrared light	Sight adjustment
Bus system	Ultraviolet light	Filter discs
Loudspeakers	Additional heating	

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Searchlights

VIRGO 350 LED



VIRGO 350 LED

We adapt our VIRGO searchlights to the different purposes of the Navy. Whether morse function, ultraviolet light or built-in infrared camera - we implement your requirements.

- + Certified according to DNV and RMRS
- + In military operation in numerous regions worldwide
- + Particularly durable thanks to highest quality materials
- + Individually configurable for project requirements

Technical Data

Material and color	Stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 56
Environmental temperature	-40°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC on request
Wattage	Max. 90 W
Range at 1lx	Approx. 4,015 m
Luminous flux	Approx. 14,230 lm
CCT (color)	6,500 K
Beam angle	1.5°; 3°; 5°; 8°

Options

Focus function	Camera	Morse function
Stabilization system	Infrared light	Sight adjustment
Bus system	Ultraviolet light	Filter discs
Loudspeakers	Additional heating	

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog..



VIRGO 250 LED

After years of providing the highest level of reliability and safety for civilian shipping, our VIRGO searchlights have also been adapted to the special requirements of the Navy and enjoy high popularity.

- + Certified according to DNV and RMRS
- + In military operation in numerous regions worldwide
- + Particularly durable thanks to highest quality materials
- + Low maintenance thanks to LED technology
- + Individually configurable for project requirements

Technical Data

Material and color	Stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 56
Environmental temperature	-40°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 35 W
Range at 1lx	Approx. 2,435 m
Luminous flux	Approx. 5,245 lm
CCT (color)	6,500 K
Beam angle	1.5°; 3°; 5°; 8°

Options

Focus function	Camera	Additional heating
Bus system	Infrared light	Morse function
Loudspeakers	Ultraviolet light	Sight adjustment
Filter discs		

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Searchlights

VIRGO 192 LED



VIRGO 192 LED

The VIRGO 192 fits everywhere where space is limited. With its powerful LEDs, it is already in service on many Navy and Coast Guard speedboats.

- + Certified according to DNV and RMRS
- + In military operation in numerous regions worldwide
- + Particularly durable thanks to highest quality materials
- + Very flat design
- + Individually configurable for project requirements

Technical Data

Material and color	Stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 56
Environmental temperature	-40°C to +45°C
Input voltage	24 V DC and 12 V DC, 230 V AC and 115 V AC at 50/60 Hz on request
Wattage	Max. 20 W
Range at 1lx	Approx. 1,840 m
Luminous flux	Approx. 750 lm
CCT (color)	6,500 K
Beam angle	1.5°; 3°; 5°; 8°

Options

Bus system	Infrared light	Additional heating
Camera	Ultraviolet light	Morse function

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog..





Floodlights

As a certified company according to DIN EN ISO 9001, KARL DOSE is a valued supplier for the Navy. Specially adapted to the high requirements of Navy ships and boats, KARL DOSE produces a wide portfolio of modern LED floodlights for outdoor use.





PAVO

Developed for the Navy, the PAVO floodlight was designed for use in extreme conditions. Vibration, shock and sea water do not affect the floodlight.

- + Lightweight housing
- + All mounting options shock tested
- + EMC compatible
- + Corrosion resistant
- + In military operation in numerous regions worldwide

Technical Data

Material and color	Housing: Seawater resistant aluminum, powdercoated (RAL color by arrangement), Bracket: Stainless steel
IP protection class	IP 56
Weight	Approx. 7.5 kg
Environmental temperature	-25°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 60 W
Luminous flux	Approx. 4,415 lm
CCT (color)	5,235 K
Beam angle	10°; 28°; 62°
Dimensions	H275xW230xD165 (mm)

Options

With Swival arm	Other CCT (color)
Wall bracket	Infrared light
Horizontally adjustable	With cable
Other LED colors	

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Floodlights

AURIGA 200 LED



AURIGA 200

The AURIGA 200 is used when requirements remain high, but space is limited. It combines outstanding efficiency with reliability in any combat situation.

- + Particularly durable thanks to highest quality materials
- + Robust design
- + Low energy consumption
- + Low maintenance
- + In military operation in numerous regions worldwide

Technical Data

Material and color	Housing and bracket: stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 67
Weight	Approx. 5.1 kg
Environmental temperature	-25°C to +40°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 34 W
Luminous flux	Approx. 4,000 lm
CCT (color)	6,300 K
Beam angle	10°; 28°; 62°
Dimensions	H287xW322xD163 (mm)

Options

Other LED colors

Other CCT (colors)

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.



AURIGA 1000

Even with Navy units our Auriga 1000 is one of the most reliable floodlights in the sector. Powerful, robust and the Auriga 1000 is part of the permanent inventory of military customers.

- + Particularly durable thanks to highest quality materials
- + Robust design
- + Low energy consumption
- + Low maintenance thanks to LED technology
- + In military operation in numerous regions worldwide

Technical Data

Material and color	Housing and bracket: stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 67
Weight	Approx. 11.6 kg
Environmental temperature	-25°C to +40°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 65 W
Luminous flux	Approx. 8,000 lm
CCT (color)	6,300 K
Beam angle	10°; 28°; 62°
Dimensions	H319xW473xD245 (mm)

Options

Other LED colors

Other CCT (colors)

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Floodlights

HERCULES 3



HERCULES 3

In the civil sector, HERCULES 3 is often used to precisely illuminate distant areas. Its performance has not gone unnoticed by military operators, which is why the HERCULES 3 has also been further developed to meet military requirements.

- + High luminosity due to high power LEDs
- + Excellent heat management
- + Robust design
- + Resistant to seawater
- + In military operation in numerous regions worldwide

Technical Data

Material and color	Housing: seawater resistant aluminum powdercoated (RAL color by arrangement), Bracket: stainless steel
IP protection class	IP 67
Weight	Approx. 11.7 kg
Environmental temperature	-40°C to +40°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 230 V DC
Wattage	Max. 160 W
Luminous flux	Approx. 18,000 lm
CCT (color)	6,300 K
Beam angle	32°
Dimensions	H349xW417xD215 (mm)

Options

With cable

Other CCT (colors)

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.





Outdoor and indoor lighting

For several decades now, KARL DOSE has been manufacturing equipment in accordance with the defense equipment standard (VG). In addition to the established delivery program for supplying the Navy, a new generation of radar-optimized outdoor lighting and a new series of indoor lighting have recently been developed. Of course with modern LED technology.





APUS LED

The intelligent design of the APUS impresses, for instance, with recesses in the housing that enable a pleasant uplight. Narrow, flat, lightweight and luminous, it can be mounted even in the tightest environments.

- + Flat design and light weight
- + Particularly durable thanks to highest quality materials
- + Vibration resistant
- + Low energy consumption
- + Smart light distribution with uplight

Technical Data

Material and color	Housing: stainless steel powdercoated (RAL color by arrangement); Cover: polycarbonate diffuse
IP protection class	IP 56
Weight	Approx. 2 kg
Environmental temperature	-30°C to +40°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz
Wattage	Max. 25 W
Luminous flux	Approx. 3,700 lm
CCT (color)	4,000 K
Beam angle	240°
Dimensions	H90xW112xD683 (mm)

Options

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Wall light

POSEIDON MWL LED



POSEIDON MWL LED

The POSEIDON family also known as the Navy Wall Light is a luminaire designed specifically for and with the Navy. The unique construction is designed to help deflect radar signals. Our POSEIDON is already sailing around the world.

- + In military operation in numerous regions worldwide
- + Radar optimized
- + Housing available with different beam angles
- + Particularly durable thanks to highest quality materials
- + Powerful and low-maintenance thanks to LED technology
- + Individually configurable for project requirements

Technical Data

Material and color	Stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 56
Weight	Approx. 5.4 kg
Environmental temperature	-25°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 17 W
Luminous flux	Approx. 1,052 lm
CCT (color)	4,000 K
Beam angle	130°
Dimensions	H330xW350xD330 (mm)

Options

Other LED colors

LED replacement kit

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.



LUPUS LED

As a reeling or gangway light, the Lupus is for areas around heli-copter landing pads. The special shape prevents pilots from being dazzled. The installed LEDs are ideally suited for use with night vision equipment.

- + Especially small, space-saving design
- + Dimmable
- + Particularly durable thanks to highest quality materials
- + Low weight

Technical Data

Material and color	Stainless steel powdercoated (RAL color by arrangement)
IP protection class	IP 67
Weight	Approx. 0.5 kg
Environmental temperature	-30°C to +40°C
Input voltage	230 V AC at 50/60Hz
Wattage	Max. 4 W
Luminous flux	180 lm
CCT (color)	510 nm
Beam angle	60°
Dimensions	H119xW164xD114 (mm)

Options

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Ceiling lights

AHTO LED



AHTO LED

Installed on many navy fleets, the luminaire with cone aperture is a proven ceiling luminaire. The brass housing in combination with LED technology promises a particularly long service life.

- + In military operation in numerous regions worldwide
- + EMC compatible
- + Low energy consumption
- + Long lifetime
- + LED upgrade with replacement kit

Technical Data

Material and color	Housing: brass (RAL color by arrangement) Cover: clear macrolon"
IP protection class	IP 56
Weight	Approx. 1.2 kg
Environmental temperature	-25°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 8 W
Luminous flux	Approx. 800 lm
CCT (color)	4,000 K
Beam angle	130°
Dimensions	H103xW116xD116 (mm)

Options

Heat junction box	Satin finish cover
Other LED colors	With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.



GADEIROS LED

The GADEIROS is a ceiling luminaire designed according to VG 88911-A1/B1. The conventional illuminant version is still installed on many ships. A developed LED replacement kit allows an uncomplicated conversion to LED.

- + Proven robust design
- + Low energy consumption
- + Long lifetime
- + Increased protection against shock and vibration
- + LED upgrade with replacement kit

Technical Data

Material and color	Brass housing with diffused polycarbonate cover
IP protection class	IP 56
Weight	Approx. 0.8 kg
Environmental temperature	-40°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 8 W
Luminous flux	Approx. 800 lm
Beam angle	120°
Dimensions	H128xW116xD116 (mm)

Options

LED replacement kit

Conventional illuminant

Other LED colors

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Ceiling lights

PONTOS LED



PONTOS LED

PONTOS the little sister of GADEIROS can be used in places where space is limited, but light is still needed. Due to protection class IP 56 it has a versatile usability.

- + Robust design due to brass housing and optional grid
- + Modern LED technology
- + No ballast necessary
- + Versatile use thanks to insensitive materials
- + Increased protection against shock and vibration
- + Conversion of existing luminaires with LED replacement kit

Technical Data

Material and color	Brass housing with diffuse glass cover (RAL color by arrangement)
IP protection class	IP 56
Weight	Approx. 0.7 kg
Environmental temperature	-40°C to +45°C
Input voltage	230 V AC, 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 4.5 W
Luminous flux	Approx. 400 lm
CCT (color)	4,000 K
Beam angle	120°
Dimensions	H137xW80xD100 (mm)

Options

LED replacement kit	Conventional illuminant	With cable
Other LED colors	Grid	3 fixing points

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.



YAM LED

Tradition meets modernity with YAM flat ceiling light. Using LED technology in a flat brass housing, this light is a popular choice for decorative areas.

- + Space-saving due to flat construction
- + Decorative
- + Conversion of existing luminaires by LED replacement kit

Technical Data

Material and color	Brass housing with clear glass cover
IP protection class	IP 56
Weight	Approx. 4.6 kg
Environmental temperature	-25° to +45° C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 17 W
Luminous flux	Up to 1,600 lm
Beam angle	140°
Dimensions	H298xW222xD122 (mm)

Options

LED replacement kit

Conventional illuminant

Other LED colors

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Ceiling light

PORT SAID LED



PORT SAID 504 LED

With its extremely robust housing and protective grid, the PORT SAID is rock solid. In addition to other Ex-relevant areas, it is often found on board in paint lockers

- + Very robust
- + High explosion protection class
- + Latest Ex Standard
- + Variable usable

Technical Data

Ex protection class	Ex II 2 G Ex db eb IIC T6 Gb
Certificate	BVS 20 ATEX E 086 X
Material and color	Housing and grid made of powdercoated brass (special ATEX coating, RAL color by arrangement) with diffused glass cover
IP protection class	IP 56
Weight	Approx. 4.1 kg
Environmental temperature	-20° to +40° C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 10 W
Luminous flux	Approx. 900 lm
CCT (color)	5,700 K
Beam angle	180°
Dimensions	H217xW150xD160 (mm)

Options

Other LED colors

Other glass colors

With cable

Other CCT (colors)

Through wiring

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.





Submarine lighting

Around the world, many submarines of international Navy customers are already setting sail with lighting from KARL DOSE. As these lightings will be modernized in the coming years, KARL DOSE has recently focused on developing practical refit solutions that allow replacement and the associated modernization of the existing lightings as simple as possible.





NEREUS LED

This retrofit light based on special LED technology is designed for use in submarines. The LED unit allows quick retrofitting by mounting the new lights on the existing base.

- + Simple installation and maintenance
- + Homogeneous light pattern
- + LEDs and circuit board with very low heat generation
- + LED unit for indirect light
- + Conversion of existing luminaires by LED replacement kit

Technical Data

Material and color	Housing made of powdercoated stainless steel (RAL color by arrangement) with diffused polycarbonate cover
IP protection class	IP 56
Weight	Approx. 4 kg
Environmental temperature	-25° to +45° C
Input voltage	230 V AC and 115 V AC at 50/60 Hz, 220 V DC
Wattage	Max. 15 W
Luminous flux	Approx. 2,100 lm
CCT (color)	5,000 K
Beam angle	120°
Dimensions	H140xW344xD120 (mm)

Options

Dimmable

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Submarine light

HYLIA LED



HYLIA LED

The HYLIA is a compact submarine light that is designed to be integrated into a KARL DOSE bus system. On customer request, it can be equipped with an optional combat light.

- + Long lifetime thanks to good heat management
- + Homogeneous light pattern
- + Switch to combat light

Technical Data

Material and color	Housing: powdercoated, seawater resistant aluminum (RAL color by arrangement) with diffuse polycarbonate cover
IP protection class	IP 56
Weight	Approx. 1.8 kg
Environmental temperature	-35°C to +70°C
Input voltage	24 V DC, 220 V DC
Wattage	Max. 20 W
Luminous flux	Approx. 2,000 lm
CCT (color)	4,800 lm
Beam angle	120°

Options

Dimmable

Connection to bus system

With cable

Other LED colors

Additional combat light

Ranges and luminous flux were measured or calculated under laboratory conditions.
The actual values depend on environmental factors such as rain or fog.



OKEANOS LED

The ceiling light, specially designed for submarines, is equipped with an additional combat light. It is suitable for recessed or surface mounting.

- + Light intensity adjustable
- + Extra combat light
- + Homogeneous light pattern
- + Simple installation and maintenance

Technical Data

Material and color	Housing: powdercoated stainless steel (RAL color by arrangement) with diffuse polycarbonate cover
IP protection class	IP 43
Weight	Approx. 3.5 kg
Environmental temperature	-25°C to +45°C
Input voltage	230 V AC and 115 V AC at 50/60 Hz; 220 V DC, 24 V DC
Wattage	Max. 15 W
Luminous flux	Max. 1,500 lm
CCT (color)	4,000 K; Combat light 527 nm or 625 nm
Beam angle	120°
Dimensions	H109xW393xD250 (mm)

Options

Other LED colors

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Submarine light

NAMAKA LED



NAMAKA LED

Our NAMAKA ceiling light creates a very homogeneous illumination output and is used as a certified ceiling or wall light in a wide range of areas.

- + Homogeneous light pattern
- + Large illumination area thanks to wide beam angle
- + Compact design
- + Low energy consumption

Technical Data

Material and color	Housing: powdercoated stainless steel (RAL color by arrangement) with diffuse polycarbonate cover
IP protection class	IP 56
Weight	Approx. 1.9 kg
Environmental temperature	-20°C to +50°C
Input voltage	230 V AC and 115 V Ac at 50/60 Hz; 220 V DC, 24 V DC
Wattage	Max. 5 W
Luminous flux	475 lm
CCT (color)	3,800 K
Beam angle	140°
Dimensions	H81xW373xD105 (mm)

Options

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.



NEPTUN II LED

The NEPTUN II battery room luminaire appeals with its compact design. NEPTUN II is engineered for narrow spaces in submarines. The innovative LED technology enables a homogeneous light pattern and optimum thermal management.

- + Certified according to ATEX and IECEx
- + Compact, flat design, for narrow spaces
- + Long lifetime thanks to excellent heat management
- + Homogeneous light pattern
- + Illuminant without rare earths

Technical Data

Ex protection class	II 2G Ex db eb IIC T6
Certificate	ATEX: BVS 21 ATEX E 084 X, IECEx: BVS 21.0087X
Material and color	Housing made of seawater-resistant aluminum, powder-coated (RAL color by arrangement)
IP protection class	IP 56
Weight	2.3 kg
Environmental temperature	-20°C to 50°C
Input voltage	230V AC and 115 V AC at 50/60 Hz, 24 V DC
Wattage	Max. 15 W
Luminous flux	Approx. 1,878 lm
CCT (color)	5,300 K
Beam angle	140°
Dimensions	H88xW216xD130

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.

Battery room light

APOLLO LED



APOLLO LED

We developed our APOLLO for the latest submarine generations, which are equipped with lithium batteries. No explosion protection is required.

- + Compact, extremely flat design for narrow spaces
- + Long lifetime thanks to good heat management
- + Homogeneous light pattern
- + Illuminant without rare earths

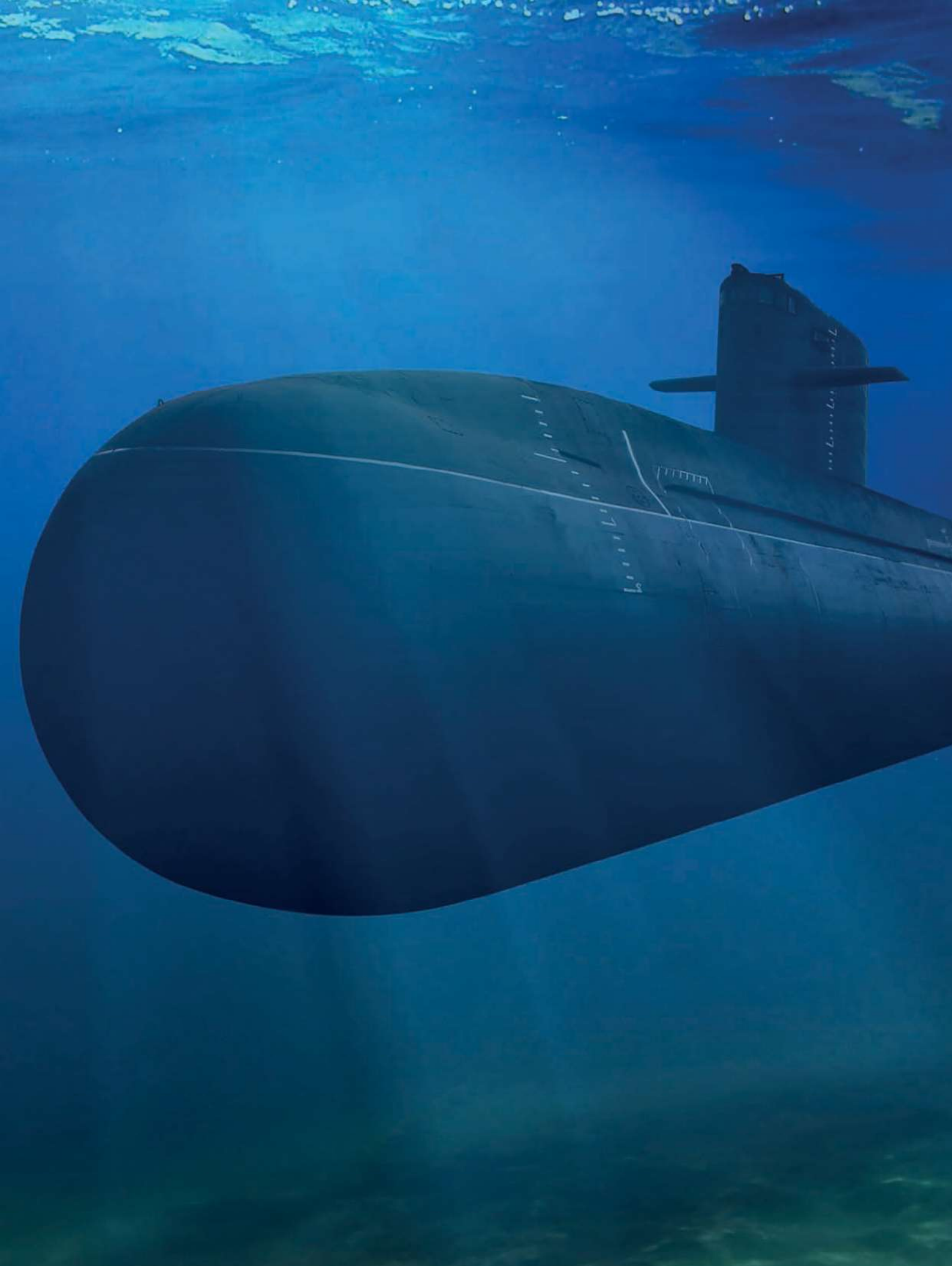
Technical Data

Material and color	Housing made of seawater resistant aluminum, powdercoated (RAL color by arrangement)
IP protection class	IP 56
Weight	Approx. 1.3 kg
Environmental temperature	-25°C to +45°C
Input voltage	24 V DC
Wattage	Max. 15 W
Luminous flux	Approx. 2,180 lm
CCT (color)	5,000 K
Beam angle	120°
Dimensions	H29xW338xD110 (mm)

Options

With cable

Ranges and luminous flux were measured or calculated under laboratory conditions. The actual values depend on environmental factors such as rain or fog.





Installation material

Our TRITON series covers the entire range of installation material. Military customers have the choice between junction boxes, push buttons, HNA switches, rocker switches, as well as HNA, Schuko and Nema sockets made of aluminum or brass. Multiple combinations are available on request. The mounted cable entries are manufactured according to VC standards.

