



Certificate No:
TAE00004EB

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
Multi-purpose luminaire 2010

Issued to
WISKA Hoppmann GmbH
Kaltenkirchen, Germany

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Vibration class	B
Degree of protection	C(IP66/68)
Temp. class	D
Voltage (V)	110-230VAC/24VDC
Suitable for Hazardous areas	No

Issued at **Hamburg** on **2021-12-08**

This Certificate is valid until **2026-12-07**.

for **DNV**

DNV local station: **Hamburg – CMC North/East**

Approval Engineer: **Uwe Supke**

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Arne Schaarmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

The 2010 multi-purpose luminaire is used for lighting in indoor and outdoor areas on ships. The luminaire is available in different versions: with one cable connection for a single connection or two cable connections for through-wiring and with a 110-230VAC or 24VDC power supply. The luminaire consists of a plastic housing in which the electrical components are located and an electrical connection.

Technical data:

Light type	LED
Operating voltage [V]	110 to 230 VAC / 24VDC
Lamp power [W]	Approx. 15
Housing material	Plastic
Colour	Black
Dimensions [mm]	238x168x69mm
Weight [kg]	0,85kg
Ingress protection	IP66/68
Appliance class	2
Dimmable	No
Suitable for open deck	Yes

Application/Limitation

Installation instruction of the manufacturer to be followed.

Location classes:

Temperature class:	D
Humidity class:	B
Vibration class:	B
EMC class:	B
Enclosure class:	C

Type Approval documentation

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, December 2019.

Applicable tests according to Class Program CP-0398, January 2021

Marking of product

The products to be marked with:

- Manufacturer name
- Model name
- Serial number
- Power supply ratings
- Degree of protection

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample test and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE