

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)

Lighting Fixture for Replenishment at Sea HIRAS green and HIRAS white

Issued to

LINKSrechts Ingenieurgesellschaft mbH
Seevetal, Germany

is found to comply with

DNV GL 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 GL.

Vibration class A

Enclosure class C

Class n/a

Temp. class D

Voltage class 24 V DC

Ex class n/a

Issued at **Hamburg** on **2017-05-19**

This Certificate is valid until **2022-05-18**.

DNV GL local station: **Hamburg**

for **DNV GL**

Approval Engineer: **Maik Gagern**

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Duy Nam Le
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.



Product description

Light Fittings

Type 1229-00X-001 HIRAS (green)

Rated voltage: 24 V DC
Rated power: 7 W
Ingress protection: IP56
Operating temperature: -25...+45°C

Type 1229-00X-003 HIRAS (white)

Rated voltage: 24 V DC
Rated power: 7 W
Ingress protection: IP56
Operating temperature: -25...+45°C

Application/Limitation

Light Fitting for Replenishment at Sea

Installation and operating instructions of the manufacturer shall be observed.

Type Approval documentation

Tests carried out

DNV GL Class Guideline DNVGL-CG-0339, Edition 2016-11
DNV GL Class Program DNVGL-CP-0398, Edition 2015-12

Marking of product

Name of Manufacturer
Model Name
Serial No.
Power Supply Ratings

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:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and 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