DNV·GL

Certificate No:
TAE0000410

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
6161 / 2 ...

Issued to
R. STAHL Schaltgeräte GmbH
Waldenburg, 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	**C**
Degree of protection	**IP 66**
Temp. class	**D**
Voltage (V)	**See Page 2**
Suitable for Hazardous areas	**See Page 2**

Issued at **Hamburg** on **2020-07-08**

This Certificate is valid until **2025-07-07**.

for **DNV GL**

DNV GL local station: **Augsburg**

Approval Engineer: **Maik Gagern**

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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.

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Product description

Optical Flash Beacon

6161/2-61-*21	Power supply 12...48V DC; 24V...42V AC, 50/60Hz
6161/2-41-*21	Power supply 60...80V DC
6161/2-31-*21	Power supply: 110...127V AC, 50/60Hz
6161/2-11-*21	Power supply: 230V AC, 50/60Hz

* Lens colour
Flash frequency: 1Hz

Explosion protection:** Ex II 2G/D
Ex db eb IIC T5/T6 Gb
Ex tb IIIC T85°C/T100°C Db

Application/Limitation

This Certificate is issued based on DNV GL Class Programme DNVGL-CP-0338, Edition 2018-09.
This Type Approval is valid for installation on ships contracted for construction before 1st of January 2022.
Maker´s instructions are to be observed.
**Note: All details about electrical explosion protection mentioned in this certificate are for information only. For relevant binding information the corresponding Certificate of Conformity with regard to electrical explosion protection, issued by a recognised Authority, shall be observed.

Location Classes:

Vibration:	C
Humidity:	B
Temperature:	D
EMC:	A

Type Approval documentation

Tests carried out

Applicable tests according to DNV GL Class Guideline DNVGL-CG-0339, Edition November 2016.

Marking of product

Maker’s trademark
Type designation
Rated Voltage
Electrical explosion protection: Type of protection and marking according to the applicable Certificate of Conformity **

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