

# TYPE APPROVAL CERTIFICATE

Certificate no.: **TAA00002GU** Revision No:

This is to certify:

that the Fire Technical Ancillary Equipment

with type designation(s)

Optical Flash Beacon CWB-ATEX 310 06 ......

issued to

# Pfannenberg GmbH Hamburg, 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.

Temperature D
Humidity B
Vibration C (2.3g)
EMC A
Enclosure C

Issued at Høvik on 2024-10-28

This Certificate is valid until 2029-10-27.

DNV local unit: Hamburg – CMC North/East

Approval Engineer: Maik Gagern

for **DNV** 



Digitally Signed By: Schaarmann, Arne Location: DNV SE Hamburg, Germany Signing Date: 2024-11-21

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 USD 300 000.

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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.



Job ID: **262.1-032190-2** Certificate no.: **TAA00002GU** 

Revision No: 1

# **Product description**

Optical Flash Beacon series CWB-ATEX 310 06

• Power supply: 230 V AC, 50/60 Hz (310 06 10)

110 V...127 V AC, 50/60 Hz (310 06 13)

60 V...80 V DC (310 06 58)

24 V...42 V AC, 50/60 Hz, 12 V...48 V DC (310 06 90)

Flashing: 1 Hz, 5JDegree of protection: IP66

• Explosion protection: II 2G Ex db eb IIC T6 / T5 Gb

II 2D Ex tb IIIC T85 °C / T100 °C Db

# **Application/Limitation**

This Certificate is issued based on DNV Class Programme DNV-CP-0338, Edition 2021-09. 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.

Requirements according Resolution A.1021(26) Code on Alerts and Indicators shall be observed.

Location Classes:
Vibration: C
Humidity: B
Temperature: D
EMC: A
Enclosure: C

# Type Approval documentation

• Documentation and test reports acc. to DNV TAC records File No. 262.1-032109

#### **Tests carried out**

Applicable tests according to DNV GL Class Guideline DNVGL-CG-0339, Edition August 2021

## **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**

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