DNV·GL

Certificate No:
TAA00002GU

TYPE APPROVAL CERTIFICATE

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 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.

Temperature	**A**
Humidity	**B**
Vibration	**C (2.3g)**
EMC	**A**
Enclosure	**Required protection according to DNV GL Rules shall be provided upon installation on board**

Issued at **Hamburg** on **2019-10-28**
This Certificate is valid until **2024-10-27**.
DNV GL local station: **Hamburg CMC**

Approval Engineer: **Didier Girardin**

for **DNV GL**

Joannis Papanuskas
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.

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Job Id: **262.1-032190-1**
Certificate No: **TAA00002GU**

Product description

Optical Flash Beacon Flashing lights: CWB-ATEX Type 310[5] 06[4] **[3] *[2] *** [1]

Art. N°.		**CWB-ATEX Type 310 06 **- * *****			
Lens [6] colour	Rated voltage	230 V AC 50 Hz / 60 Hz	110–127 V AC 50 Hz / 60 Hz	60–80 V DC	24–42 V AC / 12–48 V DC
yellow		310 06 10 3 000	310 06 13 3 000	310 06 58 3 000	310 06 90 3 000
amber		310 06 10 4 000	310 06 13 4 000	310 06 58 4 000	310 06 90 4 000
red		310 06 10 5 000	310 06 13 5 000	310 06 58 5 000	310 06 90 5 000

Nomenclature: CWB-ATEX Type 310[5] 06[4] **[3] *[2] *** [1]

[5] 310 : Product group
[4] 06 : Serie CWB ATEX (Flashing approx 1 Hz, 5 joule)
[3] ** : Power supply
[2] * : Lens colour yellow, amber, red, green, blue, clear
[1] *** : Lens material version [000=Polycarbonate] ; [300=MX])

Note:
[6] Article numbers for other colours not listed

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification**/** Special Condition for Safe Use listed in valid Excertificate issued by a notified/recognized Certification Body

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

Type Approval documentation

Hidden

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016

Marking of product

The products to be marked with:
model name
manufacturer name
serial number or production order number

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or 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 tests 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