DNV·GL

Certificate No:
TAE000040J

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
FL 70

Issued to
Glamox Marine and Offshore GmbH
Bremen, 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**
Degree of protection	**IP 66/67**
Temp. class	**D**
Voltage (V)	**220 to 254 Volt AC**
Suitable for Hazardous areas	**n/a**

Issued at **Hamburg** on **2020-07-09**

This Certificate is valid until **2025-07-08**.

for **DNV GL**

DNV GL local station: **Hamburg CMC**

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.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id: **262.1-033231-1**
Certificate No: **TAE000040J**

Product description

LED Floodlight	FL70
Number of lamps	2 LED lamps (both implemented into 1 electronic module, not replaceable separately)
Light source	LED
Rated voltage:	220 to 254 Volt AC
Frequency:	50-60Hz
Ingress protection:	IP 66/67
Suitable for open deck:	Yes

Application/Limitation

This certificate is issued based on DNV GL Class Programme DNVGL-CP-0338, Edition 2018-09.
Makers instructions are to be observed.
Location Classes:

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

Type Approval documentation

Tests carried out

Applicable tests according to DNV GL Class Programme DNVGL-CP-0398, Edition December 2015, and DNV GL Guideline DNVGL-CG-0339, Edition December 2019.

Marking of product

- 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:

- 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