

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
LED Floodlight Type FL 40 LED

Issued to

Glamox Aqua Signal GmbH
Bremen, Germany

is found to comply with
DNV GL rules for classification – Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Vibration class C
Enclosure class C
Class NA
Temp. class D
Voltage class 24V DC and 110-240V AC/DC
Ex class NA

This Certificate is valid until **2020-03-31**.

Issued at **Hamburg** on **2016-09-12**

DNV GL local station: **Bremerhaven**

Approval Engineer: **Andrea Grün**



Digitally Signed By: Rinkel, Marco
for **DNV GL**

Signing Date: 2016-09-15

Location: Hamburg - for Duy Nam Le

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

LED Floodlight

Type FL 40 LED

Light source 1 x LED COB
Light colour 4000K or 5000K
Material brackets stainless steel 316L
Voltage 110-240VAC/DC and 24 V DC
Power consumption 98,8W; 104VA
Ingress protection IP X6/7(30min, 1m)
Option dimmable version

Application/Limitation

Instructions from maker given in the instruction manual to be followed.

Type Approval documentation

Test Reports:

- Aqua Signal TR-11355:2015, TR-11365:2015 Rev. 0.a
- EMC testhaus 140814-AU01+E01:2015
- EMC testhaus 150468-AU01+E01:2015 dated 18-02-2015

Dwg BA29 -00:18.02.2015

FL40-LED Floodlight product info December 2014

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, November 2015.

(IP rating, Cold, Dry Heat, Damp Heat, Vibration, High Voltage, Insulation Resistance, Complete EMC examination for each voltage class.)

Marking of product

FL40 8000 8x0 12-24 zz and FL40 10000 8y0 110-240 zz

x: 24V DC light colour, digit 4 or 5
y: 110-240V AC/DC light colour in K, digit 3, 4 or 5
zz: beam shape SB, NB, MB, WB

Periodical assessment

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 tests (if not available tests according to applicable standards 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.

Assessment to be performed at least every 2.5 year.

END OF CERTIFICATE