Certificate No:
TAS000032D

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Underwater Lights

with type designation(s)
L1 3010HD Angles 0, 5, 10, 15, 20, 25
L2 2010HD Angles 0, 5, 10, 15, 20, 25
L1 Series Stainless Steel 316L Cofferdams
L2 Series Stainless Steel 316L Cofferdams
L1 Series Aluminium 6082 Cofferdams
L2 Series Aluminium 6082 Cofferdams

Issued to
OceanLED marine Ltd.
Hinckley, **United Kingdom**

is found to comply with
IEC 60529 Ed. 2.2 (2013-08) Degrees of protection provided by enclosures (IP Code)

Application :

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

Issued at **Hamburg** on **2021-06-01**
This Certificate is valid until **2026-05-31**.
DNV local station: **Manchester**

Approval Engineer: **Inga-Kristin Schröder**

for **DNV**

Boris Altmayer
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 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 300,000 USD.

Product description

These Underwater Lights are certified as watertight appliances for use in the hull of vessels classed by DNV, covering pressure resistance of the Underwater Light body for installation in steel structures in marine and offshore use.

Application/Limitation

1) The present certificate is based on the documentation listed below and is valid only for a construction and material as specified in the approved drawings and the given instructions.
2) Inspections and survey procedures are to be performed as required by the Rules and Regulations of DNV.
3) The mounting location and details remain subject to examination and approval for each individual project and are to be submitted by the yard or design office to DNV prior to installation on board.
4) The degree of protection provided by enclosure is IP X8, as tested.
5) The manufacturer's recommendations and instructions regarding location and operation must be observed. The operation of the light is limited to the (permanently) submerged condition of the lens.
6) The materials as given in the drawings are acceptable for use in DNV vessels, provided the material is suitable for the hull in which the appliance is fitted. Aluminium materials must be coated with corrosion protection in addition.
7) One type of cofferdam is provided with a cable gland, acceptable as secondary watertight barrier, under condition that it holds a valid DNV type approval for the purpose of being fitted in watertight boundaries. When a pipe is welded to the cofferdam for leading the cable, the pipe must lead up above the bulkhead deck, or, where no damage stability calculations apply, above the freeboard deck.

Type Approval documentation

TA-21-00997 – Rev A L-Series

Tests carried out

Hydraulic IP X8 test carried out at manufacturer's workshop 2015-12-16 in the presence of DNV surveyor.

Marking of product

n/a

Periodical assessment

DNV surveyor is to be given permission to perform a Certification Retention Survey at any time during the validity period of this certificate.