

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Water level detectors

with type designation(s)
GL-10 Water Ingress Sensor

Issued to

KONGSBERG MARITIME AS AVD SKONNERTVEGEN
Ranheim, Norway

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773**,

item No. MED/8.1. SOLAS 74 as amended, Regulation II-1/22-1, II-1/25 & XII/12, IMO Res. MSC.188(79), IMO Res. A.1021(26) and IMO MSC.1/Circ.1464 Rev.1.

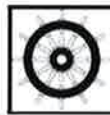
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-06-26**.

Issued at **Høvik** on **2019-06-27**

DNV GL local station:
Trondheim

Approval Engineer:
Ståle Sneen



Notified Body
No.: **0575**



for **DNV GL AS**

Digitally Signed By: Trond Sjøvåg
Location: DNV GL Høvik, Norway

on behalf of

Roald Vårheim
Head of Notified Body



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-004127-5**
Certificate No: **MEDB00005G5**

Product description

GL-10 Water Ingress Sensor (IP68 20x24h/20m).
For installation as water level detector in hold, ballast and dry spaces according to SOLAS XII Reg. 12.

Application/Limitation

Inspection and approval concerning intrinsic safety and mechanical protection is to be carried out in each case.

Cleaning is to be carried out after each cargo unloading for sensors in cargo holds.

Ex installations to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Ex-certification is not covered by this certificate and the following paragraph, which is for information only, is based on information received from the manufacturer, but not verified by DNV GL.

Information on Ex-Certification received from manufacturer – Not verified by DNV GL		
Equipment	Marking	Certificate No.
GL10/...-CL...	Ex ia IIC T5 Ga, Ta: -25°C to +85°C	Nemko 05ATEX1010

The equipment is found to comply with following location/application dependent requirements (for definition of each of the location classes, see below the table):

EQUIPMENT	TEMPERATURE	VIBRATION	EMC	ENCLOSURE
GL-10 Water Ingress Sensor	D	A	B	IP68

Definition of the location classes with reference to relevant standards:

- Temperature D – Cargo holds (-25°C to +70°C) (ref. IEC 60092-504:2016 Table 1 item 6-7)
- Vibration A – General locations (ref. IEC 60092-504:2016 table 1 item 10)
- EMC B – All locations including bridge and deck zone (ref. IEC 60092-504:2016 table 1 item 13-20)
- Enclosure IP68 – Submerged (20x24h/20m) (ref. IEC 60529 Ed. 2.2 – 2013-08).

Type Examination documentation

GL-10 label, Doc. No. E-2639 Rev. H, dated 2017-04-25
GL-10 dimensional sketch, Doc. No. GL-1974 Rev. E, dated 2019-01-23
GL-10 assembly drawing, Doc. No. GL-2173 Rev. D, dated 2012-11-28
GL-10 data sheet, Doc. No. P-GL10/CE Rev. M, dated 2017-09-18.
GL-10 installation instructions, Doc. No. 444030 Rev. B, dated 2019-04-12
Statement of conformity Order No. 30057 by Nemko, dated 2004-11-26
Statement of compliance Test Report: 29881 by Nemko, dated 2004-12-16
Test Report – Electromagnetic Compatibility, Order No. 30057 by Nemko, dated 2004-11-25
Test Report – Environmental Tests, Report No. AM1469/30057 by Nemko, dated 2005-05-20
DNV Technical Report No 2006-3115, dated 2006-02-24 rev. No. 01
EMC Test Report, Report No. 186898/2 by Nemko, dated 2011-09-27

Tests carried out

The system has been tested according to the following standards:

- IEC 60092-504:2016,
- IEC 60529 Ed. 2.2 (2013),
- IMO Res. MSC.188(79),
- IMO MSC.1/Circ.1291.



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Marking of product

For identification to this type examination certificate the products shall be marked with:

- Manufacturer's name or trade mark
- Type designation
- Mark of Conformity (wheel mark), followed by
 - identification number of the NoBo involved in production control (MED D)
 - the year the mark is affixed
 - Example: 0575/2019