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Certificate No: LR25227549TA
Issue Date: 05/09/2025
Expiry Date: 04/09/2030

## **Type Approval Certificate**

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer KLAY-INSTRUMENTS B.V.

Address NIJVERHEIDSWEG 5., Dwingeloo, 7991 CZ, Netherlands

**Type** Transmitters/Transducers

**Description** Series 8000, 8000-SAN, 8000-Cable, 8000-SAN-Cable, CER-8000, Hydrobar-

EXTD, Hydrobar-Cable and Hydrobar-Cable-FR

Series 2000, 2000-SAN, 2000-Cable, 2000-SAN-Cable, CER-2000, 2000-

Hydrobar-Cable, 2000 Hydrobar-EXTD and Hydrobar-I-Cable

**Trade Name** Electronic pressure and level transmitters

**Application** Marine application for use in Environmental Categories: ENV1, ENV2, ENV3 and

ENV5 as defined in Lloyd's Register Type Approval Scheme, Test Specification

Number 1, July 2024.

**Specified Standard** Manufacturer's specification

**Additional Tests** Immunity10V / M till 6 GHz

fx < 108MHz, Hence Radiated Emission test performed till 1GHz only.

## Ashwinikumar Mhamal

Electrical & Control Technical Manager -Africa, Middle East & India to Lloyd's Register Marine and Offshore India LLP

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

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## **Type Approval Certificate**

**Other Conditions** 

Both for hazardous area II 1 G Ex ia IIC T4 Ga or II 2 D Ex ib IIIC T100 C Db or Ex ec IIC T4 Gc

Type Approval does not eliminate the need (as required by LR Rules) the requirements for further review or for the product to be further inspected and/ or surveyed to be installed in ships classed or intended to be classed with LR.

If the specified standards are amended during the validity of this certificate, the product is to be reapproved prior to it being supplied to vessels to which the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Marine and Offshore India LLP of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** LR2024439TA

The Design Appraisal Document TSO-25-040982-E-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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