Certificate No: LR25311568TA
Issue Date: 05/10/2024
Expiry Date: 04/10/2029

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	**Meiyo Electric Co., Ltd..**
Address	485 Nanatsushinya, Shimizu-ku, Shizuoka-shi, Shizuoka, 424-0066, Japan
Place of Production	Meiyo Electric Co., Ltd.. 485 Nanatsushinya, Shimizu-ku, Shizuoka-shi, Shizuoka, 424-0066, Japan
Type	Transmitters/Transducers
Description	PTR-HD, PTR-HS PTR-S, PTR-SD, PTR-2SD PTR-SB, PTR-SC, PTR-SCD, PTR-LCD PTR-L, PTR-LD, PTR-LD-1, PTR-LD-2, PTR-LD-3, PTR-2LD PTR-LC PTR-LN7, PTR-2LN7, PTR-FN, PTR-FD PTR-M, PTR-M-1, PTR-M-2, PTR-2M, PTR-M-S, PTR-M-D PTR-MN, PTR-MB PTR-A11, PTR-A11A, PTR-M-A PTR-SDA, PTR-LN7A PTR-TD
Trade Name	Thermo-resistance bulb

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Masaharu Nakayama

Electrical & Control - Senior Specialist to
Lloyd's Register Group Limited
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Type Approval Certificate

Application

Marine and offshore applications for use in environmental categories:-
- ENV2, ENV3, ENV4 and ENV5 for PTR-LD* and PTR-TD
- ENV2, ENV3 and ENV4 for PTR-HD, PTR-HS and PTR-LCD
- ENV2 and ENV4 for the others

as defined in LR Type Approval System Test Specification No. 1, 2024 including Notice No.1 for the Specification where the Test Specification is satisfactory for the intended operation.

* The subject products are shown in Drawing No. P-33032-02, P-33032-03, P-33032-04, P-33032-05, P-33032-07, P-33032-08, P33032-09 and P-33032-10 in the Design Appraisal Document LR25311568TA

Ratings

For PTR-LD**
Measurement temperature range : -196°C to +100°C
Terminal box ambient temp. range : -25°C to +70°C

For PTR-TD
Maximum measurement temperature : +700°C

For the others
Measurement temperature range: -200°C to +800°C
Class: A or B

Protection: IP66 for PTR-LD, PTR-TD, PTR-A11 and PTR-A11A, IP56 for the others

** The subject products are shown in Drawing No. P-33032-02, P-33032-03, P-33032-04, P-33032-05, P-33032-07, P-33032-08, P33032-09 and P-33032-10 in the Design Appraisal Document LR25311568TA

Additional Tests

Low temperature test at-25°C
Enclosure test to IP66 for PTR-LD, PTR-TD, PTR-A11 and PTR-A11A, IP56 for the others

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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 Group Limited of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2001811TA-02

The Design Appraisal Document LR25311568TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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