Certificate No: LR2001544TA
Issue Date: 21/11/2019
Expiry Date: 20/11/2024

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	**Nippon Hakuyo Electronics, Ltd.**
Address	2-40-7, Higashi-Kanagawa, Kanagawa-ku, Yokohama-shi, 221-0044, Japan
Place of Production	Nippon Dry-Chemical Co., Ltd 2-2, Okajima Aza Genjiyama, Fukushima, 960-8201, Japan
Type	Fire Detection Alarm Systems
Description	Fire Detection and Alarm System
Trade Name	FF-1520 Series
Application	Marine and offshore applications for use in the environmental categories ENV2 and ENV3 and on the"Bridge and deck zone" for radiated emissions, conducted emissions and immunity to conducted ratio interface tests as defined in LR's Test Specification No.1-2019.
Specified Standard	Manufacturer's Drawings and Operation Manuals; The International Convention for the Safety of Life at Sea (SOLAS), 1974 as amended, Chapter II-2, Part C, Regulation 7; IMO Resolution MSC.98(73)-FSS code chapter 9

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71 Fenchurch Street, London, EC3M 4BS, UK

Toshihiro Shigeno

Innovation / Type Approval Coordinator and
Senior Surveyor to Lloyd's Register Group Ltd
A member of the Lloyd's Register Group

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Ratings	See Appendix
Other Conditions	As for safe type such as intrinsically safe, this certificate does not verify the safety for explosive gas atmosphere.

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

The Design Appraisal Document No. LR2001544TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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