

NIPPON KAIJI KYOKAI

Certificate

OF APPROVAL

FOR AUTOMATIC DEVICES AND EQUIPMENT



Certificate No. TA12561M

Manufacturer:

DURAG GmbH

Place of Manufacturing

Kollastrasse 105, 22453 Hamburg,

Germany

Product description:

Compact Flame Monitor

Model:

D-LX 200 and D-LX 720 series

Approval No.:

12A037

Specification & documents:

As shown on the attached sheet (-1/2)

Testing items & approval conditions:

As shown on the attached sheet (-2/2)

THIS IS TO CERTIFY that the above mentioned model of the product has been type approved in accordance with the requirements specified in Chapter 1, Part 7 of Guidance for the approval and type approval of materials and equipment for marine use and relevant Society's Rules.

This certificate is valid until 4 October 2017.

Issued at Tokyo on 5 October 2012.

T. Narisawa

General Manager

Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:

1. Ratings:

Power Supply: DC 24V

2. Component and reference drawing:

Type	Drawing No. (Housing)	Drawing No. (Electric)
D-LX 200	LX200.00.21.00.n,	LX200.01.14.00.n, LX200.01.10.00.n,
D-LX 200 XX-XX/MP	LX200.00.02.01.n	LX200.01.11.00.n, LX200.02.14.00.n, LX200.02.10.00.n, LX200.02.11.00.n,
D-LX 200 XX-XX	LX200.00.02.02.n	LX200.03.14.00.n, LX200.03.10.00.n,
D-LX 720 XX-XX/MP	LX720.00.02.01.n	LX200.03.11.00.n, LX200.04.14.00.n, LX200.04.10.00.n, LX200.04.11.00.n,
D-LX 720 XX-XX	LX720.00.02.02.n	LX200.00.20.02.n

3. Test reports, etc.:

Test Report No. 08/8044-7 (06.08.08)

Test Report No. 4.5/0732/08 (29.05.2008)

Test Report No. 07/7163-3 (Dec. 21, 07)

Test Report No. 10-L-02188-01 (4 November 2010)

Test Report No. 11-3575 (15 June 2011)

Test Report No. 10-3145 (29 October 2010)

Temperaturetest_VAF_220708_EN.doc (22.07.08)

Test Report No. C-F 1387-00/09 (2009-01-30)

Test Report No. C-F 1387-01/10 (2010-11-19)

Test Report No. 12/12087-2 (Sep. 19, 2012)

Translation of page 37 of PA-LX 200 for High Voltage Test (28.09.2012) with

quality system record (27.09/12)

Operating Instructions for Compact Flame Monitor Item number

119 619 (07.02.2012)

Testing items & approval conditions:

1. Testing items:

Applied testing items are marked with X.

ENVIRONMENTAL TESTS		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test		X
Inclination test		--
Cold test (Temperature -50°C × 2.5 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		X

2. Approval conditions:

The product is not allowed to be installed in the bridge and on open decks.