Certificate No: LR2545125TA
Issue Date: 23/04/2025
Expiry Date: 22/04/2030

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	**Nabtesco Corporation Marine Control Systems Company**
Address	1617-1 Fukuyoshidai 1-chome Nishi-ku, Kobe-shi,, 651-2413, Japan
Place of Production	Nabtesco Marinetec Co Ltd 29-1, Gupyeong-ro, Saha-gu, Busan, 49454, South Korea
Place of Production	Nabtesco Marine Machinery (Shanghai) Co., Ltd. Building No.5, Lane 777, YuanDong Road, Fengxian Country, Shanghai, China
Place of Production	Nabtesco Corporation Marine Control Systems Company 1617-1 Fukuyoshidai 1-chome Nishi-ku, Kobe-shi,, 651-2413, Japan
Type	Regulating Valves
Description	Valves control the fuel injection valves and the exhaust valves of electronically controlled engines
Trade Name	FIVA-H-45-C, FIVA-H-60-C, ELFI-V-20-C, ELFI-V-30-C, ELFI-B-30-C, ELVA-H-20-O, ELVA-H-30-O, FIVA-H-45-C-G, ELFI-B-45-C, WIVA-H-45-S, WIVA-H-60-S, ELFI-B-20-S, ELFI-V-20-C, ELFI-V-30-C & ELFI-B-30-C
Application	For use in electronic controlled diesel engine

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Yasushi Sawada

Engineering - Machinery - Lead Specialist to
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A member of the Lloyd's Register group

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Type Approval Certificate

Specified Standard Manufacturer's specification

Ratings

For hydraulic unit:

- Maximum operating pressure : 31.5 MPa
- Ambient temp : 20 ~ 60 ℃
- Oil temperature : 20 ~ 50 ℃

For pilot valve:

- Maximum operating pressure : 35 MPa
- Viscosity : 15 ~ 400 mm2/s
- Ambient temp. : -15 ~ 60 ℃
- Oil temperature : -15 ~ 60 ℃

Other Conditions The stroke sensor and linear servo valve are not covered by this type approval certificate.
Refer to certificates for the stroke sensor and linear servo valve No. LR22363781TA and LR2001789TA-05 respectively.
The valid reports of the audit assessment of the Production Quality Assurance system (PQA) are to be retained for each place of production.

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: LR2003079TA-02

The Design Appraisal Document LR2545125TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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