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Certificate No: LR22500154TA Issue Date: 10/01/2023 Expiry Date: 09/01/2028

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 Eagle Industry Co., Ltd. Marine Division

Address 2-13-23, Shinhama, Arai-cho, Takasago-shi, Hyogo, 676-0008, Japan

Place of Production Eagle Industry Co., Ltd. Kure Plant

8-1, Showa-cho, Kure-shi, Hiroshima, 737-0027, Japan

Type Stern Tube Seals

Description Water lubricated stern tube seal - mechanical face seal(s) construction,

incorporating an inflatable ring

EVK series: one working seal carrying one spare seal on shaft

EVK2RT series: tow working seals in tandem

Trade Name EVK series

Application Water lubricated stern tube seal for propeller shafts

Specified Standard Lloyd's Register (LR) Rules and Regulations for the Classification of Ships, Part

5, Chapter 6, July 2022

Ratings Nominal seal size range (mm) : $50 \sim 690$ (EVK), $110 \sim 690$ (EVK2RT)

Minimum shaft diameter (mm): 41 (EVK), 101 (EVK2RT)

Maximum shaft diameter (mm): 700

Yasushi Sawada

Lead Surveyor to Lloyd's Register Group Ltd A member of the Lloyd's Register group

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Note: EVK (standard), EVK2RT (tandem seal)

Additional Tests Representative samples tested in accordance with the producer's documents

Nos. ISEVK-008 and 14ME-006E.

Other Conditions Where the seals are intended to be installed on a ship classed or intended to be classed with LR, the following conditions of acceptance will be applicable:-

1. The seals are to be found to function to the attending LR Surveyor's satisfaction when fitted and tried under working conditions.

 The diagrammatic plans showing sea water and compressed air piping systems are to be separately submitted for individual installations by shipbuilders for approval.

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

Previous Version: 08/10003(E3)

The Design Appraisal Document LR22500154TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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