



TYPE APPROVAL CERTIFICATE
No. MAC150423PU

This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	Sterntube seals
<i>Type</i>	KEMEL COMPACT SEAL KEMEL CX KEMEL DX
<i>Applicant</i>	EAGLE INDUSTRY CO., LTD. 2-13-23, Shinhama, Arai-cho, Takasago-shi 676-0008 Hyogo-Ken JAPAN
<i>Manufacturer</i>	EAGLE INDUSTRY CO., LTD.
<i>Place of manufacture</i>	2-13-23, Shinhama, Arai-cho, Takasago-shi 676-0008 Hyogo-Ken JAPAN
<i>Reference standards</i>	Part C, Chapter 1 Section 7 of RINA Rules
<i>Reference documents</i>	RINA TYPE APPROVAL SYSTEM

Issued in **BUSAN** on **December 1, 2023**. This Certificate is valid until **November 30, 2028**



Young-Kwang Kim

RINA Services S.p.A.

This certificate consists of this page and 1 enclosure.

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KEMEL COMPACT SEAL

Reference documents

- The Eagle industry drawings no.DX-0301 & CX-0301 approved with no.PUMC-21833 on 01/12/2023.

Materials

- As per the above mentioned approved drawings.

Technical characteristics

- According to drawings.
 - 1) **CX**: Standard const. with 3 sealing rings in AFT seal and 2 sealing rings in FWD seal.
(applicable shaft diameter from 80 mm up to and including 1130 mm)
 - 2) **DX**: Double security const. with 4 sealing rings in AFT seal and 2 sealing rings in FWD seal.
(applicable shaft diameter from 110 mm up to and including 1130 mm)
- The seals are applicable on the ships having MON-SHAFT (Tailshaft Monitoring System) notation.

Fields of application

- Seals for oil lubricated propeller shaft
- Seal size ;
 - 1) **KEMEL CX** type; 125 mm to 1180 mm
 - 2) **KEMEL DX** type; 140 mm to 1180 mm

Acceptance conditions

- For each application the relevant constructional drawings are to be sent to RINA Busan office.
- The installation on board is to be made in accordance with the manufacturer's instructions.
- The acceptance of the a.m. products on board ship and other unit classed with RINA is subject to the satisfactory outcome of testing as per RINA rules.

Remarks:

- This certificate can be withdrawn in case of unsatisfactory working results of products, changes in RINA Rules or Law Acts coming into force.
- The society must be kept informed of any changes in the product characteristics.
- This certificate annuls and replaces the certificate no.MAC126218PU on 22/10/2018.



BUSAN December 1, 2023

A handwritten signature in black ink, appearing to be a stylized name or set of initials, is written below the date.