



CERTIFICATE NUMBER 22-2272503-PDA
EFFECTIVE DATE 15-July-2022
EXPIRATION DATE 14-July-2027
ABS TECHNICAL OFFICE Yokohama Engineering Services

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

EAGLE INDUSTRY CO., LTD. **MARINE DIVISION**

located at
TAKASAGO CITY

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Bearings, Line Shaft Bearing


Model KEMEL KMF, KMFN, KMS and KMSN

This Product Design Assessment (PDA) Certificate remains valid until 14-July-2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping


Takahiro Shibuya, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement

EAGLE INDUSTRY CO., LTD. MARINE DIVISION

2-13-23, SHINHAMA, ARAI-CHO

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Tier: 2 - PDA Issued

Product: Bearings, Line Shaft Bearing
Model: KEMEL KMF, KMFN, KMS and KMSN
Endorsements:

Intended Service:
Bearing for the Intermediate Shaft

Description:
KEMEL KMF and KMFN : Forced lubricating system with supply oil,
KEMEL KMS and KMSN : Self lubricating system with self contained oil bath

Rating:
1. Journal Shaft Diameter (mm); KEMEL KMF : 311 to 800, KEMEL KMFN: 661 to 890, KEMEL KMS : 161 to 890, KEMEL KMSN: 851 to 890
2. Manufacturer's specified rating for Maximum Surface Pressure:
a. Model KEMEL KMF: 1.0 N/mm²
b. Model KEMEL KMFN: 1.5 N/mm²
(for Model KEMEL KMFN when material is FCD400, Maximum Surface Pressure: 2.0 N/mm²)
c. Model KEMEL KMS: 0.8 N/mm²
d. Model KEMEL KMSN : 1.5 N/mm²

Service Restriction:
Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification of standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:
Drawing No. KEMEL KMS,KMSN & KMF,KMFN, Intermediate Shaft Bearing Drawing

Terms of Validity:
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STANDARDS

ABS Rules:
2022 Rules for Conditions of Classification, Part 1: 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
2022 Rules for Building and Classing Marine Vessel Rules: 4-3-2/1.5.1

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2022 Rules for Conditions of Classifications - High-Speed Craft, Part 1: 1-1-4/11.9, 1-1-A2, 1-1-A3, which covers the following:

2022 Rules for Building and Classing High-Speed Craft: 4-3-2/1.5.1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA