DNV·GL

Certificate No:
TAM000016N

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Stern Tube Bearing Material

with type designation(s)
Water-lubricated rubber stern tube bearings

Issued to
Kunststofftechnik Rodenberg GmbH
Rodenberg, Germany

is found to comply with
DNV GL rules for classification – Ships
DNV GL rules for classification – High speed and light craft
DNV GL rules for classification – Inland navigation vessels
DNV GL rules for classification – Yachts

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2021-03-31**
This Certificate is valid until **2026-03-30**.
DNV GL local station: **Hamburg – CMC North/East**

Approval Engineer: **Stanislav Avanesov**

for **DNV GL**

Olaf Drews
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

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Product description

Water-lubricated rubber stern tube bearings in bronze-, steel- or synthetic bush

Application/Limitation

For diameters 30 – 400mm according to manufacturer requirements

The length of the bearing depends on the diameter:

until 59mm	max 250mm
until 99mm	max 500mm
until 149mm	max 700mm
more than 150mm	max 1200mm

The length could be customized depending on the application.

Type Approval documentation

Manufacturer's descriptions, reference list and construction details,
approved with our ref.-nos. 47073/99/Lj/Kir of 1999-07-21, 096786/02/Av
of 2002-06-21 and 10-075822-ORic of 2010-07-29.

Marking of product

Product shall be marked with manufacturer’s name and type designation.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.
Periodical Assessment to be performed after 2 and 3.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

The main elements of the Periodical Assessment are to:

- Ensure that **Type Approval documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Approval documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer’s product marking and DNV GL Type Approval Certificate.

END OF CERTIFICATE