



Certificate No:
TAS000039C

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Structural Connecting Elements

with type designation(s)
WELDING BUSHING ML 380

Issued to

Quantum Controls B.V.
Nuth, Limburg, Netherlands

is found to comply with
DNV rules for classification – Ships

Application :

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

Issued at **Hamburg** on **2021-11-23**

This Certificate is valid until **2026-11-22**.

DNV local station: **Netherlands CMC**

for **DNV**

Approval Engineer: **Ansgar Gorissen**

Andree Orth
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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Form code: TA 251

Revision: 2021-03

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Product description

Welding Bushing for Foil (Wing) Stabilizer

Application/Limitation

- Loading specifications as indicated in the drawing
- Supporting as indicated in the drawing
- For each individual installation on a vessel to this class, the maximum fin force should be submitted for information.
- Welding to the ship's hull must be approved separately for each individual vessel.
- Each bushing is to be delivered with DNV material certificates.
- Surveyor is to issue DNV Product Certificate.

Type Approval documentation

Drawing 650-38-F01020-00-00 WELDING BUSHING Type ML 380

Periodical assessment

For retention of the Type Approval, DNV surveyor shall perform a survey every second year and before expire date of this certificate to verify that the conditions of the type approval are complied with.