



Certificate No:
TAS00003FC

TYPE APPROVAL CERTIFICATE

This is to certify:

That the gear box for lifesaving winch

with type designation(s)
705C

Issued to
Bonfiglioli Riduttori S.p.A.
Forlì, FC, Italy

is found to comply with
IMO Resolution MSC.48(66) as amended

Application :

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

Issued at **Hamburg** on **2022-06-16**

This Certificate is valid until **2027-06-15**.

DNV local station: **Italy/Malta CMC**

for **DNV**

Approval Engineer: **Frank Poetsch**

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 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

Gear box with multiple disc brake for winch drive, type 705C

Application/Limitation

This gear box 705C is installed in a hydraulic driven winch with multiple disc brake. When no pressure, the multiple disc brake is always applied.

This winch is used exclusively for the PALFINGER winch type LS-006WI (1300kg). The purpose of the winch LS-006WI: davit launched lifeboats and rescue boats.

Application data winch/brake:

Gearbox ratio i: 35

Hydraulic motor adaptor: REXROTH A2FE 32, 125 bar

Max. input speed: 1170 rpm

Gearbox output torque: 1926 Nm

Gearbox output speed: 33,42 rpm

Braking torque: 228 Nm

Opening pressure: 13 bar

Max. operating pressure: 50 bar

Type Approval documentation

Tests carried out

The gearbox was tested together with Palfinger winch LS-006WI according IMO Resolution MSC.81(70), amended up to MSC.323(89), Part 1, Regulation 8.1

Evaluation and test report, Palfinger Serial No. BD5100015 / Maribor SLO. Palfinger Marine Winch type: LS-006WI (wire rope 12mm), dd 2022-05-18. DNV status: Witnessed and found to comply with LSA Code Ch. VI-6.1., dd 2022-05-18

For delivery according to standards for "winches for survival craft and rescue boats", the gear unit is to be function tested according LSA Code.

Marking of product

Manufacturer's name or trade-mark and type designation.

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.

END OF CERTIFICATE