



TYPE APPROVAL CERTIFICATE
No. MAC392918CS

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

<i>Description</i>	Flexible hoses for vacuum operated sewage systems
<i>Type</i>	FLEX-PRO-VACUUM2
<i>Applicant</i>	TUBIFLEX S.P.A. STRADA TORINO 25 10043 ORBASSANO (TO) ITALY
<i>Manufacturer</i>	TUBIFLEX S.P.A.
<i>Place of manufacture</i>	STRADA TORINO 25 10043 ORBASSANO (TO) ITALY
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules

Issued in **Genoa** on **January 8, 2019**. This Certificate is valid until **January 7, 2024**

RINA Services S.p.A.
Fabio Morbioni

This certificate consists of this page and 1 enclosure



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FLEX-PRO-VACUUM2

Reference

Tubiflex drawing no. PS3770000/B approved with no. PPVT-16796 on 23/09/2013.
Qualification Test Program no. QTP PS3770000/B dated 23/07/2012.
Qualification Test Report no. QTR PS3770000/B dated 06/07/2012.

Materials/Components

External protection: square locked austenitic stainless steel flexible conduit, wall thickness 0,3 mm
Inner hose: PVC reinforced with anti-implosion steel spiral
Fittings: austenitic stainless steel, or multi-layer polypropylene, or thermo-weldable polypropylene

Technical characteristics

Size: ID 40 - 50 mm; OD 56 - 66 mm
Length: 300 to 2500 mm
Minimum bending radius: 120 mm
Pressure range: -0,4 bar to -0,55 bar
Temperature range: 10°C to 35°C

Fields of application

Vacuum operated sewage systems.

Acceptance Conditions

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 units classed with RINA is subject to the satisfactory outcome of testing as per the RINA Rules.
Installation onboard can be accepted provided that there are no exposed parts in plastic material which are not covered by metallic coating.
Hoses are to be marked with Manufacturer name or trademark and design pressure.

Remarks

This certificate annuls and replaces the previous one no. MAC238612CS of 25 September 2013.

Genoa January 8, 2019

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