Certificate no.:
TAP000035N

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Flexible hoses of non-metallic material without permanently fitted couplings

with type designation(s)
EPDM 240-24

issued to
Tristone Flowtech Italy s.r.l.
Ciriè, TO, **Italy**

is found to comply with
DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV rules for classification – Ships Pt.4 Ch.3 Rotating machinery – drivers
DNV-OS-D101 – Marine and machinery systems and equipment, Edition July 2021
DNV class programme DNV-CP-0183 – Type approval – Flexible non-metallic hoses

Application:

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

Issued at **Høvik** on **2026-03-24**
This Certificate is valid until **2031-03-23**.
DNV local unit: **Italy/Malta CMC**

for **DNV**

Approval Engineer: **Marc Avice**

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 USD 300 000.

Product description

Flexible hoses without permanently attached couplings with the following material of construction:

- Inner/outer layer : EPDM (Volvo Group Standard 412-0001)
- Reinforcement fabric: p-aramid fibers

Hose manufacturer:
Tristone Flowtech Italia srl.
Via Torina 142 – Ciriè (TO) - Italy

Application/Limitation

Design data:

Designation	Part no.	Hose ID (mm) x length (mm)	Ply	Maximum working pressure (bar)	Application
EPDM 240-24	24792431	Ø24 x 144	1	2.4	Fresh water
	24636596	Ø24 x 89			
	24636612	Ø24 x 116			

The fire-resistant flexible hoses covered by this certificate are approved for application in fresh cooling water systems of combustion engines and compressors arranged with an independent cooling system.
In addition, the flexible hoses covered by this certificate are approved for use in seawater systems on engines that are mass- or serial-produced (Category A or B1 in accordance with DNV-CP-0483), provided they are not used for single main propulsion (refer to DNV Rules Pt.4 Ch.3 Rotating machinery drivers, Sec. 1 - 2.6.3.4).

Connection of the hoses to the metallic piping system of the combustion engine shall be by double hose clamps on each side (refer to DNV Rules Pt.4 Ch.6 – Sec. 9 – 4.1.4).

Production testing

Every hose delivered under the DNV type approval scheme shall be subject to a pressure test at 1.5 times the maximum working pressure and shall be delivered with the pressure test report with reference to this type approval certificate.

Type Approval documentation

Tests carried out

Dimensional check test, change in length test, leakage test, vacuum test, burst test, cold bending test, ozone resistance test, cover adhesion test, life cycle test, fluid resistance test and fire resistance test.

Marking of product

For traceability to this Type Approval, the products are at least to be marked with:

- hose manufacturer’s name or trademark;
- date of manufacture (month/year);
- designation type reference;
- nominal diameter;
- pressure rating;
- temperature rating.

Periodical assessment

This certificate is only valid if required periodical assessments are carried out with satisfactory results.

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 DNV-CP-0338.

To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com.

Manufactured by

Tristone Flowtech Italia srl.
Via Torina 142 – Ciriè (TO) - Italy