



**Marine & Offshore
Division**

Certificate number: 12750/C0 BV

File number: ACM 135/2022/007

Product code: 2103I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

TUBIFLEX SPA
ORBASSANO -TO - ITALY

for the type of product

METALLIC HOSES (FLEXIBLE PIPES) ASSEMBLIES

DN 6 High Pressure Hose Assembly

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 15 Jul 2019

For BUREAU VERITAS,
At BV GENOA, on 15 Jul 2014,
Carlo Bozzetti



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarp.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=kfb8wgivby>

BV Mod. Ad.E 530 May 2009

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

DN 6 High Pressure Hose Assembly

1.1 Design

- Annular corrugations: One flexible tube and double metal braid as per Tubiflex Code SP.T.4755.24.006
- Helical corrugations: One flexible tube and double metal braid as per Tubiflex Code SX.T.9455.23.006
- End fittings: Straight and bent connections. The joint from welding seam to the fitting is included.

1.2 Technical Data

Size (mm)	DN 6
Working pressure (bar)	200
Testing pressure (bar)	400
Working temperature (°C)	35 max.

1.3 Material

Hose	AISI 316L / 1.4404 EN 10028-7
Braiding	AISI 304 / 1.4301 EN 10088
Ferrules	AISI 304 / 1.4301 EN 10217-7
Nipples	AISI 316L / 1.4404 EN 10272
End connections	Carbon steel galvanized

When other choices of materials are used per manufacturer's instructions, the BV agreement is to be obtained.

2. DOCUMENTS AND DRAWINGS

- Manufacturer's catalogue
- Drawing PS 3095000 Rev.B dated 03/03/2010
- Drawing PS 3595000 rev.A dated 10/02/2014

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS

Type tests performed in the manufacturer's laboratory under supervision of a Society's Surveyor:

- Burst pressure test at 5 times the design pressure

4. APPLICATION / LIMITATION

4.1 May be used on the following service on board:

- Sprinkler / Hi-Fog

4.2 They are designed exclusively for static use, with occasional movements.

4.3 The hoses are to be limited to a length necessary to provide for relative movement between fixed and flexibly mounted items of machine/equipment or systems and are only to be used in lengths up to 2 m. The hoses are to be installed in clearly visible and readily accessible locations at all times.

4.4 The hose assemblies are to be installed according to manufacturer's instructions and Bureau Veritas Rules requirements.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **TUBIFLEX SPA** in compliance with the type and the requirements described in this certificate.

5.2 This type of product is within the category IBV of BUREAU VERITAS Rule Note NR320.

5.3 BV product certificate is required.

5.4 Each hose with end fittings is to be hydraulically pressure tested to twice the maximum working pressure and provided with the manufacturer's pressure test report and conformity of production.

Place of production:

**TUBIFLEX SPA
STRADA TORINO 25
10043 ORBASSANO -TO
ITALY**

6. MARKING OF PRODUCT

Each metallic flexible hose shall be marked with at least:

- Manufacturer name or trademark
- Year of manufacture
- Maximum working pressure
- Society's brand as relevant

7. OTHERS

This approval is given with the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper method of fitting and general maintenance of the products and of the conditions of this approval.

***** END OF CERTIFICATE *****