



Certificate number: 81468/A0 BV

File number: .

Product code: 21041

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

POSEIDON MARINE SUPPLIES LTD.

PIRAEUS - GREECE

for the type of product

NON-METALLIC HOSES (FLEXIBLE PIPES) ASSEMBLIES

1SN hose assembly

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships
Bureau Veritas Rules for the Classification of Offshore Units
Bureau Veritas Rules for the Classification of Naval Ships
Bureau Veritas Rules for the Classification of Yachts

This certificate is issued to attest that Bureau Veritas Marine & Offshore 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: 16 Jan 2031

For Bureau Veritas Marine & Offshore,

At BV PIRAEUS, on 16 Jan 2026,
SPYROS KONTOULIS

This certificate was created electronically and is valid without signature



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 Marine & Offshore. 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 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 Marine & Offshore 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: <https://www.veristarpm.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=gihs3ctukx>
BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

1SN hose assembly

1.1 - Ratings

Model: 1SN			
Inner diameter (mm)	5.0	6.6	13.1
Inner diameter (inch)	3/16"	1/4"	1/2"
Design pressure (MPa)	25	22.5	16

Design temperature range (°C): -40 / +100

Design standard: EN853, GB/T3683, ISO 1436

The maximum allowable working Pressure in relation to temperature must be in conformity with manufacturer's specifications.

1.2 - Materials

Part	Material
Tube	Synthetic rubber
Reinforcement	Single layer of steel wire braided
Cover	Synthetic rubber
Fittings	Carbon Steel Q235 Brass 58-3
Ferrules	Carbon Steel Q2352

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

2. DOCUMENTS AND DRAWINGS

- Drawing N° 11914-03 Rev. 20250301 dated 23/09/2025 *1SN inner diameter 5.0 mm*
- Drawing N° 11914-04 Rev. 20250401 dated 23/09/2025 *1SN inner diameter 6.6 mm*
- Drawing N° 11914-08 Rev. 20250801 dated 23/09/2025 *1SN inner diameter 13.1 mm*
- Drawing N° FIT01 dated 07/04/22 *1/2" BSP for 1/2" hose*
- Drawing N° FIT02 dated 07/04/22 *21.8 × 14 for 1/2" hose*
- Drawing N° FIT03 dated 07/04/22 *3/8" BSP for 1/4" hose*
- Drawing N° FIT04 dated 07/04/22 *3/8" UNF for 3/16" hose (thermoplastic)*
- Drawing N° FER01 dated 07/04/22 *1/2" R1 for 1/2" hose*
- Drawing N° FER02 dated 07/04/22 *1/4" R1 for 1/4" hose*
- Drawing N° FER03 dated 07/04/22 *3/16" R1 for 3/16" hose*
- Assembling procedure N° GP-62 Rev. 03 dated 28/11/2022
- Manual of assembly and maintenance N° WIM 7.0 Rev. 2.0 dated 04/12/2025

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

3.1 - Burst type tests at 4 times the design pressure:

- Test report N° 250331 dated 31/03/2025 *performed on 3/16" 1SN with following end fittings: 3/8 UNF male*
- Test report N° 221101 dated 29/11/2022 *performed on 1/4" 1SN with following end fittings: 3/8 BSP male, 3/8 BSP male & 14 × 1.5 male, 3/8 BSP male & 3/8 female and performed on 1/2" 1SN with following end fittings: 3/4 female, 1/2 BSP male & female 21.8 × 14, female 21.8 × 14.*

3.2 - Type test reports including: Dimension test, Expansion rate test, Cold bend test, Ozone test, Interlayer adhesion and strength test:

- Test report N° 2206002 dated 23/07/2022 *performed on 1/4" 1SN*
- Test report N° 2207004 dated 23/07/2022 *performed on 1/2" 1SN*

3.3 - Type test report including following test items: Appearance, Size, Length change determination, Concentricity, Verification on pressure, Burst test, Leak test, Low temperature bending test, Ozone test:

- Test report N° 1SN-05-25MPa dated 06/03/2025 *performed on 3/16" 1SN*

3.4 - Fire resistance performed according to ISO 15540: 2016:

- Test report N° 2095.0IS0110/23 dated 30/11/2023 *performed on 1/2" size.*

- Test report N° 2096.0IS0110/23 dated 30/11/2023 *performed on 1/4" size.*

3.5 - Impulse test not performed.

3.6 - Vibration test not performed.

3.7 - Vacuum test not performed.

4. APPLICATION / LIMITATION

4.1 - May be used on the following services on board: CO2 fixed systems

4.2 - End fittings as per manufacturer's catalogue. The hoses are to be entirely assembled in the manufacturer's workshop.

4.3 - The hoses assemblies are to be installed according to manufacturer's instructions and Bureau Veritas Rules.

4.4 - Flexible hoses assemblies for essential services or containing either flammable or toxic media are not to exceed 1.5 meters in length.

4.5 - The use of metallic material is restricted according to Bureau Veritas Rules *NR 467, Pt C, Ch 1, Sec 10, Table 5* and corresponding requirements of *NR 445, NR 483 and NR 500*.

4.6 - Not to be used in case of high level of vibrations where fitted to engines, pumps, compressors and other sources of high vibrations.

4.7 - Not to be used where pressure impulses may occur.

4.8 - Not to be used as suction hose.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 - The products are to be supplied by **POSEIDON MARINE SUPPLIES LTD.** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product certificate is within the category IBV of Bureau Veritas Rule Note *NR 320*.

5.3 - Bureau Veritas product certificate is required.

5.4 - Each hose assembly is to be hydraulically pressure tested to 1.5 times the maximum working pressure and provided with the manufacturer's pressure test report and conformity of production.

5.5 - For information, **POSEIDON MARINE SUPPLIES LTD.** has declared to Bureau Veritas the following production site:

POSEIDON MARINE SUPPLIES LTD.:

6-8, Almiridos str. & Mikalis, 18540 PIRAEUS

GREECE

6. MARKING OF PRODUCT

Each flexible hose shall at least clearly and indelibly be marked with:

- Manufacturer name or logo
- Date of manufacture (month/year)
- Type designation
- Nominal Diameter
- Pressure rating
- Temperature rating
- Bureau Veritas' mark

7. OTHERS

It is **POSEIDON MARINE SUPPLIES LTD.**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

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