



# TYPE APPROVAL CERTIFICATE

Certificate no.:  
**TAP0000172**  
Revision No:  
**2**

## This is to certify:

that the **Flexible Hoses of Non-Metallic Material with Permanently Fitted Couplings**

with type designation(s)  
**PH194-05-010**

issued to

**Polyhose India Pvt Ltd.**  
**Kancheepuram Dist, Tamil Nadu, India**

is found to comply with

**ISO 15738:2019 – Ships and marine technology – Maritime safety – Gas inflation systems for inflatable life-saving appliances**

## Application:

**High-pressure hoses with permanently fitted couplings to be used in gas inflation systems for inflatable life-saving appliances.**

The certificate is valid for products not subject to DNV Classification requirements.

**Temperature range:** -45°C to 65°C  
**Max. working press.:** 153 bar(g)  
**Sizes:** DN 08

Issued at **Høvik** on **2024-01-03**

for **DNV**

This Certificate is valid until **2028-11-18**.

DNV local unit: **India**

Approval Engineer: **Maheshraja Venkatesan**

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.



## Product description

High-pressure hose [PH194-05] and hose assembly [PH194-05-010] of size DN 08 (5/16") tested according to ISO 15738:2019 for connecting gas-cylinder to the inlet manifold on inflatable chambers in gas inflation systems.

Outer diameter : 14.2 mm  
 Inner diameter : 8 mm

Hose material:

Type	Cover	Tube	Reinforcement braid
PH194-05	Polyester Elastomer. Pin Pricked.	Elastomeric core tube	High strength synthetic yarn

Couplings:

Type	Material grade	Standard
81-FANP-JCM-JCM-050606	HPb59-1 [annealed]	GB/T 5231
81-551-20651-6-5		
81-FANP-JCM-JCFX-050606		

Hose manufacturing location: Polyhose India Pvt Ltd., Kancheepuram Dist., Tamil Nadu, India

End fittings location: Powell Industrial, Unit 1, 6 Postle street, Cooper Plains, Queensland, Australia.

## Application/Limitation

This certificate is valid for the hoses as well as specific assembly of hose and coupling type as specified, assembled and delivered by the holder (named as manufacturer) of this certificate.

High-pressure hose and hose assemblies to be used in gas inflation systems for inflatable Life-Saving appliances.  
 Medium: CO<sub>2</sub>, N<sub>2</sub>, compressed air

This Type Approval certificate is not valid for designs, components, equipment, systems or products which are subject to classification by DNV.

Moisture content in CO<sub>2</sub> gas used for the hose shall be no more than 150 parts water per 1 million parts of gas by mass.

The following are excluded from the scope of approval:

- Determination of suitability of hoses for gas (CO<sub>2</sub>) inflation systems
- Evaluation of general material requirements related to IMO LSA Code

## Type Approval documentation

<u>Document No.</u>	<u>Rev.</u>	<u>Title</u>
Drawings:		
PH194-5-PWL-1-20-1	01	High pressure hose assembly with SS 9/16" UNF JIC (F)
81-551-20651-6-5	5	Coupling
81-FANP-JCM-JCFX-050606	6	Coupling
81-FANP-JCM-JCM-050606	6	Coupling
-	-	Datasheet: PH194-low temperature – R18
PH/L3/ASSY/RE-U	1	Fitting assembly procedure dated 22.08.2019
Reports:		
PH/DNV/WTC/2020-001	-	Test report dated 2020-05-14
PH/DNV/WTC/2020-002	-	Test report dated 2020-05-14
PH/DNV/WTC/2020-003	-	Test report dated 2020-05-14
20170818002	-	Test report from Bharat Test House, dated 08/08/17
PH/WTC/ 17-001, Issue no. 001	-	Test report from Polyhose, dated 06.12.17
PH/WTC/ 17-002, Issue no. 001	-	Test report from Polyhose, dated 09.12.17
CML/19-20/42655	-	Test report from Chennai Mettex Lab Pvt. Ltd., dated 26.10.2019
TR120191219001	-	Test report from BTH Test House Pvt. Ltd., dated 19.12.2019
PHIP/TP/2023-01	-	Hose assembly testing plan as per ISO 15738:2019 reviewed by DNV dated 2023.11.23
TR320231106003	-	Test report for flow test from BTH Pvt. Ltd. reviewed by DNV dated 2023.11.23

<u>Document No.</u>	<u>Rev.</u>	<u>Title</u>
PH/L3/QAP/001-01	02	Quality assurance plan dated 22.11.2022 reviewed by DNV dated 2023.11.23
PH/DNV/WTC/2023-01	-	Pressure test report witnessed by DNV dated 2023-11-23
SST/FEP-2023/001, SST/FEP-2023/002, SST/FEP-2023/003.	01	Corrosion test reports dated 2024.01.02
PH/DNV/2023-03, PH/DNV/2023-02, PH/DNV/2023-01,	-	Quality test certificates reviewed by DNV dated 2023-11-23

## Tests carried out

Tests as described in ISO 15738 [7.2]:

- Pressure test
- Cold pressure test
- Salt water exposure test
- Hydraulic pressure test
- Cold bend test
- Joint-securing test
- Flow test

## Marking of product

To enable traceability, each hose shall be marked externally with at least:

- name of the manufacturer
- lot or batch number

## 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>