

# TYPE APPROVAL CERTIFICATE

## This is to certify:

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

with type designation(s)  
**PH690**

Issued to  
**POLYHOSE INDIA (RUBBER) PVT. LTD.**  
**Kanchipuram, Tamilnadu, India**

is found to comply with  
**ISO 1825:2017 – Rubber hoses and hose assemblies for aircraft ground fuelling and defuelling – Specification**  
**EI 1529 7th Edition, November 2014 – Aviation fuelling hose and hose assemblies**

## Application :

**Rubber hoses and hose assemblies with reusable fittings for ground fuelling and defueling of aircraft.**

**This certificate is not valid for hose assemblies which are subject to Classification by DNV.**

**Temperature range:** -30 °C to +65 °C  
**Max. working press.:** 20 bar(g)  
**Sizes:** Nominal ID: 19, 25, 32, 38, 50 and 63

Issued at **Høvik** on **2022-07-13**

for **DNV**

This Certificate is valid until **2027-07-12**.

DNV local station: **Mumbai FiS**

Approval Engineer: **Maheshraja Venkatesan**

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**Zeinab Sharifi**  
**Head of Section**

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

Rubber hose assembly PH690 designed according to ISO 1825:2017 Type C/ EI 1529 Type C with the following construction:

- Inner Tube : Nitrile based Synthetic rubber resistant to Petroleum fuel
- Reinforcement : Reinforcing plies of Synthetic Textile cord
- Outer rubber cover : Polychloroprene based synthetic rubber with conductive and resistant to abrasion, outdoor exposure and petroleum fuel
- End fittings : As per submitted drawings with material grade of SS304 / SS316 for insert & aluminium LM24 for clamps

### Manufacturing locations:

- Hose : Polyhose India (Rubber) Pvt Ltd.,  
Plot No, F37 - F42, F50 - F55, F48 - F49, F28 - F29 & F100 - F102,  
Sipcot Industrial Park, Irrungattukottai Pennalur Post,  
Sriperumbudur Taluk - 602117, Kanchipuram District, Tamilnadu, India
- End fittings : Polyhose India Pvt Ltd.,  
Unit IV, 1/160, Kannivakkam Village, No . 25 Chengalpattu Taluk,  
Kanchipuram District, Tamilnadu – 603202, India.

### Assembling location:

- Polyhose India Pvt Ltd.,  
Unit IV, 1/160, Kannivakkam Village, No. 25 Chengalpattu Taluk,  
Kanchipuram District, Tamilnadu – 603202, India.

## Application/Limitation

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

Hose assemblies are approved to be used for general pressure applications on all vehicles for plane fuelling. This certificate is not valid for designs, components, equipment, systems or products which are subject to classification by DNV.

Hose Designation	Size (ID)				Maximum working pressure		Reusable Coupling designation
	DN	Dash	Inch	mm	Bar	PSI	
PH690-12	19	-12	¾	19	20	300	F1SL21005-121201000X
PH690-16	25	-16	1	25	20	300	F1SL21005-161601000X
PH690-20	32	-20	1¼	31.5	20	300	F1SL21005-202001000X
PH690-24	38	-24	1½	38	20	300	F1SL21005-242401000X
PH690-32	51	-32	2	50	20	300	F1SL21005-323201000X
PH690-40	63	-40	2½	63	20	300	F1SL21005-404001000X

Towards use of reusable fittings/ hose recouplings, procedure stated under relevant parts of EI 1529 and ISO 1825 shall be followed.

**Type Approval documentation**

<u>Document No.</u>	<u>Rev.</u>	<u>Title</u>
-	-	PH690 Aviation Fuel Hose Datasheet
PH690-I01	00	Coupling drawing reference: PH690-C01 (Clamps & Screws); (Inserts)
PH690-C01	00	SPANLOCK (Socket) & locking screw
PHIRPL/LAB/39	00	Procedure – Frequency of testing
Nos. 01, 02, 03, 04, 05, 06, 07	-	General Internal test certificates witnessed by DNV dated 2022-03-22
No. 08	-	General Internal test certificate dated 2021-01-09 reviewed by DNV dated 2022-03-23
No. 09,10, 11, 12, 13, 14	-	General Internal test certificates dated 2021-12-02 reviewed by DNV dated 2022-03-22
TR320200303001; TR320201203002; TR320201203001	-	External test certificates reviewed by DNV dated 2022-03-22

**Tests carried out**

As per Table 4 (for Rubber compounds) and Table 5 (for hose & hose assemblies) of ISO 1825:2017/ Table 3 of EI 1529 7<sup>th</sup> Ed. November 2014

**Routine testing**

Routine Testing for the actual intended application shall follow the latest applicable edition of the Standard (as mentioned on the front page of this certificate).

**Marking of product**

Minimum marking requirements shall be as outlined in ISO 1825:2017 [11] / EI 1529 7<sup>th</sup> Ed. [5].

**Periodical assessment**

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.

Type testing shall be repeated at every three-year interval or whenever a change in method of manufacturer or materials occurs.