Certificate No:
TAP00002RZ

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Flexible Hoses and Hose assemblies of Non-Metallic Material

with type designation(s)
LPG / LPGS

Issued to
ELAFLEX HIBY GmbH & Co. KG
Hamburg, **Germany**

is found to comply with
EN 1762:2018 Rubber hoses and hose assemblies for liquefied petroleum gas, LPG (liquid or gaseous phase), and natural gas up to 25 bar (2,5 MPa) – Specification
AS 1869.1:2023 Hose and hose assemblies for liquefied petroleum gases (LP Gas), natural gas and town gas, Part 1: Non-metallic liners
AS 1869.0:2023 Hose and hose assemblies for liquefied petroleum gases (LP Gas), natural gas and town gas, Part 0: General requirements

Application :

Hoses assemblies as reel hose for entire LPG distribution (from terminal to nozzle), for bulk loading and unloading from ships, rail tankers and road tankers.

Temperature range:	**-40°C up to +70°C**
Max. working press.:	**25bar**
Sizes:	**DN10 up to DN200**

Issued at **Hamburg** on **2023-09-14**

This Certificate is valid until **2028-09-13** .

for **DNV**

DNV local unit: **Hamburg – CMC North/East**

Approval Engineer: **Hagen Markus**

Sven Klinger
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

Hose assemblies for L.P. Gas distribution predominantly for propane, butane and their mixtures acc. to prEN 589:2023 Type LPG without helix and type LPGS with stainless steel helix.

Hose design

Lining : NBR, black, seamlessly extruded, electrically dissipative, low permeation, plasticiser-free
Reinforcements : Low tensile textile braids with crossed tinned copper strands electrically connectable
Cover : CR, black or orange, smooth, abrasion resistant, highly ageing resistant. Type LPG 16 pricked.

Reference: Elaflex catalogue Section 1: Liquefied Petroleum Gas Hoses LPG, pages 115 and 116

Application/Limitation

Hoses assemblies as reel hose for entire LPG distribution (from terminal to nozzle), for bulk loading and unloading from ships, rail tankers and road tankers.
This Type Approval certificate is not valid for designs, components, equipment, systems or products which are subject to classification by DNV.

Type Approval documentation

Tests carried out

Type tests according to hose design standard EN 1762:2018 and AS 1869.0/.1:2023

Marking of product

Scope	Example
Hose	ELAFLEX MADE IN GERMANY
Type	LPG
Design standard	EN 1762 Ω 25bar / 3500PSI M
Production date hose Quarter / Year	08-23

Periodical assessment

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com