DNV·GL

Certificate No:
TAP000023T

TYPE APPROVAL CERTIFICATE

This is to certify:

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

with type designation(s)
Fire Sleeve 624 with Hoses 2807, GH194, GH585, FC350

Issued to
Eaton Germany GmbH
Baden-Baden, Baden-Württemberg, Germany

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV GL class programme DNVGL-CP-0183 – Type approval – Flexible hoses

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2020-10-30**
This Certificate is valid until **2025-10-29**.
DNV GL local station: **Augsburg**

Approval Engineer: **Christian Kaemmer**

for **DNV GL**

Olaf Drews
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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.

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Product description

624 Fire Sleeve:
Fire Sleeve 624: Woven high bulk fiberglass, single layer, coated with a cover of iron oxide silicone rubber. Fuel, - lube and hydraulic oil resistant.

2807-Series:
Flexible non-metallic hose acc. to SAE 100R14.
Equipped with Fire Sleeve 624. Fire resistant acc. to ISO 15540.

GH 194-Series:
Flexible non-metallic hose acc. to EN853 1SN.
Equipped with Fire Sleeve 624. Fire resistant acc. to ISO 15540.

GH 585-Series:
Flexible non-metallic hose acc. to EN854 2TE.
Equipped with Fire Sleeve 624. Fire resistant acc. to ISO 15540.

FC350-Series:
Flexible non-metallic hose acc. to SAE J1402.
Equipped with Fire Sleeve 624. Fire resistant acc. to ISO 15540.

Responsibility
Eaton Germany GmbH, takes the responsibility that only DNVGL-Type Approved hoses and couplings are installed and that assembly with fire sleeve is effected by Manufacturers holding a valid DNVGL-AoM-Certificate (Approval of manufacturers).
The design and production of the hoses, hose end fittings and manufacturing of hose assemblies shall be in compliance with Rules, Standards and/or Regulations listed on page 1 of this certificate.

Application
Above listed hose assemblies are Type Approved for fire resistance in combination with EATON-Fire sleeves 624.
Flexible hoses are only to be used in short lengths up to 1.5 m where it is necessary due to vibrations or flexible mounting of the machinery. The hoses shall not replace/be used where permanent piping is possible/required.

Installation
The hose assemblies must only be fitted in places where they are always accessible.
The hoses are to be mounted in accordance with the manufacturer’s instructions.

Type Approval documentation

Tests carried out

Production testing
All hose assemblies shall be subject to a pressure test at 1.5 times the maximum working pressure and shall be delivered with the pressure test report with reference to the type approval certificate.

Marking of product
For traceability to this type approval, each hose assembly is to be marked with:

Marking
Manufacturer's name
Type

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNVGL-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in https://approvalfinder.dnvgl.com