

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000081X

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Materials other than steel for pipes conveying oil or fuel oil: flexible pipe assemblies and compensators

with type designation(s)
FLEXOR 3TE HF

Issued to

Alfagomma Hydraulic S.p.A.
Castellnuovo Vomano – Castellalto, TE, Italy

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2021/1158,
item No. MED/3.15c. SOLAS 74 as amended, Regulation II-2/4 & X/3 and 2000 HSC Code 7 & 10 and IMO
MSC/Circ.1120

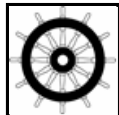
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-06-01**.

Issued at **Høvik** on **2022-06-02**

DNV local station:
Italy/Malta CMC

Approval Engineer:
Andreas Hansen



Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
Head of Notified Body



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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

Flexible hose assembly (MED/3.15c):

Flexor 3TE HF

Tube: Synthetic rubber - NBR

Reinforcement: Two braids of high tensile polyester textile thread

Cover: Synthetic rubber NBR / SBR / NR

Pyrotex® fire sleeve: Braided glass fibers / silicone rubber

Couplings:

Size		No Skive Ferrule		Insert		
DN	DASH	Carbon Steel 11SMnPb30	Stainless Steel AISI 316	Carbon Steel 11SMnPb30	Stainless steel AISI 316	CuNi
6	4	-	H3200TX2-04	-	H32xxxxx-04xxxx	H62xxxxx-04xxxx
8	5	-	H3200TX2-05	-	H32xxxxx-05xxxx	H62xxxxx-05xxxx
10	6	-	H3200TX2-06	-	H32xxxxx-06xxxx	H62xxxxx-06xxxx
12	8	-	H3200TX2-08	-	H32xxxxx-08xxxx	H62xxxxx-08xxxx
16	10	H1200TX2-10	H3200TX2-10	H12xxxxx-10xxxx	H32xxxxx-10xxxx	H62xxxxx-10xxxx
20	12	H1200TX2-12	H3200TX2-12	H12xxxxx-12xxxx	H32xxxxx-12xxxx	H62xxxxx-12xxxx
25	16	H1200TX2-16	H3200TX2-16	H12xxxxx-16xxxx	H32xxxxx-16xxxx	H62xxxxx-16xxxx
32	20	H1200TX2-20	H3200TX2-20	H12xxxxx-20xxxx	H32xxxxx-20xxxx	H62xxxxx-20xxxx
38	24	H1200TX2-24	H3200TX2-24	H12xxxxx-24xxxx	H32xxxxx-24xxxx	H62xxxxx-24xxxx
51	32	-	H3200TX2-32	-	H32xxxxx-32xxxx	H62xxxxx-32xxxx

Manufacturing locations:

Hoses: : Alfagomma Hydraulic S.p.A., Via Enrico Matteri no.6, 64020 – Castelnuovo Vomano (TE) - Italy

Couplings : Alfagomma Hydraulic S.p.A., Area Industriale Piano Lago, 87050 Mangone (CS) - Italy

Application/Limitation

Hose assemblies covered by this certificate are approved to be used in cooling and anti-freezing solutions, air, hydraulic fluid, oil, fuel oil, and freshwater applications. The hose assemblies are tested according to:

- 1) EN ISO 15540:2016 – Fire resistance of hose assemblies – Test methods
- 2) EN ISO 15541:2016 – Fire resistance of hose assemblies – Requirements for the test bench

Maximum allowable working pressure [bar]										
Size [DN]	6	8	10	12	16	20	25	32	38	51
MAWP (Carbon steel / Stainless steel Insert)	145	130	110	93	80	70	55	45	40	33
MAWP (CuNi Insert)	40	40	40	40	40	40	40	40	40	33

Type Examination documentation

Tests carried out

Fire tests carried out according to ISO 15540/15541.

Marking of product

As a minimum the final product is to be marked with at least the following particulars:

- Manufacturer's name or trademark
- Manufacturer's address
- Specification or hose name
- Hose size (inside diameter)
- Data code (quarterly and daily production code)
- Mark of conformity according to Article 10 of the Council Directive 2014/90/EU

Mark of Conformity may only be affixed to the product when the corresponding certification to production-control phase module (D, E, or F) is valid.