

EC TYPE-EXAMINATION CERTIFICATE (Module B)

Application Of:

DIRECTIVE 2014/90/EU of 23rd July 2014 and REGULATION (EU) 2020/1170 of 16th July 2020



Certificate N° 0987/MED-B/924

This Certificate consists of 2 pages

This is to certify that the product

ALFAGOMMA/ARGUS FLEXOR 3TE HF

(DN: from 06 to 51) - (Size: from 04 to 32) - (Inch: from 1/4" to 2") - (Fittings type: No skive)

Item: MED/3.15c

Product type:

MATERIALS OTHER THAN STEEL FOR PIPES CONVEYING OIL OR FUEL OIL:
ASSEMBLY OF FLEXIBLE HOSES AND COMPENSATORS

Supplied / Manufactured by:

ALFAGOMMA HYDRAULIC S.p.A.

Via Enrico Mattei, 6 - 64020 CASTELNUOVO VOMANO (TE) - Italy

Complies with the requirements in the following Regulations/Standards:

Annex B, Module B in the above Directive and as applicable:

1. SOLAS 74 as amended Reg. II-2/4, - Reg. X/3.
2. Reg. II-2/4, - IMO Res. MSC 36 (63) - (Code HSC 1994) 7, 10, - IMO Res. MSC 97 (73) - (Code HSC 2000) 7, 10, - IMO MSC Circ. 1120.
3. ISO 15540 (2016); ISO 15541 (2016).

Further details of the product and conditions for certification are given overleaf



The Manufacturer is allowed to affix the Mark of conformity according to the Article 11 in the Council Directive 96/98/EC on Marine Equipment and issue a Declaration of Conformity, only when the Module D or E or F of Annex B in the same Directive is fully complied with.

Prato, 16/07/2021

The Technical Director

PROPOSED

Luca Ferrini

The Certification Manager

APPROVED

Massimo Borsini

This certificate is valid until 15/07/2026

This Certificate is issued under the Authority of Ministero delle Infrastrutture e dei Trasporti Comando Generale del Corpo delle Capitanerie di Porto according to Decreto Ministeriale 13 September 2016 N° 861/2016.

Product description:

Appearance: flexible hose with red fire barrier (sleeve) and metallic fittings at both ends.
 Technical data: Alfagomma Hydraulic S.p.A. Technical data sheet.

Technical data of hoses:

Manufacturer :		Alfagomma Hydraulic S.p.A.	
Construction		Material	
Fire sleeve 3267 Pyrotex® sleeve by Texpack S.r.l.		Pyrotex® sleeving based on braided glass fibers covered with a thick layer of red silicone rubber Nominal diameter : x DN 6 = ~16 ; x DN 16 = ~22 ; x DN 51 = ~65 Wall thickness : x DN 6 = 3.0 mm ; x DN 16 = 3.0 mm ; x DN 51 = 5.0 mm	
Inner flexible hose FLEXOR 3TE HF - FLEXOR 3HF (DN6 - DN16 - DN 51)	Cover	Synthetic rubber, 45% NBR / 10% SBR / 45% NR compound Rubber thickness : from 0.9±0.1 mm to 1.5±0.1 mm	0.055±0.426
	Tube	Synthetic rubber, NBR type Rubber thickness : from 1.4±0.1 mm to 2.5±0.1 mm	0.046±0.598
	Intermediate layer	n. 1 Synthetic rubber, SBR type - Rubber thickness: 0.40±0.05 mm	0.021±0.112
	Reinforcement	Two braids in high tensile polyester textile thread - Adhered : RFL 1100/2 PE	0.048±0.279

Manufacturing batch by the Sponsor :

Hose, fittings and ferrule	WP (bar)	Production batch	Production date
ALFAGOMMA/ARGUS FLEXOR 3TE HF Ø ¼"	40	2Q19 - 2019 - 15852 - 915013	02 July 2021
ALFAGOMMA/ARGUS FLEXOR 3TE HF Ø 5/8"	40	2Q19 - 2019 - 16182 - 916031	02 July 2021
ALFAGOMMA/ARGUS FLEXOR 3TE HF Ø 2"	33	1Q19 - 2019 - 28562 - 1900273	02 July 2021

c/o The factory : Alfagomma Hydraulic S.p.A. located Via Enrico Mattei, 6 - 64020 CASTELNUOVO VOMANO (TE) - Italy

Nominal diameter: from 06 (1/4") to 51 (2"). - Size: from 04 to 32.

Working pressure: from 33 bar (DN 51) to 40 bar (DN 6). - Weight: from 0.174 kg/m to 1.415 kg/m.

No skive fittings; Type of metal: Ferrule made of stainless steel (AISI 316); Insert made of CuNi.

Ferrule and insert produced by Alfagomma Hydraulic S.p.A.

Technical File Reference: 107/21

Applications / Limitations

- The material fulfils the requirements of **ISO 15540: 2016** as referred to in DIRECTIVE 2014/90/EU of 23rd July 2014 and REGULATION (EU) 2020/1170 of 16th July 2020 - item MED/3.15c.

The compliance is valid for:

- All the colours
- All the nominal hose diameters from DN 06 (1/4") to DN 51 (2"), these extremes included.

The compliance is valid moreover provided that:

- The fire sleeve and the inner flexible hoses remain the same as the ones supplied for this type examination.
- The above told fire sleeve is applied on all the length of the assembly, without discontinuity.
- The fittings (no skive type) remain the same as the ones supplied for this type examination.

Moreover according to Directive 2014/90/EU, Annex II Paragraph 3, a project examination and a risk evaluation have been carried out. Concerning this aspect, the Sponsor has declared that the applicable standard cover all the reasonable risk that can be foreseen. This Notified Body maintains such a declaration in the files relative to the product object of this EC Type Examination.

Type approval documentation:

Re. Lab. no.	Products	Test Report	Issued by
1148/21	ALFAGOMMA/ARGUS FLEXOR 3TE HF Ø ¼"	1148.OIS0110/21 - ISO 15540: 2016 Ship and marine technology - Fire resistance of non-metallic hose assemblies and non-metallic compensators - Test methods	LAPI Laboratorio Prevenzione Incendi S.p.A. - Italy - Notified Testing Body N° 0987 EN 17025 Accredited Laboratory IMO Testing Laboratory SSE.1 / Circ. 3 Rev. 2 (2019)
1149/21	ALFAGOMMA/ARGUS FLEXOR 3TE HF Ø 5/8"	1149.OIS0110/21 - ISO 15540: 2016 Ship and marine technology - Fire resistance of non-metallic hose assemblies and non-metallic compensators - Test methods	
1150/21	ALFAGOMMA/ARGUS FLEXOR 3TE HF Ø 2"	1150.OIS0110/21 - ISO 15540: 2016 Ship and marine technology - Fire resistance of non-metallic hose assemblies and non-metallic compensators - Test methods	

=====**End of Document**=====

