



**TYPE APPROVAL CERTIFICATE**  
**No. MAC325823CS/002**

**This is to certify** that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	<b>Non metallic flexible hoses</b>
<i>Type</i>	<b>ALFAGOMMA FLEXOR 1A / 1AT / 1SN HF/ 1SN MINETUFF / 1ST GREENLINE 122T / 122G</b>
<i>Applicant</i>	<b>ALFAGOMMA HYDRAULIC SPA VIA ENRICO MATTEI 6 64020 CASTELNUOVO VOMANO (TE) ITALY</b>
<i>Manufacturer</i>	<b>ALFAGOMMA HYDRAULIC SPA</b>
<i>Place of manufacture</i>	<b>VIA ENRICO MATTEI 6 64020 CASTELNUOVO VOMANO (TE) ITALY</b>
<i>Reference standards</i>	<b>Part C, Chapter 1, Section 10 of RINA Rules</b>

*Issued in* **Genova** on **January 25, 2024**. *This Certificate is valid until* **November 23, 2028**

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**RINA Services S.p.A.**  
**Rosario Pitruzzo**

This certificate consists of this page and 1 enclosure

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**ALFAGOMMA FLEXOR 1A / 1AT / 1SN HF/ 1SN MINETUFF / 1ST GREENLINE 122T / 122G**

### Reference documents

Alfagomma catalogue ed. Sept. 2022

Alfagomma data sheet edition 8 dated 13/12/1999 and edition 10 dated 21/02/2000

Alfagomma datasheet Flexor 1 SN Minetuff ed.1 dated 01/12/2021

Hose fitting combination: per drawing PPVT-42640 Letter PPVT/2023/1004/CRLVA

Test report filed with Letter PPVT/2023/1004/CRLVA

alfagomma Datasheet FLEXOR1SN HF ed.0 dated 15/3/2010

### Applicable specifications

*Alfagomma type designation:*

Flexor 1ST acc. EN 853 and 100R1A acc. SAE J517 (skive)

Flexor 1SN acc. EN 853 and 100R1AT acc. SAE J517 (non-skive)

*Dunlop Hiflex type designation:*

Greenline 122T, 122G acc. EN 853 1SN

### Materials/Components

Inner tube:	oil resistant synthetic nitrile rubber
Reinforcement:	one braid of high tensile steel wire
Cover:	chloroprene rubber, weather, oil and abrasion resistant
Couplings:	Carbon steel (9SMnPb28 UNI 4838) or Stainless steel (XCrNi1810 UNI 6901)

### Fields of application

Hydraulic systems with hydraulic fluid having a flash point higher than 150 °C (closed cup test)

Pneumatic systems

Compressed air systems

Fresh water systems

Sanitary systems

CO2 Systems ( 1SN MINETUFF )

### Technical characteristics

Temperatures range: -40 °C / +100 °C

Maximum working pressure according to the following table:

DN			Max. Working Pressure
mm	inch	dash	bar
6	1/4	4	225
8	5/16	5	215
10	3/8	6	180
12	1/2	8	160
16	5/8	10	130
19	3/4	12	105
25	1	16	88
31	1 1/4	20	63
38	1 1/2	24	50
51	2	32	40

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**ALFAGOMMA FLEXOR 1A / 1AT / 1SN HF/ 1SN MINETUFF / 1ST GREENLINE 122T / 122G**

**Places of manufacture:**

Hoses:

ALFAGOMMA HYDRAULIC SPA - Via E. Mattei, 6 - 64020 Castelnuovo Vomano (TE)

Manufacturing plants:

64020 Castelnuovo Vomano (TE) - Via E. Mattei, 6

87050 Figline V. (CS) - Area Industriale Piano Lago

Couplings:

ALFATECHNOLOGY SRL - Via Torri Bianche, 1 - 20059 Vimercate (MI)

Manufacturing plants:

20040 Bellusco (MI) - Via dell'Industria, 12

87050 Mangone (CS) - Area Industriale Piano Lago

**Acceptance Conditions**

Hoses assemblies is to be carried out at Alfagomma branch sites or by authorized assemblers.

The installation on board is to be carried out by qualified personnel in accordance with the manufacturer's instructions.

The flexible hoses are to be installed in order to satisfy the requirements of para. 5.9.3 of Part C, Chapter 1, Section 10 of RINA Rules.

Hoses assemblies with Carbon steel couplings are not to be used at temperatures below -10°C, unless the material is normalized.

The acceptance of the a.m. products on board ship classed with RINA is subject to the satisfactory outcome of testing as per RINA Rules.

The product (hose and fittings) is to be marked, for traceability, with the following data: nominal diameter, design conditions, Manufacturer's name or trademark, designation type reference.

Validity of this Certificate is subject to positive outcome of periodical Audit as per Rules for Testing and Certification of Marine Materials and Equipment.

This certificate cancels and replaces the previous one No. MAC215618CS/001.

**Genova January 25, 2024**