



TYPE APPROVAL CERTIFICATE
No. MAC030813CS/007

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

<i>Description</i>	Non metallic flexible hoses
<i>Type</i>	FLEXOR 13; DUNLOP HIFLEX 713L / 713G
<i>Applicant</i>	ALFAGOMMA HYDRAULIC SPA VIA ENRICO MATTEI 6 64020 CASTELNUOVO VOMANO (TE) ITALY
<i>Manufacturer</i>	ALFAGOMMA HYDRAULIC SPA
<i>Place of manufacture</i>	VIA ENRICO MATTEI 6 64020 CASTELNUOVO VOMANO (TE) ITALY
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules

Issued in **Genova** on **May 27, 2013**. This Certificate is valid until **May 26, 2018**


RINA
Francesco Sciacca

This certificate consists of this page and 1 enclosure



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FLEXOR 13

DUNLOP HIFLEX 713L / 713G

Reference documents

Alfagomma catalogue 2011-2012

Alfagomma data sheet edition 8 dated 30/04/1999

Hose Fitting Combination dated 26/07/2000 and 24/05/2013

Hose fitting combination:

DN			Ferrule			Insert	
mm	inch	dash	Carbon steel		Stainless steel	Carb. steel	Stainl. steel
			AG branding	DH branding	AG branding	AG branding	AG branding
19	3/4	12	H1400200-12	D190000-12	H3400200-12	H14-12	H34-12
25	1	16	H1400200-16	D190000-16	H3400200-16	H14-16	H34-16
32	1 1/4	20	H1400301-20	D190000-20	H3400301-20	H14-20	H34-20
38	1 1/2	24	H1400301-24	D190000-24	H3400301-24	H14-24	H34-24
51	2	32	H1400301-32	D190000-32	H3400301-32	H14-32	H34-32

Applicable specifications

Alfagomma type designation:

R13 - EN 856 and 100 R13 - SAE J517

Dunlop Hiflex type designation:

713L acc. R13 - EN 856 and 100 R13 - SAE J517

Materials/Components

- Inner tube: oil resistant synthetic chloroprene rubber
- Reinforcement: four or six layers of high tensile spiral steel wire wrapped in alternating directions
- Cover: chloroprene rubber, weather, oil and abrasion resistant
- Couplings: Carbon steel (9SMnPb28 UNI 4838) or Stainless steel (XCrNi1810 UNI 6901)



RINA
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000



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DUNLOP HIFLEX 713L / 713G

Technical characteristics

Temperatures range: -40 °C / +120 °C (continuous service)

Maximum working pressure according to the following table:

DN			Max. Working Pressure
mm	inch	dash	bar
19	3/4	12	345
25	1	16	345
32	1 1/4	20	345
38	1 1/2	24	345
51	2	32	345

Places of manufacture:

Hoses:

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

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

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



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Remarks

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.

This certificate cancels and replaces the previous one No. MAC014207CS/007 dated 30 November 2007.

Genova May 27, 2013

