

Type Approval Certificate Extension

This is to certify that Certificate No. 07/00065(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER

Alfagomma SpA
Via Torri Bianche, 1
20059 Vimercate (MI)
Italy

PLACES OF PRODUCTION

Alfagomma Hydraulic SpA
Via E. Mattei, 6
64020 Castelnuovo Vomano (TE)
Italy

Alfagomma Hydraulic SpA
Z. I. Piano Lago
87050 Figline Vegliaturo (CS)
Italy

Alfagomma Germany GmbH
Friedrich der Große 10
44628 Herne
Germany

Alfagomma Germany GmbH
Waidmannstrasse 12
22769 Hamburg
Germany

DESCRIPTION

High pressure, fire resistant flexible hose assemblies with an inner tube and cover of synthetic rubber, reinforced with braided and spiral high tensile steel wire.

TYPE

Alfagomma Flexor 1SN/R1AT (Dunlop Hiflex 122T & 122G);
Alfagomma Flexor 2SN/R2AT (Dunlop Hiflex 222T & 222G);
Alfagomma Flexor 4SH (Dunlop Hiflex 790 L & 790 G);
Alfagomma Flexor 13 (Dunlop Hiflex 713L & 713G);
Dunlop Hiflex 3SPT & 3SPG;
Dunlop Hiflex 241T & 241G

Certificate No.

07/00065(E2)

Issue Date

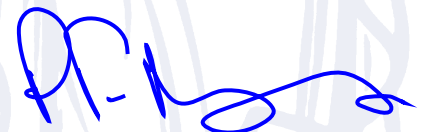
5 March 2013

Expiry Date

17 September 2017

Sheet

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P. F. Moysey
London Design Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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APPLICATION

Short joining lengths of flexible hose to accommodate relative movement in marine and offshore systems:

Fresh and sea water systems;
Fuel oil and lube oil systems in visible and accessible locations;
Hydraulic and pneumatic power and control systems;
Compressed air systems;
CO₂ systems, between bottles and master valves.

SPECIFIED STANDARDS

Lloyd's Register's Rules and Regulations for the Classification of Ships;
EN 853;
EN 856
SAE J517

RATINGS

Alfagomma Flexor 1SN/R1AT (Dunlop Hiflex 122T & 122G):

Nominal diameter (mm): 4.8 to 50.8
Max. working pressure (bar): 250 to 40
Temperature range (°C): -40 to 100

Alfagomma Flexor 2SN/R2AT (Dunlop Hiflex 222T & 222G):

Nominal diameter (mm): 4.8 to 50.8
Max. working pressure (bar): 415 to 80
Temperature range (°C): -40 to 100

Alfagomma Flexor 4SH (Dunlop Hiflex 790L & 790G):

Nominal diameter (mm): 19.0 to 50.8
Max. working pressure (bar): 420 to 250
Temperature range (°C): -40 to 100

Alfagomma Flexor 13 (Dunlop Hiflex 713L & 713G):

Nominal diameter (mm): 19.0 to 50.8
Max. working pressure (bar): 345
Temperature range (°C): -40 to 100

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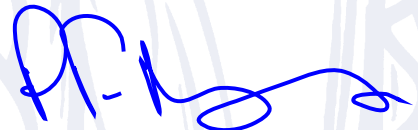
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RATINGS (cont.)

Dunlop Hiflex 3SPT & 3SPG:

Nominal diameter (mm):	9.5 to 31.8
Max. working pressure (bar):	500 to 240
Temperature range (°C):	-40 to 100

Dunlop Hiflex 241T & 241G:

Nominal diameter (mm):	6.3 to 50.8
Max. working pressure (bar):	450 to 100
Temperature range (°C):	-40 to 100

Refer to Alfagomma/Dunlop Hiflex data sheets for actual maximum working pressure for specific hose diameters.

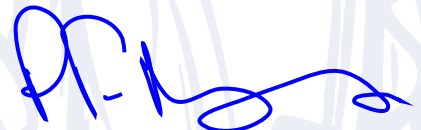
"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 07/00065(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 07/00065(E1) to which this extension should be attached.

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Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 5 March 2013	Quote this reference on all future communications LDSO/ENG/PFM/WP13450577/W03272416
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.**Issued to: ALFAGOMMA SPA****for: HIGH PRESSURE FLEXIBLE HOSE****TYPE APPROVAL CERTIFICATE No. 07/00065(E2)**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

ADDITIONAL APPROVAL DOCUMENTATION

Request form	16-Oct-2012
LR Hamburg visit report, ref. GEN1390049/HAM	21-Feb-2013
LR Naples visit report, ref. GEN1390049	25-Feb-2013
LR Dortmund visit report, ref. GEN1390049/DTM	26-Feb-2013
LR Palermo visit report, ref. GEN1390049	27-Feb-2013

Previous documentation as listed in Design Appraisal Documents 07/00065 and 07/00065(E1).

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.



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PFM