





Type Approval Certificate

This is to certify that the undernoted product has been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER	Alfagomma Hydraulic SpA Via E. Mattei, 6 64020 Castelnuovo Vomano (TE) Italy	
PLACES OF PRODUCTION	Alfagomma Hydraulic SpA Via E. Mattei, 6 64020 Castelnuovo Vomano (TE) Italy	Alfagomma Germany GmbH Waidmannstrasse 12 22769 Hamburg Germany
	Alfagomma Hydraulic SpA Zona Industriale Piano Lago 87050 Figline Vegliaturo (CS) Italy	Alfagomma Germany GmbH Friedrich der Große 10 44628 Herne Germany
DESCRIPTION	Hydraulic hose for high demanding conditions & pressure	
TYPE	Alfagomma Alfabiotech 3000, Alfabiotech 4000, Alfabiotech 5000, Alfabiotech 5000P, Alfabiotech 6000. Dunlop Hiflex Powerflexbio 3000, Powerflexbio 4000, Powerflexbio 5000, Powerflexbio 5000P (Plus), Powerflexbio 6000.	
APPLICATION	Hydraulic hose developed to withstand very demanding conditions and very high performance in pressure, pulsing and flexing	
SPECIFIED STANDARDS	Lloyd's Register's Rules and Regulations for the Classification of Ships; ISO 18752	
Certificate No.	19/00019	
Issue Date	09 April 2019	  Fabrizio Cadenaro Trieste Technical Support Office Lloyd's Register EMEA <small>LRO1112016.06</small>
Expiry Date	08 April 2024	
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Lloyd's Register EMEA

Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF

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RATINGS

Alfabiotech 3000 & Powerflexbio 3000
Diameter range 32 ÷ 76mm
Design pressure 210 bar
Design Temperature -40 ÷ +121 °C

Alfabiotech 4000 & Powerflexbio 4000
Diameter range 13 ÷ 51mm
Design pressure 280 bar; 290 bar for -24, D 38mm
Design Temperature -40 ÷ +121 °C

Alfabiotech 5000 & Powerflexbio 5000
Diameter range 16 ÷ 76mm
Design pressure 350 bar
Design Temperature -40 ÷ +121 °C

Alfabiotech 5000P (Plus) & Powerflexbio 5000P (Plus)
Diameter range 19 ÷ 25mm
Design pressure 380 bar
Design Temperature -40 ÷ +121 °C

Alfabiotech 6000 & Powerflexbio 6000
Diameter range 6 ÷ 51mm
Design pressure 420 bar, 450bar D 6mm, 445 bar D 10mm
Design Temperature -40 ÷ +121 °C

“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 Design Appraisal Document No. 19/00019 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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