



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 00/00136(E6) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Manuli Hydraulics (Suzhou) Co., Ltd. 85 Xinglin Street Suzhou Industrial Park 215027 Jiangsu Province People's Republic of China	
PLACES OF PRODUCTION	Manuli Rubber Industries SpA Zona Industriale Campolungo 63100 Ascoli Piceno Italy	Manuli Hydraulics (Suzhou) Co., Ltd. 85 Xinglin Street Suzhou Industrial Park 215027 Jiangsu Province People's Republic of China
	Manuli Hydraulics Manufacturing Sp. z o.o. ul. Przedsiębiorców 5 97-500 Radomsko Poland	Manuli Hydraulics Manufacturing Bel Lokomotivnaya street 2 211390 Orsha Vitebsk Region Republic of Belarus
DESCRIPTION	Fire safe flexible hose of non-metallic material with permanently fitted couplings	

Certificate No.	00/00136(E7)
Issue Date	27 November 2015
Expiry Date	9 October 2020
Sheet	1 of 3



P.A. Stanney
Marine Technology & Engineering Services, Southampton
Lloyd's Register EMEA

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TYPE
ROCKMASTER/12;
ROCKMASTER/15;
ROCKMASTER/1SC;
ROCKMASTER/2 PLUS;
ROCKMASTER/2SC;
ROCKMASTER/2ST;
ROCKMASTER/4SH
ROCKMASTER/4SP

APPLICATION
High abrasion resistant flexible hoses for hydraulic systems using biological and mineral oils, glycols and aqueous emulsion oils

SPECIFIED STANDARDS
Lloyd's Register's Rules and Regulations for the Classification of Ships;
ROCKMASTER/12: Exceed EN 856 R12; SAE 100 R12; ISO 3862 R12
ROCKMASTER/15: Exceed SAE 100 R15; ISO 3862 R15
ROCKMASTER/1SC: Exceed EN 857 1SC; ISO 11237 1SC
ROCKMASTER/2 PLUS: MANULI® Design: Exceed ISO 1436-2SN; EN 853-2SN; SAE J517 type 100R2AT. Performance BCS 174; ISO 6805 type 4
ROCKMASTER/2SC: Exceed EN 857 2SC; ISO 11237 2SC; SAE 100 R16.
In addition: DN 25 SAE 100 R17; ISO 11237 R17
ROCKMASTER/2ST: Exceed EN 853 2ST; SAE 100 R2A; ISO 1436 2ST/R2A
ROCKMASTER/4SH: Exceed EN 856 4SH; ISO 3862 4SH
ROCKMASTER/4SP: Exceed EN 856 4SP; ISO 3862 4SP;
Manuli Hydraulics Hose Data Sheets

RATINGS
Nominal diameter (DN): 5 to 76 mm
Max. working pressure (bar): 485 to 50

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MTES Southampton Office
Lloyd's Register EMEA

LR031.1.2013.12

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OTHER CONDITIONS

1. Not all types and size of hose are approved for manufacture in all 4 manufacturing plants. For details of hoses approved for manufacture in individual plants see Design Appraisal Document 00/00136(E7)
2. For use on ships Classed, or intended to be Classed by Lloyd's Register, the hoses must also:
 - 2.1 Have their locations shown on plans, which must be submitted for approval.
 - 2.2 Be installed to the satisfaction of the attending Surveyor.

"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. 00/00136(E7) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 00/00136(E6) to which this extension should be attached.

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