



Type Approval Certificate

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

Manufacturer	MANULI RYCO Hydraulics Sdn. Bhd.
Address	Plot 207, Kuala Ketil Industrial Estate, Kuala Ketil, Kedah, 09300, Malaysia
Place of Production	MANULI RYCO Hydraulics Sdn. Bhd. Plot 207, Kuala Ketil Industrial Estate, Kuala Ketil, Kedah, 09300, Malaysia
Place of Production	Manuli Ryco Hydraulics (Dalian) Co., Ltd. 38 Ying Ri Road, Ying Cheng Zi Industrial Zone, Gan Jing Zi District, Dalian, Liaoning, 116036, China
Place of Production	Manuli Hydraulics (Suzhou) Co., Ltd. No. 85, Xinglin Street, Suzhou Industrial Park, Suzhou, Jiangsu, 215021, China
Type	Flexible Hoses
Description	Flexible Hoses of Non-Metallic Material with Permanently Fitted Couplings Designations: Survivor RQP5, Trucker T5
Trade Name	Polyester Cover Hose
Application	For use on ships and offshore installations classed with Lloyd's Register, as short lengths in systems of hydraulic oil, fuel oil, lubricating oil and compressed air

9 North Buona Vista Drive, #02-01, Metropolis
Tower 1, 138588, Singapore

Teck Wee Chng
Engineering Piping - Senior Specialist to
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A member of the Lloyd's Register group

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Specified Standard	Part 5, Chapter 12 of Lloyd's Register's Rules and Regulations for the Classification of Ships(July, 2013) Part 5, Chapter 10 of Lloyd's Register's Rules and Regulations for the Classification of Mobile Offshore Units (September 1996 plus Notices Nos. 1, 2,3, 4, 5 & 6 as applicable) Fire Resistant Testing according to ISO 15540/15541
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Ratings	Sizes: DN 5 to DN 46 Maximum Working Pressure: 24 to 210 bar (Refer to appendix) Service Temperature: -40°C to +150°C (Refer to appendix) Coupling Material: Carbon Steel AISI Stainless Steel (Option) Electroplated Fe/Zn12c acc. to AS1789
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Other Conditions	Where synthetic rubber hoses are used for oil fuel supply to burners, the hoses are to have external wire braid protection in addition to the integral wire braid. Carbon steel couplings are to be normalized for temperatures below-10°C. In all cases the hoses are to be installed in accordance with the manufacturer's instructions and tested to the satisfaction of the attending surveyor.
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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 Singapore Pte Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document SEATASS233 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

RATINGS

SURVIVOR RQP5	DN (mm)	Max. Pressure (bar)
RQP54	5	210
RQP55	6	210
RQP56	8	157
RQP58	10	140
RQP510	12	122
RQP512	16	105
RQP516	22	56
RQP520	28	43
RQP524	35	35
RQP532	46	24
Temperature Range: -40°C to +150°C		

TRUCKER T5	DN (mm)	Max. Pressure (bar)
T54	5	210
T55	6	210
T56	8	157
T58	10	140
T510	12	122
T512	16	105
T516	22	56
T520	28	43
T524	35	35
T532	46	24
Temperature Range: -40°C to +100°C		



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