



Lloyd's  
Register

## Type Approval Certificate Extension

This is to certify that **Certificate No.13/10073(E1)** for the undernoted product(s) has/have been extended and renumbered in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

**PRODUCER** RYCO Hydraulics.

**PLACE OF PRODUCTION** RYCO Hydraulics Pty. Ltd.  
99 Calarco Drive, Derrimut, Victoria, 3026 Australia

RYCO Hydraulics Sdn. Bhd.  
Plot 207, Kuala Ketil Industrial Estate, 09300 Kuala Ketil,  
Kedah Darulaman, Malaysia

RYCO Hydraulics (Dalian) Ltd.  
38 Ying Ri Road, Ying Cheng Zi Industrial Zone, Gan Jing Zi District,  
Dalian 116036 China

**DESCRIPTION** Flexible Hoses of Non-Metallic Material with Permanently Fitted Couplings  
Designation:  
TEFLON RTH1

**TYPE** TEFLON Hose

**APPLICATION** For use on ships and offshore installations classed with Lloyd's Register, as short lengths in systems of hydraulic oil

**STANDARD** Part 5, Chapter 12 of Lloyd's Register's Rules and Regulations for the Classification of Ships (July, 2013)

**Certificate No.** 13/10073 (E2)

**Issue Date** 27 December 2018

**Expiry Date** 26 December 2023

**Sheet** 1 of 3



Chng Teck Wee  
South Asia Technical Support Office  
Lloyd's Register Singapore Pte. Ltd.

Lloyd's Register Asia  
2 Science Park Drive, #02-05/06 Ascent, Singapore 118222

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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

**RATINGS**

Sizes: DN 6 to DN 25

Maximum Working Pressure: 55 to 170 bar (see below)

Service Temperature: -60°C to +100°C (see below)

Coupling Material: Carbon Steel AISI  
Stainless Steel (Option)

Electroplated Fe/Zn12c acc. to AS1789

**OTHER CONDITIONS**

The hoses may be used for the following working conditions

TEFLON RTH1	DN (mm)	Max. Pressure (bar)
RTH14	6	170
RTH16	10	165
RTH18	12	120
RTH110	16	105
RTH112	19	85
RTH116	25	55
Temperature Range: -60°C to +100°C		

(NOTE) Maximum working pressure is dependant on working temperature. Details are to be in accordance with the producer's instruction.

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 normalised for temperatures below -10°C.

**Certificate No.** 13/10073 (E2)  
**Issue Date** 27 December 2018  
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**Sheet** 2 of 3



Chng Teck Wee  
21 January 2022  
Marine and Offshore  
South Asia Technical Support Office  
Engineering System  
Lloyd's Register Singapore Pte. Ltd.  
1303.2016.09

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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.

*"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 No. 13/10073(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous **Certificate No. 13/10073(E1)** to which this extension should be attached.

<b>Certificate No.</b>	13/10073 (E2)
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<b>Sheet</b>	3 of 3



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