

Type Approval Certificate Extension

This is to certify that Certificate No. 03/00098 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	RYCO Hydraulics
PLACE OF PRODUCTION	19 Whitehall Street, Footscray, Victoria 3011 Australia
DESCRIPTION	Flexible Hoses of Non-Metallic Material with Permanently Fitted Couplings, Designations: Avenger H12A, Diehard H12D, Slider H12S
TYPE	SAE 100R12
APPLICATION	For use on ships and offshore installations classed with Lloyd's Register, as short lengths in systems of fresh and seawater, water based hydraulics, pneumatics, fuel and lube oil.
DESIGN CODE STANDARD	Part 5, Chapter 12 of Lloyd's Register's Rules and Regulations for the Classification of Ships (July, 2008) 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 10 to DN 51 Maximum Working Pressure: 210 to 350 bar (see below) Service Temperature: -40°C to +121°C (see below) Coupling Material: Carbon Steel AISI/SAE 12L14, Electroplated Fe/Zn12c acc. to AS1789

Certificate No.	08/10092 (E1)
Issue Date	1 October 2008
Expiry Date	30 September 2013
Sheet	1 of 3



N. Nagamune
Yokohama Design Support Office
Lloyd's Register

Lloyd's Register, registered office:
71 Fenchurch Street, London EC3M 4BS