



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.

This certificate supersedes certificate number 03/20029 (E2) issued on 23.05.2013 which is hereby cancelled.

This certificate is issued to:

PRODUCER REIFLEXA P. Reischl GmbH
Am Knick 5
22113 Oststeinbek
Germany

DESCRIPTION	Tube	Reinforcement	Cover
Yellow:	ECO	Nylon text cord	ECO or CR- Chloroprene
Red :	EPDM	Nylon text cord	EPDM
HP :	EPDM	Polymer text cord	EPDM
Green :	CSM-Hypalon	Nylon text cord	CR-Chloroprene
White :	NBR-Nitrile white	Nylon text cord	CR-Chloroprene
	-----Flange material on request-----		

TYPE 1 A ; 1 S in versions: "yellow", "red", "HP", "green" and "white"

APPLICATION Marine and offshore, viz.: Fresh and sea* water lines; ballast lines in machinery spaces, duct keels and double bottom water ballast tanks; bilge lines inside duct keels only; sanitary discharge and cargo lines (NBR Nitrile black only) inside the cargo oil tanks of tankers.

Certificate No. 03/20029 (E3)

Issue Date 03 April 2018

Expiry Date 06 March 2023

Sheet 1 of 2

 Lloyd's Register

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LR031.1.2016.06

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APPLICATION, cont.

*Where fitted in sea water lines in machinery compartments, guards are to be provided which will effectively enclose, but not interfere with the action of the expansion joint and which will reduce to the minimum practicable any flow of water in the event of failure of the flexible element.

The expansion joints are to be installed in well visible and accessible locations and protected against over extension and compression and against mechanical damage. The adjoining pipes are to be suitably aligned, supported, guided and anchored.

The producer's instructions and recommendations are to be considered.

STANDARD

Lloyd's Register Rules and Regulations for the Classification of Ships, Edit. 2017

RATINGS

Type 1 A : PN 16 for DN 32 to DN 150
PN 10 for DN 200 to DN 800

Type 1 S : PN 16 for DN 32 to DN 200
(Maximum temperature: + 90°C) **

**The producer's instructions and recommendations are to be considered.

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HMD 10047-03, issue no. 3 dated 03.04.2018 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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