

Type Approval Certificate



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

Certificate No. **30 946 - 83 HH**
Company **Elaflex-Gummi Ehlers GmbH**
Schnackenburgallee 121
22525 Hamburg, GERMANY

Product Description **RUBBER COMPENSATORS**

Type **ERV**
Optional with fire sleeve type FSH

Environmental Category **None**

Technical Data / Range of Application **Size Range: DN 25 - 300 (fire sleeve applications)**
up to 400 (none fire resistant applications)

Nominal Pressure: PN* 25, 16, 10

Types	Liner	Reinforcement	Cover	M.A.W.T.*
ERV-YELLOW BAND	NBR	PA textile cord	CR	90°C
ERV-RED BAND	Butyl/EPDM	PA textile cord	EPDM	90°C
ERV-CR	CR	PA textile cord	CR	70°C
ERV-ROTEX	EPDM	Polymer textile cord	EPDM	100°C
ERV-ORANGE BAND	NBR	PA textile cord	CR	70°C
ERV- GREEN BAND	Hypalon	PA textile cord	Hypalon	80°C
ERV- WHITE BAND	Nitrile	PA textile cord	CR	80°C
ERV- VITEX	FPM	PA textile cord	ECO	90°C
RED SPOT	Butyl EPDM	PA textile cord	EPDM	60°C

* For further information refer to product data sheets of manufacturer

Connections: **Stainless steel, carbon steel, zinc plated and chromated**

Test Standard **VI-7-8 Regulations for the Performance of Type Tests, Part 6 - Test Requirements for Mechanical Components and Equipment:1998**

Documents
- Fire test report according to ISO 15540 issued by WTD 71 dated 2006-12-13
- Burst pressure test report dated 2008-10-08
- Product data sheets 4-05, 4-21, 415, 4-31, 407, 0421, 0413, 408a

Remarks **Compensators are to be installed at visible and accessible positions.**
EPDM bellows are not suitable for the use in fuel / oil systems.

Valid until **2013-04-13**

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File No. **II.D.07**

Hamburg, 2008-11-21

Germanischer Lloyd

s.v. Hansp. Raschle
Hanspeter Raschle

H. Markus
Hagen Markus

This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".

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RANGE of APPLICATION / LIMITATION

The compensators of type ERV are type approved for the use according to their suitability in:

Fuel-, lubricating oil-,hydraulic oil-, bilge-, ballast-, fresh water cooling-, sea water cooling-, fire extinguishing-, compressed air systems as well as in ancillary piping systems.

For the use in fuel oil and lubricating oil systems, seawater cooling systems and bilge and ballast water systems arranged in machinery spaces each compensator is to be provided with a fire sleeve of type FSH.

LIMITATION

Compensators made of non-metallic materials are not permitted:

- In permanently pressurized starting air lines of Diesel engines
- In cargo lines of tankers
- At the ship side

Refer to the Rules I-1-2 Machinery Installations, Section 11 U.

PRODUCT CERTIFICATION

Each compensator is to be subjected in the manufacturer's works to a pressure test under the supervision of GL.

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