



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. 83 345 - 80 HH

Company Elaflex-Gummi Ehlers GmbH
Schnackenburgallee 121
22525 Hamburg, GERMANY

Product Description FLAME RESISTANT RUBBER COMPENSATORS

Type ERV - GS
ERV - GS HNBR

Environmental Category None

Technical Data / Range of Application Technical Data:

Size range	DN 25 up to DN 600
M.A.W.P.:	10 bar
M.A.W.T.:	NBR 100°C, HNBR 120°C (short-term)
Liner	NBR, HNBR (nitrile), seamless, electrically conductive
Reinforcement	Steel wire cord, CR rubberised
Cover	CR (Chloroprene)
Flanges	Stainless steel, carbon steel, Zinc plated or hot galvanized

Range of Application

Refer to page 2

Test Standard VI-7-8 Regulations for the Performance of Type Tests, Part 6 - Test Requirements for Mechanical Components and Equipment:2008

Documents - Fire test report according to ISO 15540 dated 2.11.2005 and 27.08.2009
- Impulse test report according to DIN EN ISO 6803 issued by TÜV-SÜD dated 14.07.2005
- Data sheet 427/428, 431/432, ContinentalContitech confirmation-04.01.2011

Remarks Compensators are to be installed at visible and accessible positions. For selection and installation the manufacturer instructions are to be observed.

Valid until 2014-10-05

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File No. II.D.06

Hamburg, 2011-01-24

Germanischer Lloyd

Hanspeter Raschle
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Hagen Markus
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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

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

Fuel-, lubricating oil-, hydraulic oil-, bilge-, sea water-, ballast-, fresh water cooling-, water filled fire extinguishing-, compressed air systems as well as in ancillary piping systems arranged inside and outside of machinery spaces.

For further information refer to the Rules I-1-2 Machinery Installations, Section 11 U.

MARKING

ERV - GS NBR: 2 yellow bands, ERV DN..., PN..., production date
ERV - GS HNBR: Yellow-blue-yellow bands, ERV DN..., PN..., production date

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's side

FINAL INSPECTION

Prior to installation on board ship each compensator is to be subjected in the manufacturer's works to a pressure test under the supervision of a GL surveyor.

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