

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:  
**MEDB0000B2Z**  
Revision no.:  
**0**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

## This is to certify:

that the **Materials other than steel for pipes conveying oil or fuel oil: — flexible pipe assemblies and compensators**

with type designation(s)

**ELAFLEX Expansion Joint ERV-GS and ERV-GS HNBR, ERV with fire sleeve type FSH**

issued to

**ELAFLEX HIBY GmbH & Co. KG**  
**Hamburg, Germany**

is found to comply with the Implementing Regulation (EU) 2024/1975 for  
Item no. **MED/3.15c (Row 1 of 1)**

according to the following requirements:

**SOLAS 74 Reg. II-2/4, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.36(63)-(1994 HSC Code) 10, IMO Res. MSC.97(73)-(2000 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 10, IMO MSC/Circ.1120, SOLAS 74 Reg. X/3**

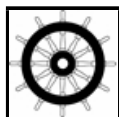
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-05-14**

Expiry date: **2030-03-23**

DNV local unit:  
**Hamburg – CMC North/East**

Approval Engineer:  
**Hagen Markus**



Notified Body  
no.: **0098**

for DNV SE

**Christine Mydlak-Röder**  
**Head of Notified Body**

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

### Product description

Rubber expansion joints consisting of rubber bellows with fabric or steel reinforcement and swivel flanges made of carbon steel, hot dip galvanized and zinc plated steel, stainless steel, gun metal or bronze.

Design of bellows, flanges and expansion joint configurations according to Elaflex "Rubber Expansion Joints Catalog - Group 4".

Please see Appendix: Product Description

### Application/Limitation

Range of Application see Appendix "Application/Limitation".

Fire sleeve applications

Expansion joints with bellows reinforcement other than steel, intended for application in piping systems conveying flammable media or sea water, where failure may result in flooding shall be completely covered by a fire sleeve of type FSH (fire tested acc. to ISO 15540/41).

Limitations

Rubber expansion joints are to be installed at visible and accessible positions.

Installation is not permitted:

- In permanently pressurized starting air lines of diesel engines
- In cargo lines of tankers
- At the ship's side

Installation

For selection and installation of the expansion joints the Elaflex "Rubber Expansion Joints Catalogue -Group 4" is to be observed. In piping systems conveying fuel oil, lubricating oil, sea water cooling and compressed air, a shut-off device, e.g. globe valve, is to be provided to isolate the expansion joint in case of bellows rupture.

Please see Appendix: Application/Limitation

### Type Examination documentation

### Tests carried out

Fire resistance tests according to ISO 15540/41:2016

### Marking of product

Please see Appendix: Marking of product