

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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

This is to certify:

That the "A" and "B", Class divisions, fire integrity

with type designation(s)
FRKL 25 E-F

Issued to

Noske-Kaeser GmbH
Hamburg Hamburg, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2015/559,**

Annex A.1, item No. A.1/3.22 and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/9 and IMO 2010 FTP Code

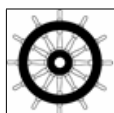
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2021-10-16**.

Issued at **Hamburg** on **2016-10-17**

DNV GL local station:
Hamburg

Approval Engineer:
Timo Linn



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

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 GL 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

Product description

Fire damper "FRKL 25 E-F with flange"

Automatic fail-safe cylindrical fire damper "FRKL 25E with flange" consisted of a housing (Ø 249 mm) made of 5 mm thick steel, isolated damper blade (Ø 238 mm) with a 15 mm layer of "PROMATECT® H" (nominal density: 870kg/m³) made of 4 mm thick steel. The fire damper has been insulated from exposed and unexposed side by one 30 mm thick layer of the insulating material "ISOVERmarine Slab ULTIMATE U MPN 66".

Variants of damper :

F = one-sided flange (see drawing no. 8202.062-00 in the test report)
2F = flange on both sides (drawing no. 8202.070-00 in the test report)

Actuation of fire damper

- electrical,
- pneumatical,
- with fusible link (72° C),
- manual

Application/Limitation

Approved for use in ventilation ducts penetrating class A bulkheads/decks. The insulated damper satisfies for 60 min. the requirements to stability and integrity according to Chapter II-2, regulation 3 of the SOLAS Convention and can may be regarded as A-60 fire Damper.

The fire damper of non-insulated type may be regarded as A-30 fire damper.

Notwithstanding the provisions of the 2010 FTP Code, part 3, Appendix 2, Section 2.2.5, the dampers were already closed as the test has been started.

The fire damper is to be fitted with open/close indication and shall be easily accessible (ex. inspection hatch).

Size of each damper module: max. (Ø 249 mm).

The arrangement of the fire damper and necessary insulation of damper frame and ducting in the vicinity of the partition is subject to approval in each case.

Steel thickness of damper casing is to be equal to or greater than thickness of duct/sleeve required by the rules if the damper casing is part of the duct/sleeve.

Each product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test report No. 20662714 APS4-Hau/Mü, dated 2016-10-14 from DMT GmbH & Co. KG.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, fire-technical rating and the Mark of Conformity (see above).