

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000C1J
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 **Fire doors**

with type designation(s)

FRS A-0 Roller shutter for closure of Class A-0 bulkhead

issued to

KAEFER Schiffsausbau GmbH
Bremen, Germany

is found to comply with the Implementing Regulation (EU) 2025/1533 for
Item no. **MED/3.16 (Row 1 of 1)**
according to the following requirements:
SOLAS 74 Reg. II-2/9, IMO MSC.1/Circ.1511

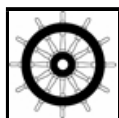
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2026-02-26**

Expiry date: **2031-02-25**

DNV local unit:
Hamburg – CMC North/East

Approval Engineer:
Helge Bjørnara



Notified Body
no.: **0098**

for **DNV SE**

Christine Mydlak-Röder
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, and amended by Decision No 1/2023 dated May 26th, 2023.
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"FRS A-0 Roller shutter for closure of Class A-0 bulkhead", consists of a steel tubular roller and its bearings mounted above the bulkhead opening enclosed with a galvanized steel sheet housing. The housing and bearing brackets are bolted to the steel bulkhead. A roller shutter is wound around the tubular roller and is directed down into the side guides. The contact and closure of the roller shutter on the deck is provided by a glass fabric gasket incorporating a contact safety bar. The on-deck sill shall be of non-combustible material.

The roller shutter may be bolted or welded to the bulkhead.

The roller shutter itself consists of interlocking stainless steel slats of thickness 1 mm and height 62.5 mm. Overall thickness is 16 mm.

Each of two side guides consists of a U and an L shaped profile (3 mm stainless steel plate) bolted together to form a box type construction each serving as the side guides for the roller shutter. The guides are bolted (M8, c-c 300 mm) to the bulkhead and are flared at the top to direct the roller shutter from the tubular roller into the side guides.

The lintel sealing arrangement consisting of U shaped profiles (1.5 mm stainless steel sheet) bolted (M8, c-c 310 mm) to the bulkhead directly above and along the top edge of the bulkhead opening.

For further details see drawings listed under Type Examination documentation.

Application/Limitation

The roller shutter is approved for installation in steel bulkheads of class A-0. Installation of the roller shutter in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

General application: The roller shutter may be mounted on either side of the bulkhead.

Maximum clear opening: 7300 mm x 3500 mm (W x H)

The insulation materials and adhesives used must be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

A roller shutter of marginally larger dimensions than a fire-tested roller shutter may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

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

Type Examination documentation

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

The roller shutter has been successfully tested for an extended test period of 68 minutes.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the Mark of Conformity and USCG Approval Number if applicable (see first page).