

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00008UA

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 dampers

with type designation(s)
HXFD-RP-MB

issued to

Changshu Haixin Ship Machinery Manufacture Co., Ltd.
CHANGSHU, Jiangsu, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation (EU) 2023/1667,
item No. MED/3.22. SOLAS 74 as amended, Regulation II-2/9 and IMO 2010 FTP Code

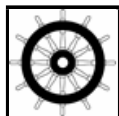
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-05-08**.

Issued at **Hamburg** on **2024-05-09**

DNV local unit:
Shanghai

Approval Engineer:
Izabela Misztal



Notified Body
No.: **0098**

for **DNV SE**

Mydlak-Röder, Christine
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) 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 300,000 USD.



Product description

"HXFD-RP-MB"

is a multi-bladed, rectangular fire damper with a pneumatic actuation intended to use on bulkheads. Its blades are formed by a layer of 1.2 mm thick steel plates on both sides, filled with 20 mm thick ceramic wool between them.

Insulation of casing and blades core:

TG type ceramic wool produced by Zhejiang Pusen New Material Technology Co. Ltd. of 170 kg/m³ density.

The fire damper is fixed to the casing by means of M12 x 40 mm steel bolts.

For further details, see Type Examination documentation below.

Application/Limitation

The fire damper is approved for installation in class A-30 bulkheads. Other applications are subject to case-by-case approval.

Fire damper construction	Max. damper size (W x H) [mm]	Coaming thickness [mm]	Damper body wall thickness [mm]	Coaming length on unexposed side [mm]	Material	Max. number of blades	Blade max. size W x H x T [mm]	Application
rectangular	2000 x 2000	10	10	700	Q235-B	9	966 x 245 x 22.4	A30

Actuators to be used (*):

- Pneumatic: SK-105.

(*) Actuators of same make but with different size as mentioned above may also be used, provided that they have sufficient torque, similar installation arrangement and equivalent fire technical and functional properties.

The damper shall be capable of being closed from both sides of the bulkhead.

The insulation used is to be regarded as minimum insulations for all fire rating and is not to be removed if the fire damper is to be used in division with lower fire ratings.

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

Type Examination documentation

Test report no. FT23307 dated 15 August 2023 from FEFTC Far East Fire Testing Centre, Shanghai, China.

Drawing no. HXFD-RP-2000x2000-MB-00 dated 14 August 2023 from manufacturer.

Drawing no. HXFD-RP-2000x2000-MB-02 dated 14 August 2023 from manufacturer.

Drawing no. HXFD-RP-2000x2000-MB-03-01 dated 14 August 2023 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

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