

EC Type Examination (Module B) Certificate

USCG-EU MRA

This is to certify that:

LLOYD'S REGISTER Deutschland GmbH (LRD), designated as a "notified body" based on the notification of the Federal Maritime and Hydrographic Agency of Germany, did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU and the valid Commission Implementing Regulation (EU) in force indicating design, construction and performance requirements and testing standards for marine equipment, subject to the conditions below and the attached Schedule which also forms part of this Certificate.

Manufacturer	Witt & Sohn Aktiengesellschaft
Address	Ziegeleiweg 38, 25421 Pinneberg, Germany
Reference	Regulation (EU) 2021/1158
Regulation Item (No. & Item Designation)	MED/3.22 Fire Dampers
Product Type	FIRE DAMPER (STANDARD FIRE TEST)
Product Description	Single Bladed Circular Fire Damper
Specified Standard	IMO Res. MSC.307(88) – (2010 FTP Code) Annex 1 Part 3
Trade Name	"IGW fire Damper, BK250, BK315 up to BK1800" for use in A-Class Steel Decks

The attached Design Appraisal Document (schedule) forms part of this certificate. This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to and agreed with the notified body named on this certificate. The manufacturer should notify LRD of any modification or changes to the equipment in order to obtain a valid Certificate.

This equipment is covered by the scope of the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed on 27 February 2004 and amended by Decision No.1/2018 dated 18 February 2019 according to U.S. Coast Guard approval category USCG Module B number:

164.139/EC0525

Lloyd's Register Deutschland GmbH,
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A member of the Lloyd's Register group

Jessica Evans

Senior Surveyor
For and on behalf of Lloyd's Register
Deutschland GmbH (0525)

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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).

Should the specified regulations or standards be amended during the period of validity of this certificate, the product is to be re-approved prior being placed on the market and on board vessels to which the amended regulations or standards apply.

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-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR22100258MB

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

This Certificate Supersedes and is a Renewal of Certificate Number 0525-MED-DE-MED 1650273

Approval Documentation

Test Reports

MPA Dresden GmbH, Fuchsmühlenweg 6F, 09599 Freiberg, Germany, Fire Test Report No: 20151619 dated 24th February 2016.

Conditions of Certification

- For applications in A-60 steel decks only, the Fire Ratings achieved are shown in Table 1 below, with the ducting and fire dampers insulated by an A-60 approved insulation system suitable for A-60 decks, for a minimum insulated duct length of 650mm in addition to the length of the insulated fire damper. All sizes of fire dampers between 319mm (BK315) and 1821mm (BK1800) internal diameters may be used in A-60 applications.
- For applications in A-0, A-15 and A-30 steel decks only, the ducting must be insulated with an approved insulation system suitable for the rating of the division for a minimum insulated duct length of 650mm and the fire damper must be fully insulated with an approved A-60 insulation system as tested for all fire ratings. All sizes of fire dampers between 254mm (BK250) and 1821mm (BK1800) internal diameters may be used in A-0, A-15 and A-30 applications.

Table 1

Type	Maximum Fire Rating achieved in Deck	Closing Mechanisms	Blade construction
BK250 254mm I.D., 315mm long.	A-30	Pneumatic closer with spring return and thermal switch	5mm thick steel blade + 38mm "PAROC Marine Fire Slab 100" + 2mm steel cladding (total thickness 45mm)
BK315 319mm I.D., 450mm long.	A-60	*Belimo BF 230-T electric spring return, and thermal switch	5mm thick steel blade + 38mm "PAROC Marine Fire Slab 100" +

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			2mm steel cladding (total thickness 45mm)
BK1800 1821 I.D., 450mm long.	A-60	*Schischek InMax 50BF electric spring return, and thermal switch	4mm thick steel blade + 50mm "PAROC Marine Fire Slab 100" + 4mm steel cladding (total thickness 58mm)

- The Belimo BF 230-T and Schischek InMax 50BF actuators may be used in all sizes of fire dampers BK315 to BK1800 for A-60 applications in steel decks.
3. Actuators and corresponding thermal triggers/fusible links are restricted for use with up to the maximum size of each type fire damper tested, in the tested orientation only (i.e., in decks only in this case). The following variations of fire tested actuators described in this certificate may be accepted on a case-by-case basis, subject to final approval from the project authority:
 - a) Derivations of fire tested actuators, such as in different voltage supplies, different electric connection specifications (European/American etc.) and with higher performance ratings such as IP ratings, Explosive ratings etc. may be accepted on a case-by-case basis, subject to formal confirmation from the actuator manufacturer provided to the final project authorities that such changes do not adversely affect their functionality and performance or reduce damper closure times. Tested actuators in alternative material options cannot be accepted under this certificate.
 4. The fire dampers are bolted to the ventilation ducting and are to be fully insulated externally with a separately approved A-60 deck insulation system for all fire ratings in steel decks only.
 5. Damper and coaming installation arrangements to be as-tested. Any additional requirements specified by the project surveyors (for example weld requirements for installations in high stress locations etc.) must also be complied with.
 6. Composition, application and installation of sub components, including any adhesives, seals and any fire retardants, to be maintained in production and use in accordance with originally tested composition formula and method of application and installation, and manufacturer's instructions.
 7. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). The wheelmark cannot be affixed to the product until a conformity assessment module is in place.
 8. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place.
 9. The manufacturer shall keep a copy of the EC type-examination certificate, its annexes and additions together with the technical documentation at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned.

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