



UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

Lloyd's Register Marine Limited (LRM Ltd) 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 the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, subject to any conditions in the schedule attached hereto.

Manufacturer	Witt & Sohn Aktiengesellschaft
Address	Ziegeleiweg 38, 25421 Pinneberg, Germany
Reference	MSN1874 Amendment 6
Regulation Item (No. & Item Designation)	UK/3.22 Fire Dampers
Product Type	FIRE DAMPER (STANDARD FIRE TEST)
Product Description	Single Bladed Circular Fire Damper
Trade Name	"IGW fire Damper, BK250, BK315 up to BK1800" for use in A-Class Steel Decks
Specified Standard	IMO Res. MSC.307(88) – (2010 FTP Code) Annex 1 Part 3

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 This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.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 is issued under the authority of the MCA. 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 approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

The "UK 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 Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an Approved Body.

Lloyd's Register Marine Limited (Reg. no. 13281335) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK.
A member of Lloyd's Register group.

Matt Tillman

UKI Marine & Offshore TSO Manager
For and on behalf of Lloyd's Register Marine Ltd. (8512)

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ATTACHMENT TO UK TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR22413183UKMB

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and the Merchant Shipping (Marine Equipment) Regulations 2016, as amended for the UK Type Examination of marine equipment for use on UK ships

This Design Appraisal Document forms part of the Certificate.

Approval Documentation

Test Reports

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

Conditions of Certification

1. 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.
2. 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" + 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)

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- 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 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 UK Conformity Mark 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 have the "UK Conformity Mark" affixed and be issued with a "UK Declaration of Conformity" affixed after a conformity assessment module is in place.
- 9. The manufacturer must keep a copy of the UK type-examination certificate, its annexes and additions together with the technical documentation at the disposal of the national authorities for a period of at least 10 years after the UK Conformity 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.
- 10. The certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products are fully compliant with the relevant statutory regulations as applicable and are designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.



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11/10/2022
09/11/2026
UKITSO/FIRE/TA/MT/WP43993113/PRJ11100327248

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11. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.

Place of Production

Witt & Sohn Aktiengesellschaft
Ziegeleiweg 38
25421 Pinneberg
Germany

Matthew Tillman
Area Technical Support Office Manager, UK&I
Marine & Offshore
**For and on behalf of Lloyd's Register Marine Ltd.
(LRM Ltd) - UK Approved Body 8512**

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