

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB00004MR
Revision No:
1

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Nozzles for fixed pressure waterspraying fire-extinguishing systems for cabin balconies

with type designation(s)
VID FireKill OH-PX2 Balcony

Issued to
Vid Fire-Kill ApS
Svendborg, Denmark

is found to comply with the requirements in the following Regulations/Standards:
Regulation **MSN 1874 Amendment 7**,
item No. UK/3.60. SOLAS 74 as amended Regulation II-2/10, FSS Code 7, IMO MSC.1/Circ.1313 and IMO MSC.1/Circ.1268

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

This Certificate is valid until **2028-11-27**.

Issued at **London** on **2023-11-28**

DNV local unit:
Denmark CMC



for **DNV UK Ltd.**

Approval Engineer:
Tessa Biever

Approved Body No.: **0097**

Christine Mydlak-Röder
MER Service Responsible



UK Approved Body Authorised
by 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 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. In case limitations of use apply, these should be indicated in the Annex.

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

'VID FireKill OH-PX2 Balcony',

is an automatic water mist system, composed sprinkler heads, stainless steel piping, sections valves and a pump unit.

The system is to be designed in accordance with the 'Principal Requirements for the System' in IMO MSC.1/Circ.1268.

Only the spray heads are type approved by this certificate. Pipes, couplings, valves and other systems components are subject to case-by-case approval.

Application/Limitation

Approved for use as an automatic water sprinkler system for cabin balconies.

Installation should be in accordance with the following tables:

Application	L x W [m ²]	Type	Location	Projection	Spacing [m]	Dist. to wall [m]
Cabin balcony ¹⁾	3 x 2	OH-PX2	Ceiling	Pendant	Single	Centre
			Sidewall	Horizontal	Single	Centre ²⁾

Notes:
 1) Heights above 2.5 m are subject to case-by-case approval.
 2) Sprinkler head to be mounted max. 100 mm below deckhead.

Sprinkler head	k-factor [lpm/bar ^{1/2}]	Min. working pressure [bar]	Min. flow [lpm]	Drawing No.
OH-PX2	19.2	6.1	47.4	180314-01-01 Rev.1

Sprinkler heads are to be made of brass and coated with nickel.
 Normal operating pressure is 6.1 bar.

For all applications

- Maximum system working pressure is 15.6 bar, while minimum working pressure at the sprinkler heads is 6.1 bar.
- All sprinkler heads are fitted with a fast response glass bulb which releases at nominal 57°C (orange code). Bulbs with higher temperature ratings, but not more than 30°C above ambient temperature, are subject to approval in each case.
- The pump(s) are to be delivered with product certificate, whereas other system components are to be certified or inspected in accordance with class rules or equivalent standard as specified by the Flag Administration.
- Redundant pump arrangement is to be approved on a case-by-case basis.
- Only stainless-steel piping or equivalent corrosion resistant pipes are to be applied (to avoid clogging of sprinklers). Primary water supply shall be fresh water of potable quality.
- Pipes, couplings and other components are regarded as "Class III" piping.
- The pump unit and section valves shall be installed in a room having ambient temperature between 4°C and 45°C.

The following items are to be approved and filed by the Flag Administration for each project:

- System arrangement plans including location of sprinklers, pipes, sections valves, control system and pump-unit.
- Specification of pipes, valves, electrical motor, pumps, pressurised tank(s) and associated components (including water supply specifications).
- Pressure drop calculations and water capacity calculations.
- Arrangement of power supply and control system.
- Manual containing installation, operation and maintenance instructions.

Installation

- Water to be in accordance with manufacturer's specification for water quality. No chemicals shall be added to the water, for the purpose of e.g. cleaning, bacterial control, corrosion inhibition, etc., without the acceptance from the Manufacturer.

Installation testing:

- System to be cleaned in accordance with routines outlined in maker's manual.
- Not less than 2 randomly selected sprinkler heads of each type shall be tested.
- Automatic start and stop of pumps.
- Automatic change over from main to emergency electric supply.
- Pressure testing of all piping to 1.5 times maximum working pressure.
- Other tests according to maker's manual and any required by the authority having jurisdiction.

Periodical testing:

- The periodical testing shall comply with instructions from flag administration, statutory interpretations and maker's maintenance manual.

Type Examination documentation

DIOM No.180305-01-03 DIOM Balcony IMO Rev.3 dated 9 May 2023 from manufacturer.

Fire test:

Test report No. 18-5-180226-215 dated 7 March 2018 from Danish Fire Laboratories (DFL), Denmark.

Component test:

Test report No. 110415-5 dated 15 April 2011 from Danish Fire Laboratories (DFL), Denmark.

Test report No. 180226-215 A dated 12 July 2018 from Danish Fire Laboratories (DFL), Denmark.

Drawing No. 180314-01-01 Rev.1 dated 14 March 2018 (sprinkler head).

Tests carried out

The system is tested according to IMO MSC.1/Circ.1268 (fire test) and according to IMO Res. A.800(19) (component tests of sprinkler head).

Marking of product

The sprinkler heads are to be marked with type designation, the MER Mark of Conformity, Approved Body No. and the year of manufacturing (see first page) whereas the pump unit is to be marked with name and address of manufacturer and type designation.