

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

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, Syddanmark, Denmark

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.60. SOLAS 74 as amended Regulation II-2/10, FSS Code 7, IMO MSC.1/Circ.1313 and IMO MSC.1/Circ.1268

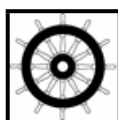
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-11-20**.

Issued at **Høvik** on **2018-11-21**

DNV GL local station:
Fredericia

Approval Engineer:
Synnøve Bolstad Eri



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified 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-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 GL AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



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 spray heads and the associated spray head manifold are type approved by this certificate. Pumps, pipes, couplings, valves and other systems components are subject to case by case approval.

The sprinkler heads are produced by VID Fire-Kill ApS, Denmark.

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	Spac g [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 ($Q = k \times p^{1/2}$) [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. 01

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

For all applications

- A. Maximum system working pressure is 15.6 bar, while the minimum working pressure at the sprinkler heads is 6.1 bar.
- B. All sprinklers 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 over ambient temperature, are subject to approval in each case.
- C. The pump(s) or the pump unit(s) is to be delivered with a product certificate whereas other system components are to be inspected in accordance with Class rules or equivalent standard as specified by the Flag Administration.
- D. Redundant pump arrangement is subject to approval in each case.
- E. Only stainless steel piping or equivalent corrosion resistant pipes are to be applied (to avoid clogging/erosion of sprinklers and sprinkler heads). Primary water supply shall be fresh water of potable quality.
- F. Pipes, couplings and other components are regarded as "Class III" piping.
- G. 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 submitted for approval for each project:

- i. System arrangement plans including location of sprinklers and sprinkler heads, pipes, sections valves, release controls (as applicable) and pump-unit.
- ii. Specification of pipes, valves, pump unit and associated components (including water supply specifications).
- iii. Pressure drop calculations and water capacity calculations.
- iv. Arrangement of power supply and control system.

- v. 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:

- a. System to be cleaned in accordance with routines outlined in maker's manual.
- b. Not less than 2 sprinkler heads in each section shall be tested. Testing may be limited to 10 sections. i.e. 2 x 10 sprinkler heads if it is successful.
- c. Automatic start and stop of pumps.
- d. Automatic change over from main to emergency electric supply
- e. Pressure testing of all piping to 1.5 times maximum working pressure.
- f. 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

Fire Performance:

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.

Manual no. DS-171117-21-01 OHPX2 Balcony Rev. 1 dated 7 March 2018.

Drawing no.180314-01-01 Rev. 01 dated 14 March 2018 (sprinkler nozzle).

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 product is to be marked with name of manufacturer, type designation, the MED Mark of Conformity (see first page), Notified Body No. and the year of manufacturing.