

1. **TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use in Potentially explosive atmospheres
Directive 2014/34/EU**
3. Type Examination Certificate Number: **EESF 19 ATEX 059X Issue 1**
4. Product: **Fire Damper**
Certified type: **FCE and FDH**
5. Manufacturer: **Halton Marine Oy**
6. Address: **Pulttikatu 2, 15700 Lahti, Finland**
7. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
8. Eurofins Expert Services Oy, Certification Body No. S017 accredited by the Finnish Accreditation Service (FINAS), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive 2014/34/EU of February 2014.

The examination and test results are recorded in confidential reports No. EUFI29-19004068-T1 and EUFI29-19001061-T1.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN ISO 80079-36 (2016) EN ISO 80079-37 (2016)
10. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
11. This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
12. The marking of the product shall include the following:



II 3 G	Ex h IIA, IIB, IIC T6...T4 Gc
II 3 D	Ex h IIIC T80°C...T130°C Dc
II 2 G	Ex h IIA, IIB, IIC T6...T4 Gb
II 2 D	Ex h IIIC T80°C...T130°C Db

Espoo, 13.3.2020
Eurofins Expert Services Oy

Kari Koskela
 Expert

Riku Vuorinen
 Manager

This document is digitally signed.

13. **Schedule**

 14. **Type Examination Certificate EESF 19 ATEX 059X Issue 1**

 15. **Description of Product**

Halton FCE fire dampers are CE-marked fire and smoke dampers for use in industrial ventilation systems. The FCE can be installed in rectangular or circular ducts. All fire dampers have a fusible link and they prevent the spread of fire and smoke within the ventilation ductwork. When the blades are in the open position, the device does not cause significant pressure loss, noise or flow disturbance. Fire dampers are set from outside and must be installed according to instructions. An open-closed indicator is visible on the outside of the damper.

Halton FDH fire dampers are type-approved class H0(H120) fire and gas dampers for use in offshore and marine ventilation systems. The FDH can be installed in rectangular or circular ducts. All fire dampers have a fusible link and they prevent the spread of fire and gases within the ventilation ductwork. When the blades are in the open position, the device does not cause significant pressure loss, noise or flow disturbance. Fire dampers are set from outside and can be installed in any position. An open-closed indicator is visible on the outside of the damper.

This document certifies that the fire dampers can't produce an ignition source which can ignite an explosive atmosphere.

The refractory is not covered.

The equipment is not designed to stop an explosion.

Possible equipment categories: II 2/3 GD or II 2/- GD.

 16. **Report Number**

EUFI29-19004068-T1 and EUFI29-19001061-T1

 17. **Specific Conditions of Use**

Damper open/close maximum speed: One meter per second.

Limitation of surface areas of gasket: 80 cm² for IIC group and 400 cm² for IIA and IIB groups.

Normal ambient temperature range is -20 °C... T_{amb}... 40 °C. With some approved components, ambient temperature range can be wider:

FCE, not wider than - 40 ≤ T_{amb} ≤ 70 °C.

FDH, not wider than - 60 ≤ T_{amb} ≤ 80 °C.

 18. **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

 19. **Thermal ignition assessment and tests**

Temperature class T6 to T4, conditional upon temperature class of assembled certified equipment and ambient temperature.

 20. **Drawings and Documents**

Drawings and documents are listed in the confidential report.

21. Certificate History

Issue	Date	Report No.	Change
-	18.9.2019		Prime certificate
1	10.3.2020		FDH added to the certificate