DNV·GL

Certificate No:
**TAF00000SD**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**That the Fire Damper**

with type designation(s)
**H-120 FIRE DAMPER TYPE FGS-01**

Issued to
**North Sea Ventilation Ltd.**
**HULL NORTH HUMBERSIDE, United Kingdom**

is found to comply with
**DNV GL offshore standards**

## Application :

**Approved for use in ventilation ducts in class H bulkheads and decks.**
**Maximum duct size: 1200 mm x 1200 mm.**

Issued at **Høvik** on **2017-08-01**
This Certificate is valid until **2022-06-30**.
DNV GL local station: **Hull - Grimsby**

Approval Engineer: **Fryderyk Hoga**

for **DNV GL**

**Mårten Schei-Nilsson**
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.


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## Product description

"H-120 Fire Damper type FGS-01"
composed of spring operated multibladed rectangular fire damper with automatic temperature sensitive release and operated either by pneumatic, electronic or manual control system.

The damper throat dimension may be increased to 1200 x 2400 mm (w x h) or 2400 x 1200 mm (w x h) if a 3 mm stainless steel mullion with dimension between 100 x 50 mm and 300 x 300 mm is included so that the individual throat dimension does not exceed 1200 x 1200 mm. The mullions are to be welded to the damper casing perimeter.

Individual fire dampers may be combined at a maximum 2 x 2 configuration by means of mechanical or weld fixing via the damper casings.

In both cases of increased damper size or combined dampers a damper shaft interlock is to be mounted, providing one actuator to drive adjacent damper blades.

## Application/Limitation

The arrangement of the fire damper and necessary insulation of damper frame and ducting in the vicinity of the partition is subject to approval in each case.

Actuator that may be used:
- Ledeen Dresser A80 RS / A160 RS (*)

(*) Actuators of same make but with different size as mentioned above may also be used, provided that they have sufficient torque, similar installation arrangement and equivalent fire technical and functional properties.

The damper shall be capable of being closed from both sides of the bulkhead/deck.

Steel thickness of damper casing to be equal to or greater than thickness of coaming/duct/sleeve required by the rules if the damper casing is part of the coaming/duct/sleeve.

Each product is to be supplied with its manual for installation, use and maintenance.

## Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

Test report WARRES No. 65508 dated 16 August 1995 from Warrington Fire Research Centre Ltd, Warrington, UK.

Test report WARRES No.115612 dated 9 January 2000 from Warrington Fire Research Centre Ltd, Warrington, UK.

Test report witness fire test dated 20 October 2000 from DNV Liverpool.

Assessment report WFRC No. 134194 dated 8 October 2003 from Warrington Fire Research Centre Ltd, Warrington, UK.

NSV drawing No. FGS-01, 2 sheets, dated 7 June 2000.

## Tests carried out

Tested according to IMO Res. A.754 (18) and with the hydrocarbon time-temperature curve specified in ISO 834-3.

## Marking of product

The product is to be marked with name of manufacturer, type designation and fire technical rating.

## Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.