

# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

**CERTIFICATE NO. F-19001**  
This Certificate consists of 2 pages

*This is to certify that the*  
**Fire Damper**

*with type designation(s)*  
**FIRE DAMPER**

*Manufactured by*  
**Witt & Sohn AG**  
PINNEBERG, Germany

*is found to comply with*  
Det Norske Veritas' Offshore Standards  
Det Norske Veritas' Rules for Classification of Ships  
Det Norske Veritas' Interpretation of SOLAS 1974 Convention as Amended

*Application*  
Approved for use in ventilation ducts in class A bulkheads. Max size: 1350 mm x 1350 mm. The damper satisfies for 60 minutes the requirements to stability and integrity according to chapter II-2, reg. 3 of the SOLAS 1974 convention.

*Place and date*  
Høvik, 2009-04-24

for DET NORSKE VERITAS AS

Petter Langnes  
*Head of Section*



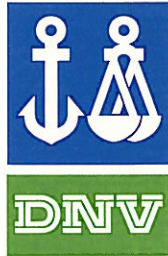
*Local Office*  
DNV Essen

*This Certificate is valid until*  
2013-06-30

Øyvind Hoff  
*Surveyor*

**Notice: 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.**

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: F-19001  
File No.: 472.22  
Case No.: 262.1-007588-1

## Product description

“FIRE DAMPER”

A 3-bladed fire damper with a spring powered operating system with automatically (electrical) or manual release. Damper blades made from 6 mm stainless steel and damper casing made from min. 10 mm mild steel. Max size: 1350 mm x 1350 mm (w x h). See drawings in test report for mounting details, etc.

## Application/Limitation

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

The fire damper shall be capable of being manually closed from both sides of the bulkhead or deck.

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

## Type Approval documentation

Certification in accordance with Certification Note No. 1.2, Type Approval, December 1996.

Test report No. GV94.23A, dated 12 June 1995 from TÜV Nord, Brandversuchshaus Hamburg, Germany.

Retention survey report no. ESN-08-4349 dated 30 March 2009 from DNV Hamburg.

Tested according to IMO FTPC Part 3 (IMO Res. A.754 (18)).

## Marking of product

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

## Certificate retention survey

Det Norske Veritas' surveyor is to be given permission to perform Certification Retention Surveys at any time during the validity period of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in item 4.3, Certification Note No. 1.2.

END OF CERTIFICATE

