

# TYPE APPROVAL CERTIFICATE

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**This is to certify:**

**That the Fire Damper**

with type designation(s)  
**BR**

Issued to

**Baas Component A/S**  
**LILLESTRØM, Norway**

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

**Application :**

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**Approved for use in ducts penetrating class H bulkheads and decks.**  
**Max. size of damper is Ø400 mm (internal diameter).**

This Certificate is valid until **2020-11-02**.

Issued at **Høvik** on **2015-11-03**

DNV GL local station: **Station Oslo Maritime and CAP**

for **DNV GL**

Approval Engineer: **Ragnar Tonjer**

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**Petter Langnes**  
**Head of Section**

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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.

Job Id: **262.1-004659-3**  
Certificate No: **TAF000004N**

## **Product description**

"BR"

composed of circular spring operated single bladed fire damper with automatic pneumatical release. Fire damper casing is made of 3 mm steel and fire damper blade is made of 4 mm steel. The damper blade edges may be fitted with 5 x 20 mm flame-retardant neoprene packing.

## **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.

The fire dampers are to be operated automatically and/or manually (when relevant).

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

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

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

## **Type Approval documentation**

Certification in accordance with Standard for Certification No. 1.2, Type Approval, January 2013.

Test report No. 103030.50 A and 103030.05 B dated 17 September 2003 and statement No. 103201.88 dated 8 September 2004 from SINTEF, Trondheim, Norway, and drawing No. T3000-12 dated 2 April 1990 from manufacturer.

## **Tests carried out**

Tested according to IMO Res. A.754(18) with temperature curve according to hydrocarbon fire.

## **Marking of product**

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

## **Periodical assessment**

DNVGL'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 Standard for certification No. 1.2 Type Approval Item 4.