

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Fire Damper**with type designation(s)
DUPLEX ST PRD (Pressure Relief Fire Damper)Issued to
Puma Products Limited
Andover, Hampshire, United Kingdomis found to comply with
DNV GL offshore standards**Application :****Pressure relief fire damper approved for use in H-0 bulkheads.**Issued at **Høvik** on **2019-01-02**for **DNV GL**This Certificate is valid until **2024-01-01**.DNV GL local station: **Southampton**Approval Engineer: **Helge Bjørnarå**

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.



Product description

“DUPLEX ST PRD (Pressure Relief Fire Damper)”

pressure relief fire damper consists of a 150 mm deep casing made of 1.5 mm stainless steel. One face is fitted with linked weighted 1.5 mm stainless steel blades and on the other face is fitted with a “cat flap” made of 1.5 mm stainless steel.

The “cat flap” is hinged to the top of the casing with two pins and fitted with two magnets to hold it in closed position at the bottom of the flap. A strip of single sided foam tape (20 mm wide x 2.5 m thick) is attached around the inside part of the flap to its perimeter.

The coaming of the damper is flange jointed onto the sleeve with bolt and nuts (max spacing 217.5 mm). The coaming of the pressure relief fire damper is to be insulated to H-60.

The fire dampers can be manufactured at the following location:

- Puma Products Limited, Hampshire, UK.

For further details, see the below Application/Limitation and Type Approval documentation.

Application/Limitation

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

Min. size of damper: 150 mm x 150 mm (W x H)

Max. size of damper: 750 mm x 750 mm (W x H)

The pressure relief fire damper has been evaluated for fire integrity only.

The pressure relief fire damper shall normally be kept in closed position. The pressure relief fire damper weighted fire blades open at 1000 Pa and the “cat flap” is set at 250 Pa.

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, September 2018.

Test reports No. 285031 dated 19 March 2013 from BRE Global Ltd, UK.

Drawing Nos.:

- M3/G/PNL 062-15, Rev. E, dated 31 May 2018
- M3/G/PNL 062-16, Rev. E, dated 31 May 2018
- M3/G/PNL 062-17, Rev. F, dated 1 June 2018
- M3/G/PNL 062-18, Rev. E, dated 1 June 2018
- M3/G/PNL 062-19, Rev. F, dated 1 June 2018
- M3/G/PNL 062-20, Rev. E, dated 1 June 2018
- M3/G/PNL 062-21, Rev. E, dated 1 June 2018
- M3/G/PNL 062-22, Rev. F, dated 1 June 2018
- M3/G/PNL 062-23, Rev. F, dated 1 June 2018

all from maker.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3 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.



Job Id: **262.1-016575-2**
Certificate No: **TAF000013J**

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.