

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Fire Door Control System

with type designation(s)
PSC 2000

Issued to

Advanced Pneumatic Marine GmbH
Reinfeld, Germany

is found to comply with

DNV GL class programme DNVGL-CP-0213 – Type approval – Fire safety equipment
DNV GL rules for classification – Ships
DNV GL offshore standards
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations
IMO International Code of Safety for High-Speed Craft (HSC CODE)
DNV GL rules for classification – High speed and light craft

Application :

Approved for use as a fire door control system for approved single leaf sliding fire doors and approved single leaf hinged fire doors.

This certificate is recognized by Transport Canada.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2018-02-20**

This Certificate is valid until **2023-02-19**.

DNV GL local station: **Hamburg**

for **DNV GL**

Approval Engineer: **Aleksandr Jegorov**

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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.



Job Id: **262.1-028233-1**
Certificate No: **TAF00000WJ**

Product description

"PCS 2000" - is a fire door pneumatic control system for sliding door or hinged door.

System consists of door actuator (pneumatic drive cylinder), air pressure cylinders (2 x 20 l. capacity and diam. 206 mm), control block (type PS2000), piping, valves, fire safety valve, pressure reducers, filter, push button, limit switch, sound alarm.

For further details see drawings and test report mentioned under Type Approval documentation below.

Application/Limitation

Approved for use as a fire door control system for approved sliding fire door and approved hinged fire door.

The fire door control system has only been evaluated with respect to fire technical properties.

System working pressure after pressure reducer is 5 - 5.5 bar., while pressure in air cylinders is 9 bar.

Maximum weight of sliding door leaf to be actuated by control system: 530 kg.
Maximum weight of hinged door leaf to be actuated by control system: 445 kg.

The insulation materials and adhesives used have to be tested according to the relevant parts of IMO 2010 FTP Code.

The 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 2017.

Test Report No. 2017CS011321 dated 25 June 2017 from RINA Services S.P.A., Genova, Italy.

Drawings from manufacturer:

For sliding door:

- No. 1-008267 Rev.0 - PCS 2000 HD Schaltplan / diagram accommodation / sound alarm
- No. 1-008268 Rev.0 - PCS 2000 HD Schaltplan / diagram car deck / key switch / sea mode
- No. 1-008269 Rev.0 - PCS 2000 HD Schaltplan / diagram with push button
- No. 1-008270 Rev.0 - PCS 2000 HD Schaltplan / diagram door handle

For hinged door:

- No. 1-008465 Rev.0 - PCS 2000 HD Schaltplan / diagram accommodation / HO / PB

Tests carried out

Tested according to IMO 2010 FTP Code part 4.

Marking of product

The product to be marked with name of manufacturer and type designation.

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the products listed in this certificate are in accordance with Transport Canada's requirements.

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.