

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Pneumatic Actuator**with type designation(s)
DFPD

Issued to

Festo AG & Co. KG
Esslingen am Neckar, Baden-Württemberg, Germanyis found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**Application :****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.****Dsgn. press./Torque 8 bar / see manufacturer's instruction**Issued at **Hamburg** on **2019-08-09**This Certificate is valid until **2024-08-08**.DNV GL local station: **Augsburg**for **DNV GL**Approval Engineer: **Guido Friederich**

Olaf Drews
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

Pneumatic quarter turn actuators single or double acting to be used for actuating and control of butterfly valves, ball valves and air dampers.
Optional additional mounting parts such as position sensors, solenoid valves, positioners are excluded from this type approval.

DFPD Size 10 to Size 2300

Actuator materials

Actuator housing	Aluminium alloy, EN AW-6063-T6
End cap	Cast aluminium
Piston	Cast aluminium
Drive shaft	Steel, Stainless steel

Application

Approved for application and mounting on remote operating butterfly valves and ball valves.
The selection of a suitable actuator for a specific valve type including operation and service conditions shall be carried out according to the technical instructions of the manufacturer.

Limitation

Actuators with housing cap and piston fabricated of aluminium shall not be mounted on valves installed in piping systems and areas subjected to potential hazards caused by fire.

Type Approval documentation

Tests carried out

Test Standards:

DNV GL Pt. 4 Ch.6 – Piping systems; Pt. 4 Ch.7 – Pressure equipment

- Pressure test witnessed by DNV GL Surveyor.
Test pressure in amount of 1,5 times the design pressure
- Functional test

Marking of product

For traceability to this type approval the products are to be marked with:

- Manufacturers name or trade mark
- Type code,
- Serial No.
- Part No.:
- Operating pressure

Places of manufacturing

Via San Lorenzo 70
25069 Villa Carcina (BS)
Italy

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to DNVGL-CP-0338, Sec.4.

The main scope of the periodical assessment will normally include:

- Verification of the TA applicant's production and quality system w.r.t ensuring continued consistent production of the type approved products at the TA applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the TA documentation and that this is still used as a basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking

END OF CERTIFICATE