



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. P-13673

This is to certify that the
Globe Valve

with type designation(s)

Globe valves designated Quick-Closing-Valves and Quick-Opening-Valves Design: straight and 90° angle type, with or without release cylinder, with or without bellow, with or without thermo release

Manufactured by

**Göpfert AG Armaturenfabrik und Metallgiesserei
WEDDINGSTEDT, Germany**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships
Det Norske Veritas' Offshore Standards
Det Norske Veritas' Standards for Certification 2.9 No. 5-794.40

Application

The valves may be used for tanks and fuel oil systems, as emergency shut-off valves.

Temperature range: Max temp 150°C
Max. working press.: Flange rating: 16 bar or ANSI 150 lbf
Sizes: DN15 - DN200

Høvik, 2010-12-08
for Det Norske Veritas AS



This Certificate is valid until
2014-12-31


Marianne Spøren
Head of Section

DNV local office:
Essen


Tom Berg-Nielsen
Surveyor

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.



Certificate No.: P-13673
File No.: 794.10
Job Id.: 262.1-009624-1

Product description

Globe valves for quick closing and quick opening.

Versions:

straight and 90° angle type, with or without release cylinder, with or without bellow, with or without thermo release.

Materials in housing:

Nodular cast iron GJS-400-18-LT

Cast steel: GP240GH

Application/Limitation

The valves may be used for tanks and fuel oil systems, as emergency shut-off valves.

This Type Approval Certificate does not cover: the attached piping, the main valve body and the actuator.

Flange rating:

- PN 16 or ANSI 150 DN15 to DN200

Each product/delivery is to be accompanied by the following documents:

- DNV product certificates are required for valves with DN > 100 mm and PN > 16 bar and for ship side valves DN > 100mm regardless of pressure rating. For other valves manufacturer's certificate may be accepted.
- Work's certificate for materials used in valve body, stem and plug indicating mechanical and chemical properties.

The valve housing shall be subject to a hydrostatic pressure test at minimum 1.5 times the design pressure.

Holding time: 2 minutes for sizes up to and including 100 mm,

5 minutes for sizes 125 - 200 mm.

No leakage is permitted.

The valve assembly shall be subject to a hydrostatic seat leakage test. The test pressure shall at least be equal to the design pressure.

Holding time: 5 minutes for sizes 125 - 200 mm.

Allowable leakage: Drop tight according to API standard 607

Type Approval documentation

The approval is based on the following:

Drawings of each valve.

Burst test report no. ESN-04-7863 dated 2006-11-13

Manufacturers brochure Schnellschlussventile

Tests carried out

Burst test

Marking of product

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

- Manufacturers name or trade mark
- Type designation

Certificate Retention Survey

For retention of the Type Approval, a DNV Surveyor shall perform a survey - every second year and before the expiry date of this certificate - to verify that the conditions for the type approval are complied with.