



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAP0000032
Revision No:
2

This is to certify:
that the **Globe Valve**

with type designation(s)
Quick Closing Valves

issued to
Göpfert AG
Weddingstedt, Germany

is found to comply with
DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV class programme DNV-CP-0186 – Type approval – Valves

Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Temperature range: **Max 150 °C**
Max. working press.: **PN16**
Sizes: **DN15 - DN200**

Issued at Hamburg on **2024-08-29**

This Certificate is valid until **2029-08-28**.

DNV local unit: **Hamburg**

Approval Engineer: **Ana Cristina Do Carmo Insfran**

for DNV



Digitally Signed By:
Sven Klinger
Location: **DNV Hamburg,**
Germany

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.



Product description

Globe valves for quick closing and quick opening on tanks and fuel lines.¹

Valve design styles:

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

Flange connections: EN 1092 PN16
 ASME B16.5 Class 150
 JIS 10K, 16K

Materials:

Valve part	Material name	Material acc. DIN/EN	Standard
Body	Nodular Cast Iron	0.7043 / EN-GJS-400-18-LT	EN 1563
	Cast steel	1.0619 / GP240GH	EN 10213
	Copper alloy	Rg5 CC491k / CuSn5Zn5Pb5-C, Gbz10 CC480k / CuSn10-C	EN 1982
Bonnet	Nodular Cast Iron	0.7043 / EN-GJS-400-18-LT	EN 1563
	Copper alloy	Rg5 CC491k / CuSn5Zn5Pb5-C, Gbz10 CC480k / CuSn10-C	EN 1982
Bonnet seal	KLINGERSIL® C-4400	--	--
	Graphite	--	--
Body bolting	Austenitic stainless	1.4301 / X5CrNi18-10	EN 10088
Disc	Martensitic stainless	1.4104 / X14CrMoS17, 1.4006 / X12Cr13	EN 10088
Seat	Austenitic stainless	1.4301 / X5CrNi18-10, 1.4305 / X8CrNiS18-9	EN 10088
	Martensitic stainless	1.4006 / X12Cr13	

Note¹: Actuators, remote operating control devices, thermo release and additional mountings are not included in this type approval.

APPLICATION

Valves for use in machinery piping systems, ship piping systems and cargo handling piping systems
 Operating media are e.g.: Fuel oil, lubrication oil, hydraulic oil and thermal oil ²

² Fuel oil, lubrication oil, hydraulic oil and thermal oil are in this context regarded as "Flammable liquids".
 See DNV Rules, Pt. 4 Ch. 1, Section 3 – Design principles

LIMITATION

Valves with KlingerSil gaskets are not permitted in systems that require fire safe certification.

Nodular cast iron of the ferritic type, with specified minimum elongation of 12%, may be used in class II and III piping and in valves located on the ship's side and bottom and valves on the collision bulkhead.

Nodular cast iron shall not be used for media having a temperature exceeding 350°C or below 0 °C.

Valves fabricated of grey cast iron and nodular cast iron with specified elongation (A5) of < 12% are not permitted for the following installations and service conditions:

- Media having temperature below 0 °C and a temperature exceeding 120°C
- Class I and II piping systems
- At the ship's side and bottom, on sea chest and on collision bulkheads
- Valves under static head fitted on external wall of fuel oil tanks and tanks for other flammable liquids

TYPE APPROVAL DOCUMENTATION

Renewal of TAP0000032 Rev. 02
 Type Approval Assessment Report dated 2024-08-28
 ISO 9001:2015 - TÜV Certificate Nr.: 44100231879 valid until 2026-12-31
 The approval is based on the following:

Doc. ref.	Description
26.01.01.04-10	Quick closing valve PN16 straight type with release cylinder DN15 to DN32
26.01.01.04-10_10	Quick closing valve PN16 straight type with auto. Thermo release DN15 to DN32
26.01.01.04-10/A	Quick closing valve PN16 – fire safe – straight type with release cylinder DN15 to DN32
26.01.01.12-18	Quick closing valve PN16 straight type with release cylinder DN40 to DN80
26.01.01.12-18_10	Quick closing valve PN16 straight type with auto. Thermo release DN40 to DN80
26.01.01.12-18/A	Quick closing valve PN16 – fire safe – straight type with release cylinder DN40 to DN80
26.01.01.22-29	Quick closing valve straight type with release cylinder DN100-125 PN16/DN150-200 PN10
26.01.01.22-29/A	Quick closing valve PN10/16 – fire safe – straight type with release cylinder (DN100-125, PN16 / DN150-200, PN10)
26.01.02.04-10	Quick closing valve PN16 angle type with release cylinder DN15 to DN32
26.01.02.04-10_10	Quick closing valve PN16 angle type with auto thermo release DN15 to DN32
26.01.02.04-10/A	Quick closing valve PN16 – fire safe – angle type with release cylinder DN15 to DN32
26.01.02.12-18	Quick closing valve PN16 angle type with release cylinder DN40 to DN80
26.01.02.12-18_10	Quick closing valve PN16 angle type with auto thermo release DN40 to DN80
26.01.02.12-18/A	Quick closing valve PN16 – fire safe – angle type with release cylinder DN40 to DN80
26.01.02.22-29	Quick closing valve PN10/16 angle type with release cylinder (DN100-125, PN16 / DN150-200, PN10)
26.01.02.22-29/A	Quick closing valve PN10/16 – fire safe – angle type with release cylinder (DN100-125, PN16 / DN150-200, PN10)
26.01.11	Quick closing valve PN16 – with bellow – straight type with release cylinder DN15 – DN125
26.01.12	Quick closing valve PN16 – with bellow – angle type with release cylinder DN15 – DN125
26.05.01	Quick opening valve PN16 – with bellow – straight type with release cylinder DN15 to DN125
26.05.01_01	Quick opening valve PN16 straight type with release cylinder DN15 to DN125
26.05.02	Quick opening valve PN16 – with bellow – angle type with release cylinder DN15 to DN125
26.05.02_01	Quick opening valve PN16 angle type with release cylinder DN15 to DN125 Burst test report no. ESN-04-7863 dated 2006-11-13 Burst test report no.201501, dated 2015-07-07. Manufacturers brochure: "Schnellschlussventile"
572-05	Vibration test report no. 572-05, dated 2005-02-14, Paconsult GmbH
--	Confirmation Asbestos free, dated 208-09-17, Rich. Klinger GmbH
--	

TESTS CARRIED OUT

Test standard	Type of test
DNV Pt.4 Ch.6	
DNV CP-0186	Burst test, vibration test

Test documentation provided as reference for this type approval.

PRODUCTION TESTING

The valves are subjected to the following scope of tests:

Test standard: DNV Pt.4, Ch.6		Purpose
Title	Test reference	
Hydrostatic pressure test	Valve body	To confirm the pressure containing capability of the valve body against internal pressure Test pressure = 1,5 times the design pressure Holding time: 2 minutes for sizes ≤ DN 100 5 minutes for sizes DN 125 – DN 20 No leakage is permitted.
Seat tightness	Valve seat	To confirm the capability of the seats to comply with the specified leakage rate Test pressure to be equal to the design pressure. Holding time: 2 minutes for sizes ≤ DN 100 5 minutes for sizes DN 125 – DN 200 Leakage permitted: Drop tight

CERTIFICATION

Application in machinery and piping systems

Valves intended to be installed in piping system listed in DNV Rules Pt.4, Ch. 6 – Section 1 shall be certified according to DNV Rules Pt.4, Ch.6 – Piping systems, Section 9

Valve nominal size / Pressure rating

DN > 100 mm and PN > 16 bar
 DN ≤ 100 mm or PN ≤ 16 bar

Type of Certificate (PC) / Issued by

PC Product Certificate / DNV
 PD Product Declaration / Manufacturer

Material certificates (valve bodies)

In accordance with DNV Rules Pt.4 Ch.6 – Piping systems, Section 2

MARKING OF PRODUCT

For traceability of products, marking shall be legible and indelible. Products are to be marked as follows:

- Manufacturers name or trade mark
- Type designation (nominal diameter)
- Nominal size DN,
- Nominal pressure PN
- Arrow to indicate direction of flow on one-way flow valves.

Marking sample:

Göp
 DN20
 PN16
 →

Periodical assessment

For retention of the Type Approval, a DNV 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 DNV CP-0338, Sec.4.

The certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

End of Certificate