



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **P-14840**

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

with type designation(s)

**462002, 462102, 467002, 467102, 901002, 901102, 902002, 902102, 921002, 921102, 901022, 901122, 901062, 901162, 901092, 901192, 902062, 902162**

Issued to

**LK Valves AB**  
**HELSINGBORG, Sweden**

is found to comply with

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

Application

**may be used for tanks and fuel oil systems, sea- and fresh water, gases and compressed air**

**Temperature range: See cert.**  
**Max. working press.: See cert.**  
**Sizes: See cert.**

This Certificate is valid until **2017-12-31**.

Issued at **Høvik** on **2014-04-10**

DNV local station: **Malmö**

Approval Engineer: **Adel Samieizafarghandi**

for **Det Norske Veritas AS**  
Digitally Signed By: **Marianne Spæren Marveng**  
Location: **DNV Høvik, Norway**  
Signing Date: **2014-04-10**

**Marianne Spæren Marveng**  
**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. 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.

## Product description

The valves are manufactured at:  
**Helsingborg, Sweden.**  
**Changzhou, China.**

Type no	Description	Size (DN)	Material
462002	Globe Valve Straight, bellow sealed	15-250	EN-GJS-400-15, alt. EN-GJS-400-18
462102	Globe Valve Angle, bellow sealed	15-250	EN-GJS-400-15, alt. EN-GJS-400-18
467002	Globe Valve Straight	15-250	EN-GJS-400-15
467102	Globe Valve Angle	15-250	EN-GJS-400-15
901002	Quick Closing Valve, Straight	15-250	EN-GJS-400-15
901102	Quick Closing Valve, Angle	15-250	EN-GJS-400-15
902002	Quick Closing Valve, Straight, bellow sealed	15-250	EN-GJS-400-15 alt. EN-GJS-400-18
902102	Quick Closing valve, Angle, bellow sealed	15-250	EN-GJS-400-15 alt. EN-GJS-400-18
921002	Self Closing Valve, Straight	15-80	EN-GJS-400-15
921102	Self Closing Valve, Angle	15-80	EN-GJS-400-15
901022	Quick Closing valve, Straight	15-250	Bronze. RG5
901122	Quick Closing valve, Angle	15-250	Bronze. RG5
901062	Quick Closing valve, Straight	15-250	GS-C25
901162	Quick Closing valve, Angle	15-250	GS-C25
901092	Quick Closing valve, Straight	15-250	AISI316
901192	Quick Closing valve, Angle	15-250	AISI316
902062	Quick Closing valve, Straight	15-250	GS-C25
902162	Quick Closing valve, Angle	15-250	GS-C25

Trim of the valve are in standard execution AISI 304, 316, and RG5 depending on application. However other qualities can be delivered.

Disc types can be Fixed disc, SDNR, Regulating discs

## Application/Limitation

The valves may be used for tanks and fuel oil systems, sea- and fresh water, gases and compressed air.

The approval does not include actuator and/or other equipment for remote control of the valves.

Design pressures:

- Sizes up to DN200: 16 bar
- Sizes incl. and above DN200: 10 bar

Design temperatures:

- 462002 and 462102:
  - 0-120°C for 16 bar
  - 0-300°C for 10 bar
- 902002, 902102, 902062, 902162: 0-300°C
- All other types: 0-180°C

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

- Work's test certificate for materials used in valve body, stem and plug indicating mechanical and chemical properties.



Each 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 - 250 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 all sizes  
Allowable leakage: Drop tight according to API standard 607

### Type Approval documentation

Drawing No.	Rev./Date
Master	0
62288	P0
62287	P0
75262	B
75266	C
75158	D
62307	P0
62308	P0
75666	A
75674	0
75983	A
75995	B
75971	B

Manufacturer's burst test report witnessed by DNV dated 2008-11-06.

Type approval assessment report dated 2013-10-24 signed and stamped by DNV Malmö.

### Tests carried out

Burst test

### Marking of product

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

- Manufacturer's name or trademark.
- Type designation
- Size
- Maximum design Pressure

### Periodical assessment

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.

**END OF CERTIFICATE**