

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Globe Valve**with type designation(s)
01252, 03252, 01272, 03272

Issued to

**Herose GmbH Armaturen und Metalle
Bad Oldesloe Schleswig-Holstein, Germany**

is found to comply with

**DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV GL rules for classification – Ships Pt.5 Ch.7 Liquefied gas tankers
DNV GL class programme DNVGL-CP-0186 – Type approval – Valves
DNV GL offshore standards****Application :****Bellow sealed globe valves.****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.****For installation on Offshore units the requirements specified in the applicable DNV GL rules for classification of Offshore units (RU-OU) are to be observed.**

Type:	Temperature range:	Max. working press.:	Sizes:
01252, 03252	-196°C to +120°C	PN 50	DN 10 to DN 50
01272, 03272	-255°C to +120°C	PN 50	DN 10 to DN 50

This Certificate is valid until **2022-01-30**.Issued at **Hamburg** on **2017-01-31**DNV GL local station: **Hamburg**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

Type 01252 Globe valves

Bellow sealed globe valve.

Butt weld or socket weld connection or stainless steel stubs according to DIN EN ISO 1127 or ASTM A312

Materials:

Body	Mat.no 1.4308	ASTM A351 CF8
Valve seal:	PTFE/Carbon filled 25 %	
Disc	Mat.no 1.4301	ASTM A276 Grade 304
Bonnet gasket	PTFE	
Headpiece	Mat.no 1.4301	ASTM A276 Grade 304
Bellow stem:	Mat.no 1.4571	ASTM A276 Grade 321
Bolts:	Mat.no 1.4301/A2	ASTM A194 B8
Bellow:	Mat.no 1.4571	ASTM A276 Grade 321
Elongation tube	Mat.no 1.4541	ASTM A213 TP 321
Upper part	Mat.no 1.4301	ASTM A276 Grade 304
Bush:	CW452K	ASTM B103 Alloy A
Stem	Mat.no 1.4301	ASTM A276 Grade 304
Gland packing:	Graphite/PTFE	
Gland nut:	Mat.no 1.4305	ASTM A276 Grade 303
Handwheel	Aluminum Alloy	

Size range: DN 10, 15, 20, 25, 32, 40, 50

Type 01272 Globe valves

Bellow sealed globe valve.

Butt weld or socket weld connection or stainless steel stubs according to DIN EN ISO 1127 or ASTM A312

Materials:

Body	Mat.no 1.4409	ASTM A351 CF3M
Valve seal:	PCTFE	
Disc	Mat.no 1.4404	ASTM A276 Grade 316L
Bonnet gasket	Graphite	
Headpiece	Mat.no 1.4404	ASTM A276 Grade 316L
Bellow stem:	Mat.no 1.4571	ASTM A276 Grade 316Ti
Bolts:	Mat.no 1.4571/A4	ASTM A194 B8T
Bellow:	Mat.no 1.4571	ASTM A276 Grade 316Ti
Elongation tube	Mat.no 1.4571	ASTM A276 Grade 316Ti
Upper part	Mat.no 1.4404	ASTM A276 Grade 316L
Bush:	CW452K	ASTM B103 Alloy A
Stem	Mat.no 1.4404	ASTM A276 Grade 316L
Gland packing:	Graphite/PTFE/Mica	
Gland nut:	Mat.no 1.4305	ASTM A276 Grade 303
Handwheel	Aluminum Alloy	

Size range: DN 10, 15, 20, 25, 32, 40, 50

Type 03252 Globe valves

Bellow sealed globe valve.

Flanged connection acc. to DIN EN 1092-1 PN40 or ANSI B16.5 Class 150 and 300

Materials:

Body	Mat.no 1.4308	ASTM A351 CF8
Valve seal:	PTFE/Carbon filled 25 %	
Disc	Mat.no 1.4301	ASTM A276 Grade 304
Bonnet gasket	PTFE	

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Headpiece	Mat.no 1.4301	ASTM A276 Grade 304
Bellow stem:	Mat.no 1.4571	ASTM A276 Grade 321
Bolts:	Mat.no 1.4301/A2	ASTM A194 B8
Bellow:	Mat.no 1.4571	ASTM A276 Grade 321
Elongation tube	Mat.no 1.4541	ASTM A213 TP 321
Upper part	Mat.no 1.4301	ASTM A276 Grade 304
Bush:	CW452K	ASTM B103 Alloy A
Stem	Mat.no 1.4301	ASTM A276 Grade 304
Gland packing:	Graphite/PTFE	
Gland nut:	Mat.no 1.4305	ASTM A276 Grade 303
Handwheel	Aluminum Alloy	

Size range: DN 15, 20, 25, 40, 50

Type 03272 Globe valves

Bellow sealed globe valve.

Flanged connection acc. to DIN EN 1092-1 PN40 or ANSI B16.5 Class150 and 300

Materials:		
Body	Mat.no 1.4409	ASTM A351 CF3M
Valve seal:	PCTFE	
Disc	Mat.no 1.4404	ASTM A276 Grade 316L
Bonnet gasket	Graphite	
Headpiece	Mat.no 1.4404	ASTM A276 Grade 316L
Bellow stem:	Mat.no 1.4571	ASTM A276 Grade 316Ti
Bolts:	Mat.no 1.4401/A2	ASTM A194 B8M
Bellow:	Mat.no 1.4571	ASTM A276 Grade 316Ti
Elongation tube	Mat.no 1.4571	ASTM A213 TP 316Ti
Upper part	Mat.no 1.4571	ASTM A276 Grade 316Ti
Stem	Mat.no 1.4404	ASTM A276 Grade 316L
Gland packing:	Graphite/PTFE	
Gland nut:	Mat.no 1.4404	ASTM A276 Grade 316L
Handwheel	Aluminum Alloy	

Size range: DN 15, 20, 25, 40, 50

Application/Limitation

Valves may be used for compressed air, vapours, nitrogen, oxygen, cryogenic liquified gases including LNG.

Working temperature:

Globe valve types 01252, 03252 -196°C to +120°C,
 01272, 03272 -255°C to +120°C

Pressure rating: PN50

Type Approval documentation

Tests carried out

Burst test

Marking of product

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

- Manufacturer's name and/or trade mark



Job Id:
Certificate No: **TAP00000KD**

- Valve type designation
- Valve size
- Design pressure
- Design temperature
- Arrow for indication of flow direction

Periodical assessment

A condition for retention of the Type Approval Certificate in its validity period is that periodical assessments are successfully carried out.

The objective of the periodical assessment is to verify that the conditions for the type approval have not been altered. 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