

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Gate Valve

with type designation(s)
09340, 09343

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 :

Gate Valve.

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:
09340	-196°C to 120°C	DN 25 - DN 80 :50 bar, DN 100: 40 bar	DN 25 to DN 100
09343	-196°C to 120°C	DN 25 - DN 80: 50 bar; DN 100: 40 bar	DN 25 to DN 100

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**

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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 09340 :
Gate valve with handwheel
Butt weld or socket weld end connection or stainless steel stubs according to
DIN EN ISO 1127 or ASTM A312

One way tightening (in flow direction), "live loaded" gland packing

Materials:
Body: Mat.No. 1.4308 ASTM A351 CF8
Valve seat : PTFE/Carbon filled 25%
Disc CW452K ASTM B 103 UNS C51900
Bolts: Mat.No. 1.4301/A2 ASTM A194 B8

Size range: DN 25, 40, 50, 65, 80 and 100

Type 09343
Gate valve with pneumatic Actuator
Butt weld or socket weld end connection or stainless steel stubs according to
DIN EN ISO 1127 or ASTM A312

One way tightening (in flow direction), "live loaded" gland packing

Materials:
Body: Mat.No. 1.4308 ASTM A351 CF8
Valve seat : PTFE/Carbon filled 25%
Disc CW452K ASTM B 103 UNS C51900
Bolts: Mat.No. 1.4301/A2 ASTM A194 B8

Size range: DN 25, 40, 50, 65, 80 and 100

Application/Limitation

May be used for air, gases, and cryogenic liquified gases, LNG.
Working temperature: -196°C to +120°C

Type Approval documentation

Tests carried out

Burst test

Marking of product

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

- Manufacturers name or trade mark
- Valve type designation
- Valve size
- Maximum design pressure and temperature
- Arrow to indicate direction of flow on one way flow valves.

Periodical assessment

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



Job Id:
Certificate No: **TAP00000NH**

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