

# TYPE APPROVAL CERTIFICATE

Certificate No: **TAP00000NH** Revision No: 2

This is to certify:

That the Gate Valve

with type designation(s) **09340**, **09343** 

Issued to

## HEROSE G.M.B.H. ARMATUREN UND METALLE

Bad Oldesloe, Schleswig-Holstein, Germany

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.6 Piping systems DNV rules for classification – Ships Pt.5 Ch.7 Liquefied gas tankers DNV class programme DNV-CP-0186 – Type approval – Valves DNV offshore standards

## Application:

Gate Valve.

Products approved by this certificate are accepted for installation on all vessels classed by DNV. For installation on Offshore units the requirements specified in the applicable DNV 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

Issued at Hamburg on 2022-11-28

for **DNV** 

This Certificate is valid until 2027-11-27.

DNV local unit: Essen

Approval Engineer: Ana Cristina Do Carmo Insfran

Sven Klinger Head of Section

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 300,000 USD.



Form code: TA 251 Revision: 2022-09 www.dnv.com Page 1 of 3

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.



Job Id: **262.1-022904-3**Certificate No: **TAP00000NH** 

Revision No: 2

## **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

Type Approval Application dated on 2022-08-02

Type Approval Assessment Report dated on 2022-10-19

Type overview table

Drawing Nr.: 09340-X-; 09343 – X- Zulassung dated on 2022-03-08

Test report from TÛV Nord dated 04.10.2007 and 25.02.2005

#### **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.

Form code: TA 251 Revision: 2022-09 www.dnv.com Page 2 of 3



Job Id: **262.1-022904-3** Certificate No: **TAP00000NH** 

Revision No: 2

### 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 <a href="https://approvalfinder.dnv.com">https://approvalfinder.dnv.com</a>.

#### **END OF CERTIFICATE**

Form code: TA 251 Revision: 2022-09 www.dnv.com Page 3 of 3