



## Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>Herose GmbH Armaturen und Metalle</b>
<b>Address</b>	Elly-Heuss-Knapp-Str. 12, Bad Oldesloe, 23843, Germany
<b>Type</b>	Valves - General
<b>Description</b>	Globe valves with flanged, threaded or welded sleeve connection consisting of stainless steel body (1.4308 for non-welded, 1.4571 or 1.4409 for welded and non-welded versions), disc seat with surface stellite (NiCrBSi) or PTFE optional in fire safe design (1.4301 or 1.4401), bonnet with or without extension in stainless steel (1.4301, 1.4401 for non-welded or 1.4404, 1.4571, 1.4307 optional for welded versions) or bronze, manual or pneumatically operated, with or without non-return function. Bellow sealed bonnet available.
<b>Trade Name</b>	Cryogenic-Globe and Globe/Check Valves
<b>Application</b>	LNG, hydrogen and cryogenic service on board of ships classed or intended for classification with Lloyd's Register.
<b>Specified Standard</b>	Lloyd's Register's Rules and Regulations for the Classification of Ships, 2024; Lloyd's Register's Rules and Regulations for the Construction and Classification of for the Carriage of Liquefied Gases in Bulk, 2024, Lloyd's Register's Rules and Regulations for the Classification of Ships using Gases or other Low-flashpoint Fuels, July 2024, International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), 2016, International Code of Safety for Ships using Gases or Other Low-Flashpoint

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Fuels (IGF Code) 2016,  
ISO 28921 (BS 6364); on request acc. EN ISO 10497  
EN 1626

### Ratings

### Types:

#### Globe valves:

01345, 01355,  
01645, 01655,  
01741, 01743, 01745, 01751, 01753, 01755,  
01841, 01843, 01845, 01851, 01853, 01855,  
03341, 03343, 03351,  
03641, 03651,  
03741, 03743, 03751,  
03841, 03843, 03851,  
11C01.A001

#### Globe valves bellow sealed:

01272, 03252, 11C01.A001

Nominal pressure: 63 bar, DN 10 to 50 for type 11C01,  
50 bar for DN 10 to DN 100,  
40 bar for DN 150,  
25 bar for DN 200

Temperature range: -196°C to +120°C for valves of 1.4308,  
-255°C to +120°C for valves of 1.4409,  
-269°C to +80°C for valves of 1.4571, type 11C01

Note: available prototype tests conducted only until -196°C

### Additional Tests

For hydrogen applications the valves are to be shell and seat leakage tested with helium or a mixture of 95 per cent nitrogen and 5 per cent hydrogen.



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**Other Conditions**

Only fire safe design to be used for emergency shut down or terminal (end of pipe) applications for flammable fluids.  
The manufacturer's operating and maintenance instructions are to be sought.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** LR2508712TA, (LR2002016TA)

The Design Appraisal Document TSO/24-022549 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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