Certificate No: LR2003773TA-02
Issue Date: 16/05/2023
Expiry Date: 18/10/2024

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.

Manufacturer	**Samson AG**
Address	3,Weismüllerstraße, Frankfurt am Main, 60314, Germany
Type	Low Temperature Valves
Description	Globe Control Valves
Trade Name	3241, 3244, 3251, 3254
Application	Marine, offshore and industrial fields for cryogenic applications. Restrictions: Not to be used for emergency shut-down systems and terminal end valves or means to prevent back-flow of liquid. Only types and sizes with prototype cryogenic tests are to be used for piping systems with design temperatures lower than -55°C on LR classed ships.
Specified Standard	Lloyd's Register's Rules and Regulations for Classification of Ships, 2022; Lloyd's Register's Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gases in Bulk, July 2022; Lloyd's Register's Rules and Regulations for the Classification of Ships using Gases or other Low-flashpoint Fuels, July 2022; ASME B16.34; EN 12516

Johannes Wiegel

Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Ratings

Type 3241
For cryogenic industrial service
Size [DN]: 15 to 300
Size [NPS]: ½ to 12

For LNG service and process gas systems*
Size[DN]: 25 40 50 80 100 150 250
Size[NPS]: 1 1½ 2 3 4 6 10

Temperature Range: -196 °C to 450 °C
Pressure/Temperature Ratings acc. ASME B16.34 / EN 12516-1

Body: casting A351 CF3M / 1.4409
Flange: A182 F316(L) / 1.4401/1.4404
Seat: A182 F316(L) / 1.4401/1.4404
Cone: 1.4409/1.4404
Shaft: A479 316(L) / 1.4401/1.4404

Type 3244*
Size[DN]: 50
Size[NPS]: 2

Temperature Range: -196 °C to 450 °C
Pressure/Temperature Ratings acc. ASME B16.34 / EN 12516-1

Body: casting: A351 CF8M / 1.4408
Flange: A182 F316(L) / 1.4401 / 1.4404
Seat: A182 F316L / 1.4404
Cone: A182 F316L / 1.4404Shaft: A479 316(L) / 1.4404

Type 3251*
Size[DN]: 25 50 150
Size[NPS]: 1 2 6

Temperature Range: -196 °C to 550 °C

Type Approval Certificate

Pressure/Temperature Ratings acc. ASME B16.34 / EN 12516-1

Body: casting: A351 CF8M / A182 F316 / 1.4408 / 1.4401
Seat: A479 F316L / A351 CF3M / 1.4404 / 1.4409
Cone: A479 F316L / A351 CF3M / 1.4404 / 1.4409Shaft: A351 CF8M / A182 F316 / 1.4408 / 1.4401

Type 3254*
Size[DN]: 100
Size[NPS]: 4

Temperature Range: -196 °C to 550 °C
Pressure/Temperature Ratings acc. ASME B16.34 / EN 12516-1

Body: casting: A351 CF8M / 1.4408
Seat: A479 316(L) / A351 CF3M / 1.4401 / 1.4404
Cone: A479 316(L) / A351 CF3M / 1.4401 / 1.4404
Shaft: A351 CF8M / A182 F316 / 1.4408 / 1.4401

*)other sizes on request require additional cryogenic type tests

Other Conditions The manufacturer's instructions for material selection and installation are to be sought. Material A351 CF8M is not to be used for welded connections in marine environment. Only the low carbon types C <0.03% are to be used here.

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: LR2003773TA-01

The Design Appraisal Document HTS/ENS 39795-19 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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