



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	HEROSE G.M.B.H. ARMATUREN UND METALLE
Address	Elly-Heuss-Knapp-Str. 12, Bad Oldesloe, 23843, Germany
Type	Safety Valves
Description	Standard or full lift safety valves, optional with lifting device or bellow sealed, with thread connection consisting of stainless steel or bronze body, soft or metal seated disc. Types 06800, 06801, 06805, 06806 standard safety valves with bellow; 06011, 06012, 06016, 06381 standard safety valves; 06383, 06413 full lift safety valves; 06440, 06441, 06445, 06446 standard safety valves;
Trade Name	Cryogenic-Safety Valves
Application	LNG, hydrogen, ammonia, methanol and cryogenic service on board of ships classed or intended for classification with Lloyd's Register.
Specified Standard	Lloyd's Register's Rules and Regulations for the Classification of Ships, 2025; Lloyd's Register's Rules and Regulations for the Classification of Ships using Gases or other Low-flashpoint Fuels, 2025; Lloyd's Register's Rules and Regulations for the Construction and Classification of for the Carriage of Liquefied Gases in Bulk, 2025;

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DIN EN 13648-1, EN ISO 4126-4,

Ratings	see Appendix
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.
Other Conditions	Not to be used for boiler or steam generator. The manufacturer's operating and maintenance instructions are to be sought. Selection of materials for valves and sealing are to be appropriated for the intended fluids and ratings. Bronze (copper alloy) is not to be used with ammonia.

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: 15-20076-02

The Design Appraisal Document TSO/25-034098, (previous HTS/ENS 33077-15, Issue No. 1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

RATINGS:

	Type:	Size [inch]	Do [mm]	Set Pressure [bar]
Safety valves	06800**, 06801, 06805, 06806	G1/2 - G1**	12,5 - 23	3 – 25*
	06011, 06012, 06016	G1/4 – G1/2	6	1 – 55
	06381	G1/2 - G3/4	10,5	0,2 - 36
	06383, 06413	G1/2 – G2	7 - 23	2 – 50*
	06440, 06441, 06445, 06446	G1/2 – G1 1/4	7 - 23	0,4 – 50*

R- and NPT- thread connections are optional available.

*) Minimum and maximum set pressures depend on sizes, pressure reduction as per manufacturers data sheets.

**) Only size G 1", do=23 mm of this type group cryogenic tested.

Temperature range: -270°C to +225°C depending on type. Temperature reduction as per manufacturer data sheet.

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