Certificate No: LR26171657TA
Issue Date: 20/04/2026
Expiry Date: 19/04/2031

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	**Habonim Industrial Valves Ltd**
Address	Kfar Hanassi, Upper Galil 12305, 67899, Israel
Type	Low Temperature Valves
Description	Stainless steel unidirectional and bidirectional cryogenic ball valve and diverter ball valve with different end connections, flanged, screwed, butt weld and extended butt weld, available. TYPE C47-666 ball valve FC47-666 ball valve fire safe design DC47-666 diverter ball valve
Trade Name	C47, FC47 (fire safe design), DC47
Application	For use in piping systems in marine, offshore and industrial field for cryogenic applications.
Specified Standard	Lloyd's Register's Rules and Regulations for the Classification of Ships, July 2025; Lloyd's Register's Rules and Regulations for the Construction and Classifications of Ships for the Carriage of Liquefied Gases in Bulk, July 2025; Lloyd's Register's Rules and Regulations for the Classification of Ships using

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Johannes Wiegel

Engineering Piping/Decarbon - 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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Gases or other Low-flashpoint Fuels, July 2025

Ratings

Size:	DN15 / 1/2"	DN25 / 1"	DN40 / 1 1/2"	DN50 / 2"
Design Pressure :	20 bar	103 bar	103 bar	70 bar
	DN65 / 2 1/2"	DN80 / 3"	DN100 / 4"	DN150 / 6"
	50 bar	50 bar	50 bar	50 bar

Temperature Range: PTFE Seats -196 to 200°C
NRG Seats -196 to 200°C
TFM Seats -196 to 230 °C

Additional Tests

Fire test of type FC47 according API standard 6FA, 3rd Edition, April 1999
DIN EN 12266-1
BS 6364

Other Conditions

Selection and installation of valves has to be in accordance with the manufacturer's recommendations.
Only the fire safe design FC47 is to be used for emergency shut down or terminal (end of pipe) applications for flammable fluids.
NRG carbon filled PTFE has to be used as material for seat and steam seal for the fire safe design (type FC47).
Material A351 CF8M is not to be used for welded connections in cryogenic applications in the marine environment. Only the low carbon types C <0.03% are to be used here.
Screwed connections are only to be used for accessory and instrumentation lines with external diameters of 25 mm or less.

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: LR21292569TA-03

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The Design Appraisal Document TSO/26-057863-P-1 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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