

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.

This certificate is issued to:

PRODUCER	Habonim Industrial Valves & Actuators Kfar Hanassi Upper Galilee 1 1230500 Israel
DESCRIPTION	Stainless steel cryogenic ball valve with different end connections, flanged, screwed, butt weld and extended butt weld, available.
TYPE	20-C47C-6666 20-FC47W-6666 (fire safe design)
APPLICATION	For the use in piping systems including cryogenic and liquefied gas in the marine environment.
ADDITIONAL TESTS	Fire test of type FC47W according API standard 6FA, 3th edition, April 1999.
STANDARD	Lloyd's Register Rules and Regulations for the Classification of Ships January 2016, LR Rules and Regulations for the construction and Classification of Ships for the carriage of Liquefied Gases in Bulk January 2016 Lloyd's Register Type Approval Procedure 2015 Test Spec 2

Certificate No.	16/20037
Issue Date	18 April 2016
Expiry Date	17 April 2021
Sheet	1 of 2

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS



Johannes Wiegel
Hamburg Technical Support Office
Lloyd's Register EMEA

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RATINGS

Size: DN50 / 2"
Design pressure: 70 bar
Temperature Range:

PCTFE Seats -196 to 200°C
NRG Seats -196 to 200°C
TFM Seats -196 to 230°C

OTHER CONDITIONS

Selection and installation of valves have to be in accordance with the manufactures recommendations. Only the fire safe design 20-FC47W 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 FC47W).

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ENS 34293-16 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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