



Lloyd's  
Register

## Type Approval Certificate Extension

*This is to certify that Certificate No. 09/10014 for the undermoted products is extended and renumbered as shown.*

This certificate is issued to:

PRODUCER	Hy-Lok Corporation
PLACE OF PRODUCTION	1467-1, Songjeong-dong, Gangseo-gu, Busan, 618-817 Korea
DESCRIPTION	Cryogenic needle valve, extended bonnet
TYPE	VCRYLON series
APPLICATION	Marine use for cargo tanks and cargo piping systems in ships for carriage of liquefied gasses in bulk
STANDARD	Chapter 5 of Lloyd's Register's Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gasses in Bulk (August 2013) Part 5, Chapter 12 of Lloyd's Register's Rules and Regulations for the Classification of Ships (July 2013)
RATINGS	Nominal sizes (mm) : 15 & 25 Nominal pressure rating (MPa) : 1.0 Minimum service temperature (°C) : -196
PERFORMANCE TEST	The following tests carried out on representative samples of 15 and 25 mm sizes in accordance with BS 6364: 1984 with satisfactory results:- 1) Operating torque test 2) Shell tightness test 3) Seat tightness test

Certificate No. 09/10014(E1)

Issue Date 18 February 2014

Expiry Date 17 February 2019

Sheet 1 of 2

N. Terashita

Yokohama Technical Support Office  
Lloyd's Register Group Limited

*Lloyd's Register Group Limited, registered office:  
71 Fenchurch Street, London EC3M 4BS*

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#### OTHER CONDITIONS

Where the valves are intended to be installed on a ship classed with Lloyd's Register (LR), the following comments are applicable:-

- 1) The valves are to be made, installed and tested in accordance with the Class I or II piping system requirements of Part 5, Chapter 12, Section 9 of the Rules and Regulations for the Classification of Ships.
- 2) The valves are to be tested at the manufacturer's works to the satisfaction of the LR Surveyor in accordance with Chapter 5, LR 5.3-03 of the Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gases in Bulk.

*"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 Group Limited of any modification or changes to the equipment in order to obtain a valid certificate."*

*The attached Design Appraisal Document No. 09/10014(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No. 09/10014 to which this extension should be attached.

Certificate No.	09/10014(E1)
Issue Date	18 February 2014
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Sheet	2 of 2

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