



NIPPON KAIJI KYOKAI

## TYPE APPROVAL CERTIFICATE

Certificate No. TA22233M

**This is to certify** that the undernoted product(s) has been approved in accordance with the relevant requirements of "Rules for the Survey and Construction of Steel Ships", "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" as specified below, and that the product(s) is found to comply with "International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code)" as amended by Res.MSC.370(93) and "International Code of Safety for Ships Using Gases or Other Low-flashpoint Fuels (IGF Code)" as adopted by Res.MSC.391(95).

This certificate is issued to:

Manufacturer	<b>Hy-Lok Corporation</b>
Product description	<b>Cryogenic Needle Valves</b>
Type designation(s)	<b>As per attached sheet</b>
Applied requirements	<ul style="list-style-type: none"><li>• <b>Chapter 5 Part N Annex 1, Guidance for the Survey and Construction of Steel Ships</b></li><li>• <b>Chapter 5 Part GF Annex 1, Guidance for the Survey and Construction of Steel Ships</b></li><li>• <b>Part 6, Chapter 2, Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use</b></li></ul>

Approval No. **22LA010B**

This certificate is valid until **08 May 2027**

Issued at Tokyo on **09 May 2022**

See the conditions specified in the attached sheet.

  
(S. Oishi)  
General Manager of  
Machinery Department

**Condition for approval**

## 1. Particulars:

Type		Nominal Dia. (inch)	Class Rating (lbs)	Max. Design Pressure (bar)	Min. Design Temperature (°C)	Fluid
VCRYONC	-8FA	1/2	150	10.0	-196	LNG
	-8BWA					
	-8BWFA					
	-8BWNA					
	-8FBWA					
	-8NA					
	-8FB		300	25.0		
	-8BWB					
	-8BWFB					
	-8BWNB					
	-8FBWB					
	-8NB					
	-16FA	1	150	10.0		
	-16BWA					
	-16BWFA					
	-16BWNA					
	-16FBWA					
	-16NA		300	25.0		
	-16BWB					
	-16BWNB					
-16NB						

## 2. Connections

## Butt-welded joints

- For design temperatures colder than -10°C, butt welds are to be either double welded or equivalent to a double welded butt joint.
- For design pressures in excess of 1 MPa and design temperatures of -10°C or colder, backing rings are to be removed.

## Screwed couplings

- Couplings cannot be used for cargo/fuel piping and shall only be used for accessory lines and instrumentation lines with external diameters of 25 mm or less.

## 3. Compatibility with other intended fluids is to be otherwise confirmed by the Society.

NIPPON KAIJI KYOKAI

Attached sheet to the Certificate No.TA22233M (2/2)

4. Details of materials and constructions are to be in accordance with the manufacturer's drawings approved as followings.

- DWG. No.: 2015A15M02, approved on 20 April 2022

5. Production inspection is required for each product in the presence of the Society's surveyor.

- The End -