お客様各位

### 株式会社宮入バルブ製作所

# 低温用弁の船級取得のお知らせ

拝啓 時下ますますご清栄のこととお喜び申し上げます。平素は格別のご高配を賜り、厚く御礼申し上げます。さて、この度当社では、LNG燃料船用緊急遮断弁、空気操作弁、手動弁及び安全弁について「国際ガス燃料船安全コード(IGFコード)」に準拠したNK(日本海事協会)、JG及びBV(Bureau Veritas)の船級(型式認証)を取得しましたのでお知らせ申し上げます。

敬具

記

■NK 船級	長軸玉形弁 アングル弁 全量式安全弁 揚程式安全弁 空圧式緊急遮断弁 空気操作弁	LTV-295M LTV-295SLM SVC-301MULT LPR-670LTFM LTE-692M LTE-694M
■JG船級	長軸玉形弁 アングル弁 全量式安全弁 揚程式安全弁 空圧式緊急遮断弁 空気操作弁	LTV-295M LTV-295SLM SVC-301MULT LPR-670LTFM LTE-692M LTE-694M
■BV船級	長軸玉形弁 アングル弁 全量式安全弁 空圧式緊急遮断弁	LTV-295M/LTV-295SM LTV-295SLM SVC-301MULT LTE-692M





# TYPE APPROVAL CERTIFICATE

Certificate No. TA19563M

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 Low Flashpoint Fuels (IGF Code)" as adopted by Res.MSC.391(95).

#### This certificate is issued to:

Manufacturer

MIYAIRI VALVE MFG. CO., LTD

Product description

**Cryogenic Valves** 

Type designation(s)

As per attached sheet

Applied requirements

- Chapter 5 Part N Annex 1, Guidance for the Survey and Construction of Steel Ships
- Chapter 5 Part GF Annex 1, Guidance for the Survey and Construction of Steel Ships
- Part 6, Chapter 2, Guidance for the Approval and

  Type Approval of Materials and Equipment for

  Marine Use

Approval No.

14LA004B

This certificate is valid until **22 October 2024**Issued at Tokyo on **7 October 2019** 

See the conditions specified in the attached sheet.

T. Shimada
General Manager
Machinery Department

Attached sheet to the Certificate No.TA19563M

# **Condition for approval**

### 1. Particulars:

Article	Туре	Drawing No.	Nominal Dia.	Max. Design Pressure (MPa)	Min. Design Temp. (°C)	Fluid
Long bonnet type globe valve		B-28845-78	15A, 20A 25A, 32A, 40A, 50A	3.0	-165	LNG
	LTV-295M	B-28845-A4	15A, 50A	3.0	-165	LNG
		B-28845-A5	15A, 20A 25A, 32A, 40A, 50A	3.0	-165	LNG N2
	LTV-295SLM	B-29262-10	10A	3.0	-165	LNG
	LTE-694M	B-69312-49	32A	2.0	-165	LNG
		B-69312-35	25A	2.0	-165	LNG NG N2
Emergency shut off valve	LTE-692M	B-68847-B5	25A, 32A, 40A, 50A	2.0	-165	LNG
		B-68847-E0	25A, 32A, 40A, 50A	2.0	-165	LNG NG, N2
		B-68847-E1	25A, 32A, 40A, 50A	2.0	-165	LNG

- 2. Compatibility with other intended cargoes is to be otherwise confirmed by the Society.
- 3. Details of materials and constructions are to be in accordance with the manufacturer's drawings approved on 17 August 2018 and 7 October 2019
- 4. Production inspection is required for each product in the presence of the Society's surveyor.





# TYPE APPROVAL CERTIFICATE

Certificate No. TA19564M

**This is to certify** that the undernoted products have been approved in accordance with the relevant requirements of "Rules for the Survey and Construction of Steel Ships" and "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".

This certificate is issued to

Manufacturer:

MIYAIRI VALVE MFG. CO., LTD

Product description:

Safety Valve for Liquefied Gas Carrier

Type designation(s):

As par attached

Approval No.:

14LA005E

Valid until:

9 December, 2024

This certificate is subject to the conditions specified in the attached sheet.

Issued at Tokyo on 7 October 2019.

T. Shimada

General Manager

Machinery Department

Attached sheets to the Certificate No.TA19564M

# Condition for approval

# 1. Particulars

TYPE OF SAFETY VALVE	P [MPa]	T [°C]	L [mm]	d <sub>l</sub> [mm]	d <sub>t</sub> [mm]	d <sub>s</sub> [mm]	d <sub>2</sub> [mm]	K
SVC-301MULT	2.0	-165 ~40	4.5	23	16	18.5	50	0.777
LPR-670LTFM	2.0	-165 ∼40	3.2	-	14	-	-	0.655

P:Maximum Pressure, T:Working Temperature

L:Lift, ,  $d_l$ :Inlet dia.,  $d_t$ :Throat dia.,  $d_s$ :Seat dia.,  $d_2$ :Outlet dia.

K:Coefficient of Discharge

- 2. Compatibility with intended cargoes is to be otherwise confirmed by the Society.
- 3. Details of materials and constructions are to be in accordance with the manufacturer's drawings approved on 10 December 2014
- 4. Production tests are to be carried out for each one in the presence of NK surveyor.

- The End -



Certificate number: 50922/A0 BV File number: ACM 145/1312/02

Product code: 73311

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

## TYPE APPROVAL CERTIFICATE

This certificate is issued to

# MIYAIRI VALVE MFG. CO., LTD. Kofu Plant

Minami-Alps - JAPAN

for the type of product

# **GLOBE VALVES FOR LIQUEFIED GAS PIPING SYSTEMS**

LTV-295SM

#### Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units
- IGC Code as amended by IMO Res. MSC.370(93)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 07 Jun 2023

For Bureau Veritas Marine & Offshore, At BV KOBE, on 07 Jun 2018, Shinichi Takemoto



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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Certificate number: 50922/A1 BV File number: ACM 145/1312/02

Product code: 73311

This certificate is not valid when presented without the full attached schedule

composed of 7 sections

www.veristar.com

### TYPE APPROVAL CERTIFICATE

This certificate is issued to

# MIYAIRI VALVE MFG. CO., LTD. Kofu Plant

Minami-Alps - JAPAN

for the type of product

#### **GLOBE VALVES FOR LIQUEFIED GAS PIPING SYSTEMS**

LTV-295SM, LTV-295M and LTV-295SLM

#### Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units
- IGC Code as amended by IMO Res. MSC.370(93)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 07 Jun 2023

For Bureau Veritas Marine & Offshore, At BV KOBE, on 04 Nov 2019, Shinichi Takemoto



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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Certificate number: 57005/A0 BV

File number: .

Product code: 22211

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

### TYPE APPROVAL CERTIFICATE

This certificate is issued to

## MIYAIRI VALVE MFG. CO., LTD. Kofu Plant

Minami-Alps - JAPAN

for the type of product

# **EMERGENCY SHUT OFF VALVES, QUICK CLOSING VALVES**

Type LTE-692M

#### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships Bureau Veritas Rules for the Classification of Offshore Units

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 17 Nov 2024

For Bureau Veritas Marine & Offshore, At BV KOBE, on 17 Nov 2019, Shinichi Takemoto





This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.





Certificate number: 57007/A0 BV

File number: . Product code: 73511

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This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

#### TYPE APPROVAL CERTIFICATE

This certificate is issued to

# MIYAIRI VALVE MFG. CO., LTD. Kofu Plant

Minami-Alps - JAPAN

for the type of product

#### PRESSURE RELIEF VALVES FOR LIQUEFIED GAS PIPING SYSTEMS

Closed-Type Full Bore Safety Valve SVC-301MULT

#### Requirements:

BUREAU VERITAS RULES for the Classification of Steel Ships BUREAU VERITAS RULES for the Classification of Offshore Units IGC Code as amended by IMO Resolution MSC.370(93)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 17 Nov 2024

For Bureau Veritas Marine & Offshore, At BV KOBE, on 17 Nov 2019, Shinichi Takemoto



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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