



NIPPON KAIJI KYOKAI

COPY

TYPE APPROVAL CERTIFICATE

Certificate No. TA22180M

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	HEROSE GMBH ARMATUREN UND METALLE
Product description	Safety Valves for Low temperature service
Type designation(s)	As per attached sheet
Applied requirements	• Chapter 6 Part N Annex 1, Guidance for the Survey and Construction of Steel Ships • Chapter 6 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.	22LA006B

This certificate is valid until **21 April 2027**

Issued at Tokyo on **22 April 2022**

See the conditions specified in the attached sheet.



(S. Oishi)
General Manager of
Machinery Department

NIPPON KAIJI KYOKAI

Attached sheet to the Certificate No.TA22180M

Approval conditions

1. Particulars:

Type	Inlet Size (NPS)	Throat diameter d ₀ [mm]	Kdr-value		Set pressure range [bar-g]	Minimum Design Temperature [°C]
			Steam/Gas	Liquid		
06800	1/2	12.5	0.60	–	3.0 – 25.0	-196°C
06801	3/4	15.0	0.50	0.34		
06805	3/4, 1	20.0	0.60	0.45		
06806	1	23.0	0.66	0.48		
06011	1/4, 3/8, 1/2	6.0	0.09	0.09	5.0 – 55.0	
06012 06016	1/4, 3/8, 1/2	6.0	0.42	–	1.0 – 55.0	
06386	1/2, 3/4, 1	10.5, 14.0	0.67	–	0.2 – 40.0	
06387	1/2	10.5	0.67	–	0.2 – 25.0	
06416	1/2, 3/4, 1	10.5, 14.0	0.67	–	0.2 – 40.0	
06417	1/2	10.5	0.67	–	0.2 – 25.0	
06383	1/2, 3/4	7.0	0.82	–	3.3-50.0	
06388	1/2, 3/4	10.5	0.58	–	2.9-50.0	
06413	1	15.0	0.50	–	2.9-50.0	
06418	1.1/4, 1.1/2, 2	23.0	0.62	–	2.0-50.0	
06420, 06421, 06425,	1/2, 3/4	7.0	0.78	–	0.4 – 50.0	
06426, 06440,	1/2, 3/4	10.5	0.69	–		
06441, 06445, 06446	3/4, 1	14.0	0.66	–	0.4 – 40.0	
	1, 1.1/4	18.0	0.66	–		
	1.1/4	23.0	0.54	–	0.4 – 10.0	
06474 06478	1/4, 3/8, 1/2, 3/4	6.0	0.66	–	0.4 – 55.0	

2. Detail of construction is to be in accordance with the Manufacture's drawings approved on 22 April 2022 with the following comment.

Comment;

Material test is to be carried out in the presence of the Society's surveyor for Inlet Body, Outlet Body and Bonnet.

3. Compatibility with intended fluids is to be otherwise confirmed by the Society.
4. Production inspection is required for each product in the presence of the Society's surveyor, as per Annex 1 6.4.3, Part N and GF of NK Guidance.

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