Certificate No: LR25404148TA
Issue Date: 14/11/2025
Expiry Date: 13/11/2030

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.

Manufacturer	**Tomoe Valve Co., Ltd.**
Address	3-2-48, Nishi-Konoike-cho, Higashi-Osaka-shi, Osaka, 578-0976, Japan
Type	Butterfly Valves
Description	Flanged Type Rubber-Seated Butterfly Valves
Trade Name	Model 704G-01, 722F-01 and 722F-02
Application	Marine Piping Systems: • Shipside valves in machinery spaces (not including scuppers or similar fittings) • Sea and fresh water cooling systems • Water ballast and fresh water pumping Systems • Cargo lines on oil tankers • "In-line" valves on chemical tankers and liquefied gas carriers • Bilge suctions for holds in bulk carriers when fitted in a pipe tunnel in association with a non-return valve • Suction valves on double bottom oil fuel tanks when located in a closed pipe tunnel or duct keel • As pump suction valves from main bilge line where valve is located in the immediate vicinity of the pump and fitted in conjunction with a metal non-return valve on the bilge main side of the butterfly valve • "In-line" valves (not outlet valves on deep tanks) in lubricating or fuel oil piping systems and as suction valves on double bottom lubricating oil or fuel oil tanks in machinery spaces where the design is such that failure of the non-metallic seal would not result in external leakage or

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prevent transfer of oil to the settling or service tanks
- Sanitary systems
- “In-line” valves in oil piping systems of hydraulic deck machinery
- Inert gas systems
- Air piping systems having a working pressure not greater than 7 bar, except as stop valves on air receivers

Specified Standard

Lloyd’s Register’s Rules and Regulations for the Classification of Ships, Part 5, Chapter12 - July 2025

Ratings

Nominal Pipe Diameter:
50 to 100 mm (704G-01)
125 to 300 mm (722F-01)
350 to 800 mm (722F-02)
Design Pressure: 1.0 MPa
Maximum Allowable Temperature:
NBR Seat : 70 °C
EPDM Seat : 120 °C
FKM Seat : 90 °C
Specified Pipe Flange Design:
JIS 5K & 10K, ANSI 125LBS & 150LBS, DIN PN10 & 16, BS10E

Other Conditions

Where intended to be installed on a ship classed with LR, the valves are to be made, installed and tested in accordance with Part 5, Chapter 12 of the Rules and Regulations for the Classification of Ships, and to the attending Surveyor’s satisfaction, and in all cases the valve body, disc, seat and seals should be suitable for intended services.

The valve body is to be marked with the following information:
a. Manufacturer's name or abbreviation
b. Material of valve body
c. Nominal pressure
d. Nominal diameter

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e. Flow direction (Only when the directionality exists.)

Using the identification plate, the following information are to be marked.

a. Materials of rubber seat and valve disc
b. Series number of face-to--face and end-to-end dimensions
c. Year of manufacture
d. Model name of manufacturer

The following information are to be marked on the upper surface of handle or in an identification plate.

a. Letters (or marks) and arrow mark indicating opening and closing directions
b. Letters (or marks) indicating degree of opening

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.

Previous Version: LR2113056TA-02

The Design Appraisal Document LR25404148TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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