Certificate No: LR25362167TA
Issue Date: 02/12/2025
Expiry Date: 01/12/2030

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	**NAKAKITA SEISAKUSHO CO., LTD.**
Address	1-1 Fukonominamicho, Daito, Osaka, 574-0075, Japan
Place of Production	Nihon Automatic Controller Mfg. Co., Ltd. 1-2 Fukonominamicho, Daito, Osaka, 574-0075, Japan
Type	Butterfly Valves
Description	Wafer and Flange Type Butterfly Valves
Trade Name	NS CBT-1300 and NS PCBT-3300
Application	Marine piping systems:- • Shipside valves in machinery spaces (only applicable to Flange Type and 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 • Bilges systems • Lubricating or fuel oil piping systems • Sanitary systems • “In-line” valves on 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

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• Fire-main and fire-extinguishing piping system (from 80 to 400 mm nominal size)
• Other piping systems where applicable
Note) see OTHER CONDITIONS below.

Specified Standard

Lloyd's Register (LR) Rules and Regulations for the Classification of Ships (July 2025), Part 5, Chapter 12.

Ratings

Nominal pipe diameters : 80 to 800 mm
Design pressure : 4.9, 10.3 or 15.7 bar for applicable flange design
Max. allowable temperature : NBR Seat 70 °C
CR Seat 70 °C
EPDM Seat 120 °C
FKM (VITON) Seat 90 °C
Actuator - Manual : Type NS MAN series actuator for Type NS CBT-1300
Actuator - Hyd. Oil : Type NS PAC-92 series actuator for Type NS PCBT-3300

Other Conditions

Where the valves are intended to be installed on a ship classed with LR, their positions are to be indicated on any plans of piping systems and arrangements which are required to be submitted for classification approval and final acceptance of their applications to be confirmed thereon, and the following conditions should also be observed.

1. 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.
2. In all cases the materials are to be suitable for their intended service conditions.
3. The valves for ship-side applications are to be installed such that the section of piping immediately inboard of the valve can be removed without affecting the watertight integrity of the hull, and the wafer type and semi-lug types not to be used for such applications.
4. The valves are not to be used in spaces where leakage or failure caused by fire could result in fire spread, flooding or the loss of an

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essential service.

5. The valves are not to be used for the services in which they are required to be capable of being closed remotely in the event of fire.
6. The valve is not to be used for bilge services, except i) bilge suctions for holds in bulk carriers when fitted in a pipe tunnel in association with a non-return valve and similar low fire risk spaces and ii) as pump suction valves from main bilge line where the 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 (cargo ships only).

The valid reports of the audit assessment of the Production Quality Assurance system (PQA) are to be retained for each place of production.

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: LR2044403TA-02

The Design Appraisal Document LR25362167TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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