Certificate No: LR26424054TA
Issue Date: 28/06/2026
Expiry Date: 27/06/2031

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	**Hanyang Valve Ind. Co., Ltd.**
Address	19, Mieumsandan 2-ro 16beon-gil, Gangseo-gu, Busan, 46748, South Korea
Type	Butterfly Valves
Description	Concentric & Eccentric of Rubber Seated Butterfly Valves
Trade Name	Wafer, Lug, Flanged, Long flanged type
Application	Marine PipingSystems:- · Cargo oil lines · Tank cleaning lines · Cargo vent lines · Inert gas systems · Sea water systems · Fresh water systems · Bilge and drainage systems · Fuel oil systems · Lubricating oil systems · Sanitary systems · Compressed air piping systems · Other piping systems where applicable Note: see OTHER CONDITIONS below.

Downloaded Copy

Gouriprasad Vulla

Engineering Piping - Specialist to Lloyd's Register Marine and Offshore India LLP
A member of the Lloyd's Register group

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR26424054TA
Issue Date: 28/06/2026
Expiry Date: 27/06/2031

Type Approval Certificate

Specified Standard

Lloyd's Register (LR) Rules and Regulations for the Classification of Ships, Part 5, Chapter 12 – July 2026
JIS F 7480:1996: Shipbuilding – Rubber seat butterfly valves
JISB 2220:2012: Steel pipe flanges

Ratings

Concentric	Lever type(DN)	Geartype(DN)	Design Pressure
Wafer type	40~200	40~1000	150 lb
Lug type	40~200	40~1000	5kgf/cm²
Flange type	40~200	40~1000	10 kgf/cm²
Long Flange	80~200	80~800	5kgf/cm², 10kgf/cm²

Double Eccentric	Levertype(DN)	Gear type(DN)	Design Pressure
Wafer/Lug/	50~150	50~1000	150 lb
Flange/Long	-	50~600	300 lb
Flange type	50~150	50~1000	5 kgf/cm²
	50~150	50~1000	10 kgf/cm²
	-	50~1000	16 kgf/cm²
	-	50~900	20 kgf/cm²

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 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 in accordance with Rules and Regulations.
3) Wafer type vales or grey cast iron are not to be used for shipside valve.
5) This approval does not include any operating gear for remote control valves.
6) The valves may be used for ship-side applications but not including

Downloaded Copy

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Type Approval Certificate

scuppers or similar fittings.
7) 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 essential service.
8) The valves are not to be used as stop valves in fire main and water spray systems on the deck in the cargo area in oil tankers, chemical tankers and liquefied gas carriers.
9) The valves are not to be used for the services in which they are required to be capable of being remotely in the event of fire.
10) 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 paces 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).
11) The valves are not to be used for the service that is the transfer of oil fuel to the settling or service tanks as required in the event of fire.

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 Marine and Offshore India LLP of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR26424054TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Downloaded Copy

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.