Certificate No: LR21209282TA
Issue Date: 30/08/2021
Expiry Date: 10/01/2022

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 **ABO valve, s.r.o.**

Address Dalimilova 285/54, 783 35 Olomouc, Czech Republic

Type Butterfly Valves

Description Double eccentric lug or wafer type butterfly valves for installation between EN/ ANSI/JIS flanges. Top flange acc. to ISO 5211 allows connection of various actuators.

Trade Name Series 2E

Application As shut-off or regulating valve in high performance applications for installation on ships and offshore installations classed or intended for Classification with Lloyd's Register allowable systems. They have to be installed to the attending surveyor's satisfaction for:

1. Shipside valves provided the valve is bolted to the shipside connection in such way that the section of pipe immediately inboard of the valve can be removed
2. Sea water, freshwater and water ballast systems
3. Cargo Lines as"in-line" valves on oil and chemical tankers and on liquefied gas carriers
   (depending on pressure, temperature, medium and material)
4. As "in-line" valves in lubricating or oil fuel piping systems in low fire risk compartments of cargo vessels and metal or fire safe seated versions also as outlet valve on deep tanks
5. Bilge suctions (in association with a metal non return valve) of cargo

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vessels, but resiliently seated types in low fire risk compartments only
6. As pump suction valves from the main bilge line only where the valve is located in the immediate vicinity of the pump. The valve is to be fitted in conjunction with a metal non-return valve, which is to be on the bilge main side of the butterfly valve.
7. Sanitary, black and grey water
8. Inert gas
9. Air piping (except as stop valves for air receivers) having a working pressure not greater than 7bar
10. only metal or fire safe seated versions for pump isolating valves in systems containing flammable liquids
11. Isolating valves in fire mains with metal or fire safe seated versions

Specified Standard

Lloyd's Register Rules and Regulations for the Classification of Ships, 2021
Design according to EN 593, API 609, EN ISO 10497 and API 607
Tightness check acc.: EN 593, EN 12266-1, ISO 5208, API 598, ANSI/FCI 70-2;

Ratings

Operating pressure: up to 50 bar
PTFE seat DN 50 – DN 600, PN 50/ 40 / 25 / 16 / 10 / 6, ANSI class 300 /150,
Metal/Metal seat DN 50 – DN 125, PN 25 / 16 / 10 / 6, class 300 / 150,
Fire Safe seat DN 50 – DN 125, PN 40 / 25 / 16 / 10, class 300 / 150
Temperature range: -60 to +320°C (standard design),
-100 to +500°C (on request)
(depending on pressure, medium and material)
Body material: carbon steel 1.0625, low temperature/carbon steel 1.1156, stainless steel 1.4408

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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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 12/20001(E1)

The Design Appraisal Document ENS 27477-12, Issue No. 2 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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