Certificate No: LR2194469TA
Issue Date: 10/03/2021
Expiry Date: 09/03/2026

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	**Alfa Europe B.V.**
Address	Oosterveldsingel 37, Hengelo, 7558 PJ, Netherlands
Place of Production	Alfa Europe B.V. Oosterveldsingel 37, Hengelo, 7558 PJ, Netherlands
Type	Butterfly Valves
Description	S96 / S97 / S98 Series
Trade Name	Alfa Europe
Application	Marine, offshore applications subject to the valves complying with LR Rules and Regulations for the particular service.
Specified Standard	Rules and Regulations for the Classification of Ships, July 2019 BS EN 593 : 2009 + A1 2011 API609-2009 API607-2016 BS EN12266-1 :2003 ISO 10497 : 2010
Ratings	S96 Double Eccentric Butterfly Valve Size: DN50 – DN600 Maximum Working Pressure (MPa): PN1.0, PN1.6 and PN2.0

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Xiaodong Zhang

Lead Specialist and Section Leader for Engineering Section to Lloyd's Register Classification Society (China) Co Ltd

19th Floor, 550 Yan An dong Road, Shanghai, Huangpu District, China

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Maximum Working Temperature (°C):
PTFE 180 °C
RPTFE 230 °C
METAL 450 °C
S97 Double Eccentric Butterfly Valve
Size: DN50 – DN600
Maximum Working Pressure (MPa): PN1.0, PN1.6 and PN2.0
Maximum Working Temperature (°C):
PTFE 180 °C
RPTFE 230 °C
METAL 450 °C
S98 Double Eccentric Butterfly Valve
Size: DN50 – DN600
Maximum Working Pressure (MPa): PN1.0, PN1.6 and PN2.0
Maximum Working Temperature (°C):
PTFE 180 °C
RPTFE 230 °C
METAL 450 °C

Other Conditions

For application on a LR classed vessel, the following conditions are to be complied with:-
1. The materials used for valves are to be suitable for the medium and the service for which the piping is intended on-board. The application limitation to valves of cast iron is to be in accordance with the requirements of Rules Part 5, Chapter 12, Section 4.
2. Valves are to be selected and installed in accordance with the manufacturer's instructions and recommendations and to the attending Surveyor's satisfaction.
3. Materials for castings and forgings of Class I, II piping systems are to be produced at a works approved by LR and are in general to be tested in accordance with the Rules for Materials.
4. Where valves intended for installation in pressure piping systems having working pressures exceeding 7 bar, the valves are to be surveyed at the manufacturer's work and to the attending Surveyor's satisfaction.
5. Valves which are not fire safe type are not to be used in spaces where

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leakage or failure caused by fire could result in fire spread, flooding or the loss of an essential service.
6. The approval does not include any operating gear for remote control of the valves.

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 Classification Society (China) Co Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR2194469TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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