TYPE APPROVAL CERTIFICATE
No. **MAC416426XG**

This is to certify that the product identified below is in compliance with the regulations herewith specified.

Description	**BUTTERFLY VALVES**
Type	**DYNAXE**
Applicant	**WOUTER WITZEL EUROVALVE B.V.** **Industreterrein De Pol 12, 7581 CZ LOSSER** **THE NETHERLANDS**
Manufacturer	**WOUTER WITZEL EUROVALVE B.V.**
Place of manufacture	**Industreterrein De Pol 12, 7581 CZ LOSSER** **THE NETHERLANDS**
Reference standards	**Part C, Chapter 1, Section 10 of RINA Rules**

Issued in **HAMBURG** on **November 16, 2026**. *This Certificate is valid until* **November 15, 2031**

RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure

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Reference documents

Technical Specification (Wouter Witzel EuroValve booklet), design standard according to EN593

General Drawings Nos. D-CAAA057-D, D-CACA042-D, D-CAEA010-C, D-CABA004-D, D-CADA001-F and D-CAFA009-A.

Southwest Research Institute Fire Test Reports no. 6-995, 6-1012, 6-1013, 6-1024, 01.10933.01.719 according to ISO 10497, API 607 and UK DOT Appendix D.

Materials/Components

Body :

Stainless steel, steel or nickel aluminium bronze according to the following standards:

1.4408 (EN 10213-4), 1.0619 (EN 10213-2) ASTM WCB216, CC333G (EN 1982)

Body seat:

Stainless steel :

1.4370, 1.4408 (EN 10213-4), stellite GR21

Disc:

Stainless steel, steel or nickel aluminium bronze according to the following standards::

1.4408 (EN 10213-4), 1.0619 (EN 10213-2) ASTM WCB216, 1.4401 (EN 10088),

1.0460 (EN 10273), CC3336 (EN 1982)

Liner :

see details shown on the above mentioned drawings:

RTFE Basic configuration (TH) or RTFE Fire safe design (TF) or Metal solid seat (MS) or Metallic laminated seat or reinforced elastomer (EPDM - NBR - FPM)

Stem :

Stainless steel or nickel aluminium bronze:

1.4542 (EN 10088), 1.3964 (EN 10088-3), 1.4021 (EN10088), NA18 (monel K500), CW370G (EN 12163)

Material combinations will be as per Manufacturer’s Instructions.

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Technical characteristics

Type, dimension and working pressure:

Flangeless Wafer Lug and Tap and Double Flanges Butterfly Valve

Size Range: DN 50 - 900 mm PN 10/16 bar - class 150 (according to ANSI)
Size Range: DN 50 - 600 mm PN 25/40 bar - class 300 (according to ANSI)

Working temperature:

Depending on liner type used (see catalogue).

Fields of application

- Ballast and bilge system
- Sea and fresh water system
- Domestic and Sanitary system
- Potable water system
- Fuel oil and lubricating oil
- Hydraulic oil
- Washing and fire extinguishing
- Compressed air
- Inert gas
- Cargo systems of oil tankers and chemical tankers
- Exhaust system
- Fire main isolating valve

Remarks

The butterfly valve body, disc and sealing should be suitable for the foreseen service.

For working temperatures higher than ambient temperature the maximum working pressure is to be reduced as per the Manufacturer's instructions .

Final acceptance of valves is subject to satisfactory outcome of testing as per RINA Rules.

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Evidence of what follows is to be given on the test certificate:

- butterfly valves not fitted with flanges are not to be used for water inlets or overboard discharges unless provisions are made to allow disassembling at sea of the pipes served by these valves without any risk of flooding.
- for installation on cargo system of chemical tankers compatibility between cargo products and valve material is to be verified in accordance with Chapter 6 and Chapter 15 of IBC Code.
- bilge valves will be fitted in association with a non return valve.
- for sea water pipe systems, the use of austenitic stainless steel is not recommended according to Table 4 Part C, Chapter 1, Section 10 of RINA Rules.

This certificate does not cover any appropriate system for remote control valve.

The present Type Approval Certificate annuls and replaces the previous one MAC338121XG.

HAMBURG November 16, 2026

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