



**TYPE APPROVAL CERTIFICATE**  
No. **MAC289323XG**

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

|                             |  |
|-----------------------------|--|
| <i>Description</i>          | <b>BUTTERFLY VALVES</b>  |
| <i>Type</i>                 | <b>EVS-i<br/>EVFS-i<br/>EVTLS-i<br/>EVCS-i<br/>EVCLS-i</b>                             |
| <i>Applicant</i>            | <b>WOUTER WITZEL EUROVALVE B.V.<br/>P.O. BOX 54<br/>7580 AB LOSSER<br/>NETHERLANDS</b> |
| <i>Manufacturer</i>         | <b>WOUTER WITZEL EUROVALVE B.V.</b>  |
| <i>Place of manufacture</i> | <b>INDUSTRIETERREIN DE POL 12<br/>7581 CZ LOSSER<br/>NETHERLANDS</b>                   |
| <i>Reference standards</i>  | <b>Part C, Chapter 1, Section 10 of RINA Rules</b>                                     |

*Issued in* **Hamburg** on **November 4, 2023**. *This Certificate is valid until* **November 3, 2028**

---

**RINA Services S.p.A.**  
**Giuseppe Russo**

This certificate consists of this page and 1 enclosure

TYPE APPROVAL CERTIFICATE

No. **MAC289323XG**

Enclosure - Page 1 of 2

EVS-i

EVFS-i

EVTLS-i

EVCS-i

EVCLS-i

**Reference documents**

- PDS01.61.001 - Wouter Witzel - EVS-i (2023-05-22) DN 400-1000
- PDS01.62.001 - Wouter Witzel - EVFS-i (2023-05-22) DN 40-1400
- PDS01.63.001 - Wouter Witzel - EVTLS-i (2023-05-22) DN 40-1000
- PDS01.64.001 - Wouter Witzel - EVCS-i (2023-05-22) DN 40-350
- PDS01.65.001 - Wouter Witzel - EVCLS-i (2023-06-06) DN 40-300

**Technical characteristics**

| Type designation | End Connection   | Size DN [mm] | Maximum working pressure [bar] |
|------------------|------------------|--------------|--------------------------------|
| EVS-i            | Flangeless Wafer | 400 - 1000   | 16                             |
| EVFS-i           | Double Flanged   | 40 - 1400    | 16                             |
| EVTLS-i          | Lugged Wafer     | 40 - 1000    | 16                             |
| EVCS-i           | Flangeless Wafer | 40 - 350     | 16                             |
| EVCLS-i          | Flangeless Wafer | 40 - 300     | 16                             |



TYPE APPROVAL CERTIFICATE

No. **MAC289323XG**

Enclosure - Page 2 of 2

EVS-i  
EVFS-i  
EVTLS-i  
EVCS-i  
EVCLS-i

***Fields of application***

- Ship's side or bottom and sea chest;
- Salt and fresh cooling water systems;
- Ballast water and fresh water transfer systems;
- Bilge suctions in association with a non return valve;
- Cargo oil lines (oil tanker);
- Fuel oil transfer systems;
- Fire main isolating valve.

Grey cast iron valves are not permitted to be installed on:

- piping system of first class;
- piping system of second class when the design pressure exceeds 13 bar;
- fuel oil lines with design pressure above 7 bar or design temperature above 60°C;
- ship's side or bottom sea chest and fittings;
- the collision bulkhead;
- bilge lines in tanks;
- the external wall of fuel oil and lubricating oil tanks, when under static head;
- piping subject to hydraulic hammering, excessive strains and vibrations.

According to RINA RULES Pt. C Ch. 1 Sec 10:

type EVS valves is not permitted to be installed on:

- ship's side or bottom and sea chest;
- the collision bulkhead;
- the external wall of fuel oil and lubricating oil tanks, when under static head.

The lining material is to be suitable for the medium conveyed in the piping.

Hamburg November 4, 2023

