



C E R T I F I C A T E

Certificate no. 17-SIL-0010015-04-TIC

WE HEREBY CERTIFY THAT

Product description

WAFER, SPLIT WAFER AND SPLIT BODY FLOATING BALL VALVES

Models

SERIES MAGNUM, THOR

Manufacturer

OMAL S.p.A.

Via Ponte Nuovo 11 – 25050 Rodengo Saiano BS

IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE STANDARDS

IEC 61508 Parts 1÷7:2010

AS RESULT OF THE ASSESSMENT ACCORDING TO THE PROVISION SET OUT IN THE ABOVE-MENTIONED STANDARDS

Summary Report no. RC-0717-SIL-TIC-PC-0010015-17-08

Expiry date

03.08.2020

Note

This certificate is issued upon the request of the manufacturer as voluntary certification; it does not include the product inspection nor the production surveillance. This certificate is valid for the documents evaluated, as referred in the summary report. This certificate does not allow the manufacturer to use the safety mark of TÜV INTERCERT.



Reggio Emilia, 04.08.2017

Eng. Andrea Vivi
TÜV INTERCERT Certification Body

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C E R T I F I C A T E

ANNEX to Certificate no. 17-SIL-0010015-04-TIC

| | |
|-------------------|--|
| Type | A |
| HFT | 0 |
| Safety functions | 1. Close / Open upon the demand of the actuation system 2. Close upon the demand of the actuation system, with inline tightness when in closed position |
| Mode of operation | Low Demand Mode |

| Random failure rates | | | | |
|----------------------|-----------------|----------------------|----------------------|-------------------|
| Configuration | Safety function | λ_{DU} [1/h] | λ_{DD} [1/h] | λ_S [1/h] |
| Floating - No PST | 1 | 5,52E-08 | 0,00E+00 | 0,00E+00 |
| Floating - With PST | 1 | 5,52E-09 | 4,96E-08 | 0,00E+00 |
| Floating - No PST | 2 | 7,08E-08 | 0,00E+00 | 0,00E+00 |
| Floating - With PST | 2 | 2,12E-08 | 4,96E-08 | 0,00E+00 |

| | | | | |
|---------------------------|--|---------|------------------------|---------|
| Systematic capability | 3 (Route 1 _S applied) | | | |
| Architectural constraints | Route 1 _H : | Applied | Route 2 _H : | Applied |
| | The product can be used in: <ul style="list-style-type: none">single channel configuration:<ul style="list-style-type: none">up to SIL 2 without external diagnostic testsup to SIL 3 considering external diagnostic testsdouble channel configuration: up to SIL 3 | | | |

Remarks:

- Self-relieving configuration: both upstream and downstream seats shall be of self-relieving type (i.e. single barrier in the flow direction)
- Double piston effect configuration: at least downstream seat shall be of double piston effect type (i.e. double barrier in the flow direction)
- For further details, including environmental conditions, limitations of use, lifetime, failure rates traceability, mean repair times, common cause factors and systematic capability constraints, make reference to Safety Manual SMA201703.

END OF CERTIFICATE

Reggio Emilia, 04.08.2017

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