

Certificate no.

18-SIL-0010037-01-TIC

WE HEREBY CERTIFY THAT

Product description

**BOLTED SIDE ENTRY TRUNNION MOUNTED BALL** 

**VALVES** 

Models

Series DB, HPA, HRA

**ALTIFORT FCT** 

Manufacturer

2 rue Sabanel - 81160 Saint Juéry

France



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-0419-SIL-TIC-PC-0010037-18-02

Expiry date

25.04.2022

Note

This certificate is issued upon the request of the manufacturer as voluntary certification; it does not include the production surveillance.

This certificate does not allow the manufacturer to use the safety mark of TÜV INTERCERT.



Reggio Emilia, 26.04.2019

TÜ√INTERCERT Certification Body

Page 1 of 2



|  |   | TUV<br>NTER CER   |                       |                       |                      |  |
|--|---|---|-----------------------|-----------------------|----------------------|--|
|  |   | NTER CER  |                       |                       |                      |  |
| CEF  | <b>5</b> T I  | F   | I C                   | Δ -                   | TE                   |  |
|  |   |   |                       |                       | L                    |  |
| ANNE   | X to Certifica  | te no. 18-S   | IL-001003             | 7-01-TIC              |                      |  |
| Time   | Δ.  |   |                       |                       |                      |  |
| Type HFT   | A<br>0  |   |                       |                       |                      |  |
| Safety functions   | <ol> <li>Close / Open</li> <li>Close upon th</li> </ol> | upon the demar  |                       |                       | ine tightnes         |  |
| Mode of operation  | when in close<br>Low Demand Mo                          |   |                       |                       |                      |  |
|  |   | dom failure rate  | es                    |                       |                      |  |
| Configuration  |   | Safety<br>function  | λ <sub>DU</sub> [1/h] | λ <sub>DD</sub> [1/h] | λ <sub>s</sub> [1/h] |  |
| Self-relieving - No PST  |   | 1   | 7,43E-08              | 0,00E+00              | 0,00E+0              |  |
| Self-relieving - With PST                                      |   | 1   | 6,69E-09              | 6,77E-08              | 0,00E+0              |  |
| Self-relieving - No PST  |   | 2   | 9,53E-08              | 0,00E+00              | 0,00E+0              |  |
| Self-relieving - With PST                                      |   | 2   | 2,76E-08              | 6,77E-08              | 0,00E+0              |  |
| Double piston effect - No PST                                  |   | 1   | 7,43E-08              | 0,00E+00              | 0,00E+0              |  |
| Double piston effect - With PST                                |   | 1   | 6,69E-09              | 6,77E-08              | 0,00E+0              |  |
| Double piston effect - No PST  Double piston effect - With PST |   | 2   | 8,55E-08              | 0,00E+00<br>6,77E-08  | 0,00E+0              |  |
|  |   |   | 1,78E-08              | 0,776-06              | 0,000                |  |
| Systematic capability  | 1   |   | T = 1 =               |                       |                      |  |
| Architectural constraints                                      |   | Applied   | Route 2               | H: Applie             | ed                   |  |
|  |   | The product can be used in:  • single channel configuration:  |                       |                       |                      |  |
|  |   | o up to SIL 2 without external diagnostic tests   |                       |                       |                      |  |
|  |   | <ul> <li>up to SIL 3 considering external diagnostic tests</li> <li>double channel configuration: up to SIL 3</li> </ul>  |                       |                       |                      |  |
| Remarks:   | Self-relieving  | Self-relieving configuration: both upstream and downstream seats shall be of self-relieving type (i.e. single barrier in the flow direction)  |                       |                       |                      |  |
|  |   | ing type (i.e. single<br>on effect configura  |                       |                       | eat shall be         |  |
|  |   | n effect type (i.e. d   |                       |                       |                      |  |
|  | lifetime, fail  | <ul> <li>For further details, including environmental conditions, limitations of use<br/>lifetime, failure rates traceability, mean repair times, common cause<br/>factors and systematic capability constraints, make reference to Safety</li> </ul> |                       |                       |                      |  |
|  | factors and<br>Manual R-D                               |   | oility constraints    | s, make refere        | ence to Safe         |  |
|  |   |   |                       |                       |                      |  |
|  |   | ,   |                       |                       |                      |  |
|  | END   | OF CERTIFICA  | TE                    |                       |                      |  |
|  |   |   |                       |                       |                      |  |
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| Reggio Emilia, 26.04.2019                                      |   |   |                       |                       |                      |  |