



Certificate of compliance Product



Holder ESFEROMATIC SA, Argentina

Compliant Item Eccentric Ball Valves Series SIL-156/163/168/186/187

Basis of Certification IEC 61508:2010

Certification Include(s) ☒ Safety requirements specification
☒ Hardware
☒ Hardware reliability

Functional Safety Data

Safety function: See report
Mode: Low demand
Type: B
HFT: See next page
Hardware route: 1_H
Failure rates (FIT): See next page
Safe failure fraction: See next page
SIL See next page

Certification Results Risknowlogy certifies that the above Compliant Item meets the requirements of the Basis of Certification for the selected assessment(s). The Risknowlogy report 2071.626.6 are an integral part of this certificate.

Certificate Number 2071.626.7-1

Initial Certification 2025-11-12

This Certificate 2025-11-12

Expiry Date 2030-11-12

Certifier Dr Michel Houtermans





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| Valve: Safety function #1 | Type | SD | SU | DD | DU | SFF | HFT=0 | HFT=1 |
|---------------------------|------|----|----|----|-----|-----|-------|-------|
| SIL156 | A | 0 | 0 | 0 | 103 | 0% | SIL 1 | SIL 2 |
| SIL163 | A | 0 | 0 | 0 | 108 | 0% | SIL 1 | SIL 2 |
| SIL168 | A | 0 | 0 | 0 | 128 | 0% | SIL 1 | SIL 2 |
| SIL186 | A | 0 | 0 | 0 | 158 | 0% | SIL 1 | SIL 2 |
| SIL187 | A | 0 | 0 | 0 | 153 | 0% | SIL 1 | SIL 2 |

| Valve: Safety function #2 | Type | SD | SU | DD | DU | SFF | HFT=0 | HFT=1 |
|---------------------------|------|----|----|----|----|-----|-------|-------|
| SIL156 | A | 0 | 0 | 0 | 33 | 0% | SIL 1 | SIL 2 |
| SIL163 | A | 0 | 0 | 0 | 42 | 0% | SIL 1 | SIL 2 |
| SIL168 | A | 0 | 0 | 0 | 33 | 0% | SIL 1 | SIL 2 |
| SIL186 | A | 0 | 0 | 0 | 47 | 0% | SIL 1 | SIL 2 |
| SIL187 | A | 0 | 0 | 0 | 47 | 0% | SIL 1 | SIL 2 |

