



Certificate no. TAI-FS-C-24-0051

WE HEREBY CERTIFY THAT

Product description PNEUMATIC COMPACT SCOTCH-YOKE SPRING RETURN AND DOUBLE ACTING ACTUATOR

Models SERIES CP/S, CP/D

Manufacturer ROTORK FLUID SYSTEMS S.r.l.
Via Padre Jacques Hamel 138/B
I-55016 Porcari (LU)

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. TAI-FS-R-24-0101

Expiry date 13.06.2027

Issue date 14.06.2024

TUV AUSTRIA ITALIA
14.06.2024, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

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C.F./P. IVA IT01055750333 - Cap. Soc. i.v. € 400.000,00 - REA AN n. 211030
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TÜV AUSTRIA HOLDING AG Deutschstrasse 10, A-1230, Vienna, Austria
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Annex to certificate no. TAI-FS-C-24-0051

| | |
|--------------------------|---|
| Type | A |
| HFT | 0 |
| Safety functions | <u>Spring return actuators:</u> 1. Delivery of a full stroke ($90^\circ \pm$ tolerance) driven by the spring, with power fluid exhausted from the cylinder through the control system <u>Double acting actuators:</u> 1. Delivery of a full stroke ($90^\circ \pm$ tolerance) driven by the piston of cylinder, powered by the specified medium working pressure |
| Mode of operation | Low Demand Mode |

| Random failure rates | | | | |
|------------------------|-----------------|----------------------|----------------------|-------------------|
| Configuration | Safety function | λ_{DU} [1/h] | λ_{DD} [1/h] | λ_S [1/h] |
| Series CP/S - No PST | 1 | 2,48E-08 | 0,00E+00 | 0,00E+00 |
| Series CP/S - With PST | 1 | 2,23E-09 | 2,25E-08 | 0,00E+00 |
| Series CP/D - No PST | 1 | 2,30E-08 | 0,00E+00 | 0,00E+00 |
| Series CP/D - With PST | 1 | 2,07E-09 | 2,10E-08 | 0,00E+00 |

| | | | | |
|----------------------------------|--|---------|------------------------|---------|
| Systematic capability | 3 (Route 1s 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 tests ○ up to SIL 3 considering external diagnostic tests • double channel configuration: up to SIL 3 | | | |

- Remarks:**
- 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 SM-CP-A-02-E

END OF CERTIFICATE

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