



Certificate no. TAI-FS-C-25-0003

WE HEREBY CERTIFY THAT

Product description

Pneumatic scotch-yoke spring return and double acting actuator

Models

Series GP/S, GP/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

Assessment report no. TAI-FS-R-25-0003

Expiry date 20.02.2028

Issue date 21.02.2025

TUV AUSTRIA ITALIA
21.02.2025, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

TUV AUSTRIA ITALIA S.p.A.
Via del Commercio, 6/A 60030 Monte Roberto (AN)
+39 0731 22781 - info@tuvaustraliaitalia.com - tuvaustraliaitalia@pec.it
C.F./P. IVA IT01055750333 - Cap. Soc. i.v. € 400.000,00 - REA AN n. 211030
Società a socio unico, soggetta a controllo e coordinamento di:
TÜV AUSTRIA HOLDING AG Deutschstrasse 10, A-1230, Vienna, Austria
www.tuvaustraliaitalia.com

Annex to certificate no. TAI-FS-C-25-0003

Type	A
HFT	0
Safety functions	<u>Spring return actuators:</u> 1. Delivery of a full stroke (90° ± 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° ± tolerance) driven by the piston of cylinder, powered by the specified medium working pressure
Mode of operation	High Demand Mode

Random failure rates				
Configuration	Safety function	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
Series GP/S - No on-line monitoring	1	1,91E-08	0,00E+00	0,00E+00
Series GP/S - With on-line monitoring	1	1,72E-09	1,74E-08	0,00E+00
Series GP/D - No on-line monitoring	1	2,67E-08	0,00E+00	0,00E+00
Series GP/D - With on-line monitoring	1	2,40E-09	2,43E-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 1 without on-line monitoring by the process ○ up to SIL 3 considering on-line monitoring by the process • 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-GP-A-02-E

END OF CERTIFICATE

TUV AUSTRIA ITALIA
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