



Certificate no. TAI-FS-C-21-0068

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

Summary Report no. TAI-FS-R-21-0141

Expiry date 04.07.2024

Issue date 05.07.2021

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
05.07.2021, Monte Roberto (AN)

Page 1 of 2

Ing. Crescenzo Di Fratta

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
Sede operativa: Via dell'Industria, 14 – 25030 Erbusco - Brescia, Italy
Phone +39 030 9821049 Fax +39 030 9822253 info.bs@tuvaustralia.com
Sede legale: Via del Commercio, 6/A - 60030 Monte Roberto - Ancona, Italy
Cap. Soc. i.v. EUR 10.000,00; R.I. Ancona – C.F. – P. IVA 02217380423
Cod. Id. CEE IT02217380423 REA AN n. 170070
A socio unico, soggetta a controllo e coordinamento di:
TÜV AUSTRIA HOLDING AG, Deutschstrasse 10, 1230, Vienna, Austria
www.tuvaustralia.com www.tuv.at

Annex to certificate no. TAI-FS-C-21-0068


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	Low Demand Mode

Random failure rates				
Configuration	Safety function	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
GP/S - No PST	1	2,58E-08	0,00E+00	0,00E+00
GP/S - With PST	1	2,32E-09	2,35E-08	0,00E+00
GP/D - No PST	1	2,78E-08	0,00E+00	0,00E+00
GP/D - With PST	1	2,50E-09	2,53E-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-GP-A-02-E.

END OF CERTIFICATE



TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
05.07.2021, Monte Roberto (AN)

Ing. Crescenzo Di Fratta