



Certificate no. TAI-FS-C-22-0020

WE HEREBY CERTIFY THAT

Product description PNEUMATIC RACK AND PINION SPRING RETURN AND DOUBLE ACTING ACTUATOR

Models SERIES GT, RCR

Manufacturer ROTORK CONTROLS (INDIA) PVT., LTD.
RFS DIVISION
23/3, Thiruvallur High Road
Thirumazhisai, Chennai, Tamil Nadu 600124
India

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-22-0041

Expiry date 04.05.2025

Issue date 11.05.2022

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
11.05.2022, Monte Roberto (AN)

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Cod. Id. CEE IT02217380423 REA AN n. 170070
A socio unico, soggetta a controllo e coordinamento di:
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Annex to certificate no. TAI-FS-C-22-0020

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

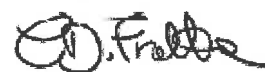
Random failure rates				
Configuration	Safety function	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
GT, RCR (spring return) - No PST	1	3,49E-08	0,00E+00	0,00E+00
GT, RCR (spring return) - With PST	1	3,14E-09	3,18E-08	0,00E+00
GT, RCR (double acting) - No PST	1	1,48E-08	0,00E+00	0,00E+00
GT, RCR (double acting) - With PST	1	1,33E-09	1,34E-08	0,00E+00

Systematic capability	3 (Route 1s applied)			
Architectural constraints	Route 1H:	Applied	Route 2H:	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-GT-00-EN.

END OF CERTIFICATE

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
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