



Certificate no. TAI-FS-C-25-0006

WE HEREBY CERTIFY THAT

Product description	Pneumatic rack and pinion spring return and double acting actuator
Models	EL-O-Matic™ series F (up to and including size 0600)
Manufacturer	Emerson Process Management Valve Automation, Inc. 19200 Northwest Freeway Houston, Texas 77065 United States of America
	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-25-0006
Expiry date	06.04.2028
Issue date	07.04.2025

TUV AUSTRIA ITALIA
07.04.2025, Monte Roberto (AN)


Ing. Crescenzo Di Fratta

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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-25-0006

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]
EL-O-Matic™ series F spring return - No PST	1	1,11E-08	0,00E+00	0,00E+00
EL-O-Matic™ series F spring return - With PST	1	1,00E-09	1,01E-08	0,00E+00
EL-O-Matic™ series F double acting - No PST	1	1,35E-08	0,00E+00	0,00E+00
EL-O-Matic™ series F double acting - With PST	1	1,21E-09	1,22E-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 DOC.SILM.EF.EN

END OF CERTIFICATE

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