

CERTIFICATE

This certifies that the company

Actuatech S.p.A. Via San Lorenzo, 70 25069 Villa Carcina (BS) Italy

Is authorized to provide the product mentioned below

Description of product: Pneumatic rack and pinion spring return and double acting actuator series RP

In accordance with:

EN 61508:2010 Parts 1, 2, 4, 5, 6, 7

Registration No 21 21859 01 Test Report No PS-24085-23-M File reference 24085-01

TÜV NORD Italia S.r.l. (TÜV NORD Group) Via Turati, 70 - 20023 Cerro Maggiore (MI)



www.tuev-nord.it

Validity from 2023-06-09 until 2026-05-29

Cerro Maggiore, 2023-06-09 prodotto@tuev-nord.it

Please also pay attention to the information stated overleaf



ANNEX

Annex 1, Page 2 of 2

To Certificate-Nr. 21 21859 01

Туре	A
HFT	0
Safety functions	 <u>Spring return actuators:</u> 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> 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 _{ου} [1/h]	λ _{DD} [1/h]	λ _s [1/h]			
RP spring return - No PST	1	8,33E-08	0,00E+00	0,00E+00			
RP spring return - With PST	1	7,50E-09	7,58E-08	0,00E+00			
RP double acting - No PST	1	2,17E-07	0,00E+00	0,00E+00			
RP double acting - With PST	1	1,95E-08	1,97E-07	0,00E+00			

Systematic capability	atic capability 3 (Route 1 _s applied)						
	Route 1 _H :	Applied	Route 2 _H :	Applied			
Architectural constraints	 The product can be used in: single channel configuration: 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 SM202101.

