



Certificate no. TAI-FS-C-24-0088

WE HEREBY CERTIFY THAT

Product description Pneumatic linear spring return and double acting actuator

Models Series LAPS, LAP

Manufacturer DVG Automation S.p.A.
Via Gabriele Rossetti 2
I-29016 Cortemaggiore (PC)

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-24-0159

Expiry date 02.12.2027

Issue date 03.12.2024

TUV AUSTRIA ITALIA
03.12.2024, 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-24-0088

Type	A
HFT	0
Safety functions	1. Stem extended upon the demand of the actuation system 2. Stem retracted upon the demand of the actuation system
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	Safety function	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
Series LAPS (integral spring module) - No PST	1	1,65E-08	0,00E+00	0,00E+00
Series LAPS (integral spring module) - With PST	1	1,48E-09	1,50E-08	0,00E+00
Series LAPS (integral spring module) - No PST	2	1,63E-08	0,00E+00	0,00E+00
Series LAPS (integral spring module) - With PST	2	1,47E-09	1,48E-08	0,00E+00
Series LAPS (separate spring module) - No PST	1	1,68E-08	0,00E+00	0,00E+00
Series LAPS (separate spring module) - With PST	1	1,52E-09	1,53E-08	0,00E+00
Series LAPS (separate spring module) - No PST	2	1,63E-08	0,00E+00	0,00E+00
Series LAPS (separate spring module) - With PST	2	1,47E-09	1,48E-08	0,00E+00
Series LAP - No PST	1	3,00E-08	0,00E+00	0,00E+00
Series LAP - With PST	1	2,70E-09	2,73E-08	0,00E+00
Series LAP - No PST	2	3,02E-08	0,00E+00	0,00E+00
Series LAP - With PST	2	2,72E-09	2,75E-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: - 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 Manuals SCTD-SM-LAPS-01, SCTD-SM-LAP-01

END OF CERTIFICATE

TUV AUSTRIA ITALIA
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