



**Certificate no. TAI-FS-C-20-0011**

WE HEREBY CERTIFY THAT

**Product description** PNEUMATIC PRESSURE SWITCH  
**Models** SERIES APS  
**Manufacturer** DVG AUTOMATION S.p.A.  
Via Giacomo 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

**Summary Report no.** TAI-FS-R-20-0023

**Expiry date** 28.04.2023

**Issue date** 29.04.2020

29.04.2020, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

**Annex to certificate no. TAI-FS-C-20-0011**

|                          |  |
|--------------------------|--|
| <b>Type</b>              | A  |
| <b>HFT</b>               | 0  |
| <b>Safety functions</b>  | 1. De-energize-to-trip operation: to discharge a chamber of a single acting pneumatic actuator |
| <b>Mode of operation</b> | Low Demand Mode  |

| Random failure rates |                 |                      |                      |                   |
|----------------------|-----------------|----------------------|----------------------|-------------------|
| Configuration        | Safety function | $\lambda_{DU}$ [1/h] | $\lambda_{DD}$ [1/h] | $\lambda_S$ [1/h] |
| APS                  | 1               | 2,64E-08             | 0,00E+00             | 2,10E-07          |

|                                  |  |         |                             |         |
|----------------------------------|--|---------|-----------------------------|---------|
| <b>Systematic capability</b>     | 3 (Route 1s applied)   |         |                             |         |
| <b>Architectural constraints</b> | <b>Route 1<sub>H</sub>:</b>  | Applied | <b>Route 2<sub>H</sub>:</b> | Applied |
|                                  | The product can be used in: <ul style="list-style-type: none"> <li>• single channel configuration: up to SIL 2</li> <li>• double channel configuration: up to SIL 3</li> </ul> |         |                             |         |

**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 SCTD-SM-APS-01.

END OF CERTIFICATE



Ing. Crescenzo Di Fratta