



**Certificate no. TAI-FS-C-21-0021**

WE HEREBY CERTIFY THAT

**Product description** HYDRAULIC QUICK LOAD VALVE

**Models** SERIES AQEH...F...; AQEH...J...; AQEH...P...

**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-21-0041**

**Expiry date** 07.02.2024

**Issue date** 08.02.2021

08.02.2021, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

## Annex to certificate no. TAI-FS-C-21-0021

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	1. De-energize-to-trip operation: to deliver a full stroke of the spool on pilot pressure fall, to feed a chamber of the actuator, to drive the actuator to its defined safe state
<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]
AQEH...F...; AQEH...J...; AQEH...P... - No PST	1	2,22E-08	0,00E+00	1,12E-07
AQEH...F...; AQEH...J...; AQEH...P... - With PST	1	2,22E-10	2,20E-08	1,12E-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:                             <ul style="list-style-type: none"> <li>○ up to SIL 2 without external diagnostic tests</li> <li>○ up to SIL 3 considering external diagnostic tests</li> </ul> </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 SM 17\_001.

END OF CERTIFICATE

