



**Certificate no. TAI-FS-C-20-0032**

WE HEREBY CERTIFY THAT

**Product description** PNEUMATIC COMPACT HELICAL SLOT SPRING RETURN ACTUATOR  
**Models** SERIES UCRPM  
**Manufacturer** SERVOVALVE S.p.A.  
Via Giotto 29  
I-20145 Milano (MI)

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-20-0061**

**Expiry date 11.10.2023**

**Issue date 12.10.2020**

12.10.2020, Monte Roberto (AN)

  
Ing. Crescenzo Di Fratta

**Annex to certificate no. TAI-FS-C-20-0032**

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	1. Delivery of a full stroke (90° ± tolerance) driven by the spring, with power fluid exhausted from the cylinder through the control system
<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]
UCRPM - No PST	1	5,01E-08	0,00E+00	0,00E+00
UCRPM - With PST	1	4,51E-09	4,56E-08	0,00E+00

<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-05.

*END OF CERTIFICATE*



Ing. Crescenzo Di Fratta

12.10.2020, Monte Roberto (AN)