

**Certificate of Conformity No.: 28714103**

**Manufacturer:** Servovalve S.p.A.  
Via Quasimodo, 25/27  
I-20010 S. Stefano Ticino (MI)

**Specifications:** IEC 61508-1÷7:2010

**Product:** Helical Slot Actuator

**Type:** Series UCRPM, UCROM

**RESULT:**

As per the TÜV Rheinland Italia Report No. FS 28714103 Rev. 0 we declare that the product meets the below requirements:

**IEC 61508: 2010, part 1 to 7**

**Functional Safety of electrical/electronic/programmable electronic safety related systems; Type A, Low Demand Mode, HFT=0**

Safety Action	$\lambda_D$ [1/h]	$\lambda_{DD(PS)}$ [1/h]	Systematic Capability
Close / Open	2,29E-08	2,06E-08	3

The above values are compatible with SIL 3.

For SFF values with external diagnostic tests, carried out according to definition 3.8.7 of IEC 61508-4, see what written in the Safety Manual.

The requirements of minimum hardware fault tolerance (HFT) according to table 6 of IEC 61511-1 have to be observed.

Expiry date: **2017-03-31**

Location: **Milan**

Date: **2014-03-24**

TÜV Rheinland Italia S.r.l.  
Via Enrico Mattei, 3  
I - 20010 Pogliano Milanese

Giovanni De Felippis  
Operational Manager




**Attachment 1 to  
Certificate of Conformity No.: 28714103**



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		Test Interval Frequency (months)				
		6	12	24	36	48
Partial Stroke frequency (months)	1	1,31E-05	1,81E-05	2,81E-05	3,82E-05	4,82E-05
	2	2,06E-05	2,56E-05	3,57E-05	4,57E-05	5,57E-05
	3	2,81E-05	3,32E-05	4,32E-05	5,32E-05	6,32E-05
	6		5,57E-05	6,58E-05	7,58E-05	8,58E-05
	9				9,84E-05	
	12			1,11E-04	1,21E-04	1,31E-04

PFD<sub>AVG</sub> values according to IEC 61508 for different values of TI and TI<sub>PS</sub>

Test Interval Frequency (months)				
6	12	24	36	48
5,07E-05	1,01E-04	2,01E-04	3,01E-04	4,02E-04

PFD<sub>AVG</sub> values according to IEC 61508 for different values of TI (no Partial Stroke Test)

Location: **Milan**

Date: **2014-03-24**



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