



Certificate no. TAI-FS-C-23-0007

WE HEREBY CERTIFY THAT

Product description SOLDOTM BOLT MICRO SWITCH BOX

Models Series BM, TB, BJ, BX

Manufacturer ROTORK INSTRUMENTS ITALY S.r.l.
Via Portico 17
I-24050 Orio al Serio (BG)

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-23-0016

Expiry date 19.03.2026

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TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
20.03.2023, Monte Roberto (AN)

Page 1 of 2

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Annex to certificate no. TAI-FS-C-23-0007

Type	A
HFT	0
Safety functions	<ol style="list-style-type: none"> 1. Give an output signal to indicate that the actuator has moved from the "normal position" 2. Give an output signal to indicate that the actuator has reached the "safe position"
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	Safety function	λ_D [1/h]	λ_S [1/h]	SFF [%]
BM, TB and BJ with reed or micromechanical switch	1 / 2	4,8E-10	<1,0E-09	> 60% > 99% including PST
BX with Pepperl+Fuchs NAMUR sensors, standard NAMUR amplifier With Werner Turck NAMUR sensors	1 / 2	9,6E-09	1,6E-08	> 60% > 99% including PST
BX with Pepperl+Fuchs NAMUR sensors, fail-safe interface	1 / 2	7,0E-11	2,5E-08	> 99%


Systematic capability	3 (Route 1s applied)			
Architectural constraints	Route 1_H:	Applied	Route 2_H:	Applied
	The product can be used in: <ul style="list-style-type: none"> • single switch configuration: <ul style="list-style-type: none"> ○ up to SIL 2 without external diagnostic tests ○ up to SIL 3 considering external diagnostic tests (only for safety function 1) • redundant switch 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 Manual IOM00069_ENG

END OF CERTIFICATE

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
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