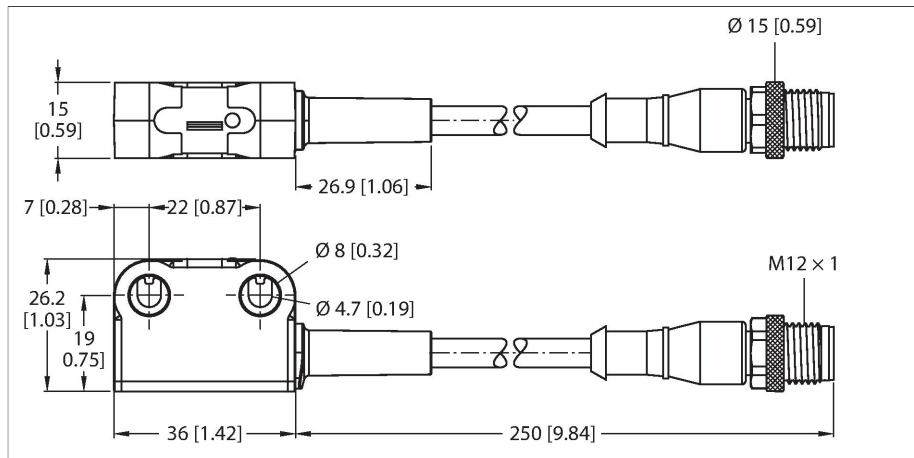


SI-RFDL-UP8

Safety Technology – RFID Safety Switch



Technical data

Type	SI-RFDL-UP8
ID no.	3806399
Function	RFID safety switch
Repeatability	1.3 mm
Hysteresis	≤ 2 mm
Range	10...25 mm
With muting function	no
Operating voltage	19.2...30 VDC
No-load current	≤ 50 mA
Max. current safe output	100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Communication protocol	ISD
Output function	2 × OSSD, NO contacts, PNP
Number of safe semiconductor outputs	2
Rated insulation voltage	75 V
Impulse withstand voltage	500 kV
Protection class	III gemäß EN IEC 61558
Switching frequency	≤ 1 Hz
Readiness delay	≤ 2 s
Response time typical	< 100 ms
With restart interlock	yes
Design	Rectangular, SI-RF
Dimensions	26 x 15 x 36 mm
Housing material	Plastic, Thermoplastic material
Cascadable	yes



Features

- Contactless safety sensor for cascading
- Coding type: unique
- Reset: locked
- Diagnostics: detailed ISD (in-series diagnostic) diagnostic system for a complete status image (not safety-relevant)
- Operating status indicator (green/red)
- Switching output indicator (yellow)
- IP69K
- SIL 3 (IEC 61508)
- PL e (ISO 13849-1)
- Required for operating SI-RF-A actuators

Functional principle

The safety sensors from the SI-RF product series use RFID technology to monitor doors, flaps and other moving mechanical guards that separate people and devices from hazardous situations. This contactless system meets the highest safety standards, is tamper-proof and offers diagnostic functions which make it easier to solve problems and minimize plant downtimes.

The uniquely coded RFID safety sensors offer the highest level of tamper protection. The RFID sensor and the SI-RF actuator in this pair will only work with each other. The RFID code is completely unique to this SI-RF actuator and no additional SI-RF actuators can be taught into the sensor.

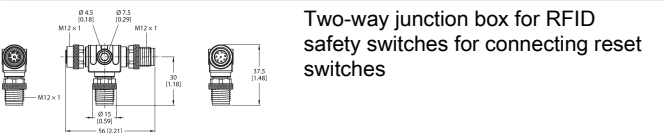
Cascaded RFID safety sensors with in-series diagnostics (ISD) provide users with additional status-related and diagnostic information. These can be parameterized using the SI-RFA-DM1 diagnostics module.

Technical data

Electrical connection	Cable with connector, M12 × 1, 0.25 m, PUR
Number of cores	8
Ambient temperature	-25...+70 °C
Storage temperature	-25...+70 °C
Relative humidity	0...93 %
Protection class	IP69K
Power-on indication	LED, Green/Red
Switching state	LED, Yellow
Error indication	LED, red
Tests/approvals	
Vibration resistance	acc. to EN IEC 60947-5-2
Shock test	acc. to EN IEC 60947-5-2
PL acc. to DIN EN 13849-1:2008	e
Category acc. to DIN EN 13849-1:2008	4
SIL according IEC 61508	3
Useful Lifetime	20 years
Coding level/tamper protection	Unique

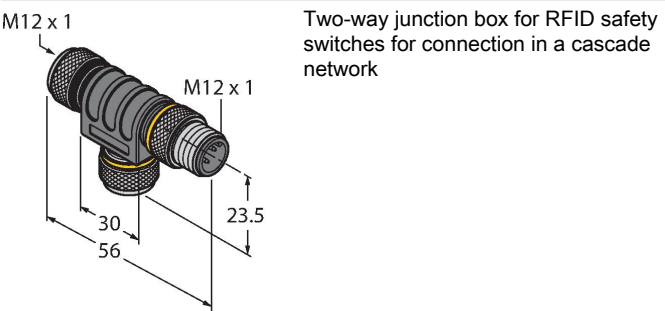
Accessories

SI-RFA-TK 3806410



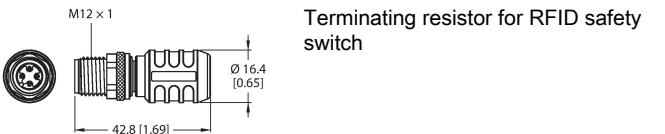
Two-way junction box for RFID safety switches for connecting reset switches

SI-RFA-TS 3806409



Two-way junction box for RFID safety switches for connection in a cascade network

SI-RFA-P 3806411



Terminating resistor for RFID safety switch

Accessories

Dimension drawing	Type	ID no.	
	SI-RF-A	3806408	Actuator for RFID safety switch

