

Safety Switch

RFID

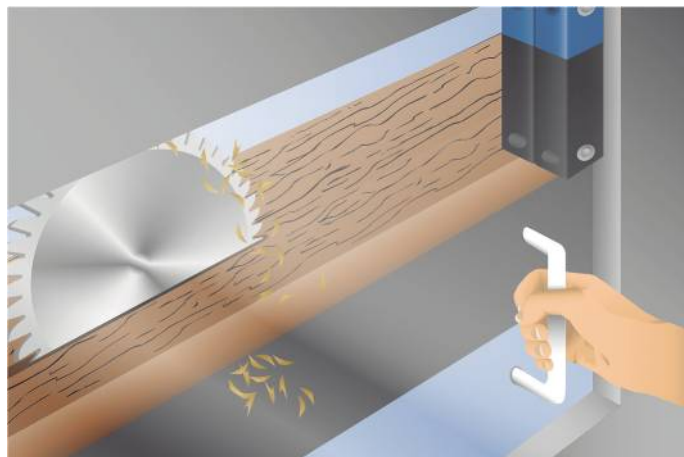
SD4RAS02IN89

Part Number



- Easy to clean
- High level of manipulation protection thanks to RFID coding
- Integrated locking
- Protection mode IP69K
- Universal fastening opportunities

Separating safety devices can be easily protected up to cat. 4 PL e using these contactless safety switches, even during series connection. Response and risk times remain unchanged at all times. Extensive diagnosis functions boost system availability and make installation and maintenance easier. The locking version can be used as a stop and secures small doors or flaps.

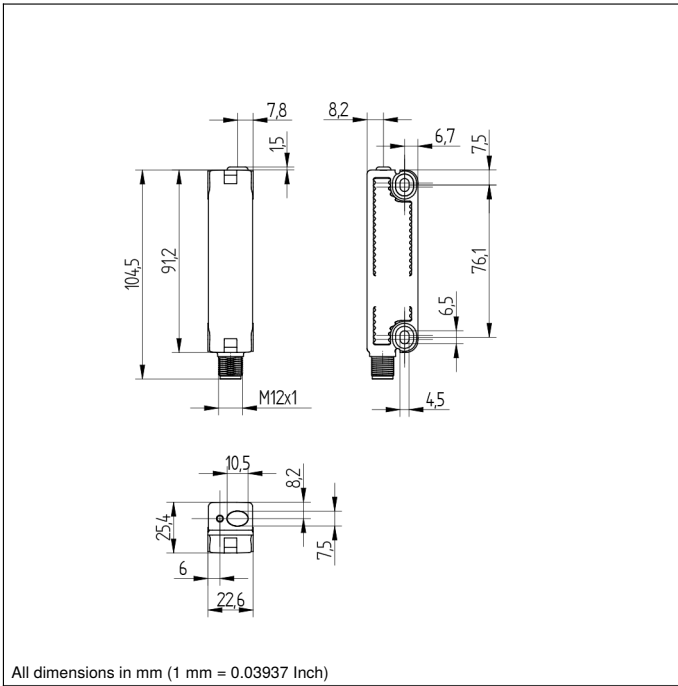


Technical Data

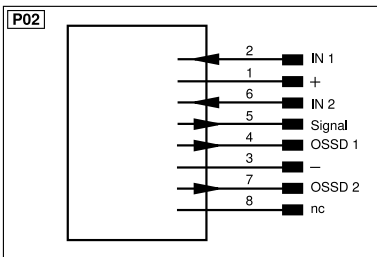
Electrical Data	
Sensor Type	Switch
Supply Voltage	20,4...26,4 V DC
Response Time	< 100 ms
Risk time	< 200 ms
Temperature Range	-25...70 °C
Storage temperature	-25...85 °C
Safety Output	OSSD
Number of safety outputs (OSSDs)	2
PNP Safety Output/Switching Current	< 250 mA
Safety Output Voltage Drop	< 1 V
Number of Signal Outputs	1
PNP signal output switching current	50 mA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Protection Class	II
Mechanical Data	
Switching Distance	12 mm
Protected Sao switching-off distance	10 mm
Protected Sar switching-off distance	16 mm
Housing Material	Plastic
Degree of Protection	IP65/IP67/IP69K
Connection	M12 × 1; 8-pin
Latching Force, typical	18 N
Safety-relevant Data	
Operating principle	RFID
Coding	Individual
Performance Level (EN ISO 13849-1)	Cat. 4 PL e
PFHD	2,70 × E-10 1/h
Safety Integrity Level (EN 61508)	SIL3
Safety Integrity Level (EN 62061)	SILCL3
PDDb (EN 60947-5-3)	yes
Function	
Series Connection	yes
Permanent magnet	yes
Applicable actuator	SD4RAA02
Connection Diagram No.	P02
Suitable Connection Equipment No.	89


Complementary Products

Safety Relay SR4B3B01S, SR4D3B01S
Seal Set Z0047
Software



All dimensions in mm (1 mm = 0.03937 Inch)



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contacting Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
			Wire Colors according to DIN IEC 60757
			BK Black
			BN Brown
			RD Red
			OG Orange
			YE Yellow
			GN Green
			BU Blue
			VT Violet
			GY Grey
			WH White
			PK Pink
			GNYE Green/Yellow

