

Safety Switch

RFID

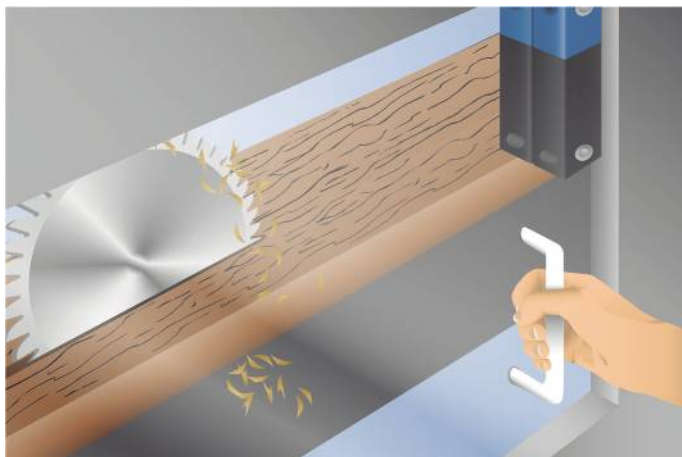
SD4RAS01SN89

Part Number



- Easy to clean
- High level of manipulation protection thanks to RFID coding
- 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 does not secure any small doors or flaps.

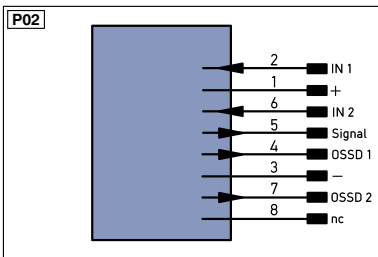
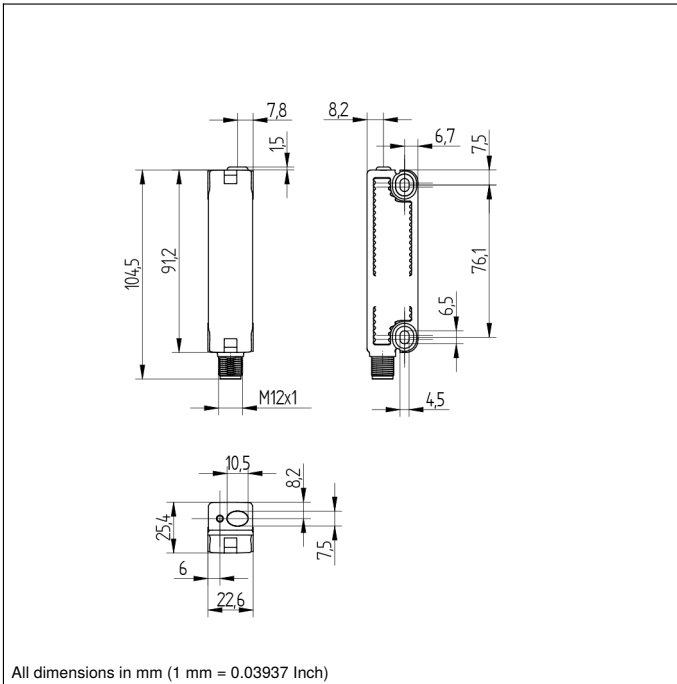


Technical Data

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
No. 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
Safety-relevant Data	
Operating principle	RFID
Coding	Standard
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
PDDDB (EN 60947-5-3)	yes
Function	
Series Connection	yes
Applicable actuator	SD4RAA01
Connection Diagram No.	P02
Suitable Connection Equipment No.	89

Complementary Products

Safety Relay SR4B3B01S, SR4D3B01S
Seal Set Z0047
Software



Legend	
+ Supply Voltage +	PT Platinum measuring resistor
- Supply Voltage 0 V	nc not connected
~ Supply Voltage (AC Voltage)	U Test Input
A Switching Output (NO)	U Test Input inverted
Ā Switching Output (NC)	W Trigger Input
V Contamination/Error Output (NO)	W- Ground for the Trigger Input
Ṽ Contamination/Error Output (NC)	O Analog Output
E Input (analog or digital)	O- Ground for the Analog Output
T Teach Input	BZ Block Discharge
Z Time Delay (activation)	AMV Valve Output
S Shielding	a Valve Control Output +
RxD Interface Receive Path	b Valve Control Output 0 V
TxD Interface Send Path	SY Synchronization
RDY Ready	SY- Ground for the Synchronization
GND Ground	E+ Receiver-Line
CL Clock	S+ Emitter-Line
E/A Output/Input programmable	± Grounding
IO-Link	S_nR Switching Distance Reduction
PoE Power over Ethernet	Rx+/- Ethernet Receive Path
IN Safety Input	Tx+/- Ethernet Send Path
OSSD Safety Output	Bus Interfaces-Bus A(+)/B(-)
Signal Signal Output	L_a Emitted Light disengageable
Bl..D+/- Ethernet Gigabit bidirect. data line (A-D)	Mag Magnet activation
EN0_{RS422} Encoder 0-pulse 0-0 (TTL)	RES Input confirmation
	EDM Contactor Monitoring
	EN_{AR5422} Encoder A/Ā (TTL)
	EN_{BR5422} Encoder B/B̄ (TTL)
	EN_A Encoder A
	EN_B Encoder B
	A_{MIN} Digital output MIN
	A_{MAX} Digital output MAX
	A_{OK} Digital output OK
	SY_{in} Synchronization In
	SY_{OUT} Synchronization OUT
	OL_T Brightness output
	M Maintenance
	rsv reserved
	Wire Colors according to DIN IEC 757
	BK Black
	BN Brown
	RD Red
	OG Orange
	YE Yellow
	GN Green
	BU Blue
	VT Violet
	GY Grey
	WH White
	PK Pink
	GNVE Green/Yellow

