

Safety Switch

RFID

SD4RAS01TN89

Part Number



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

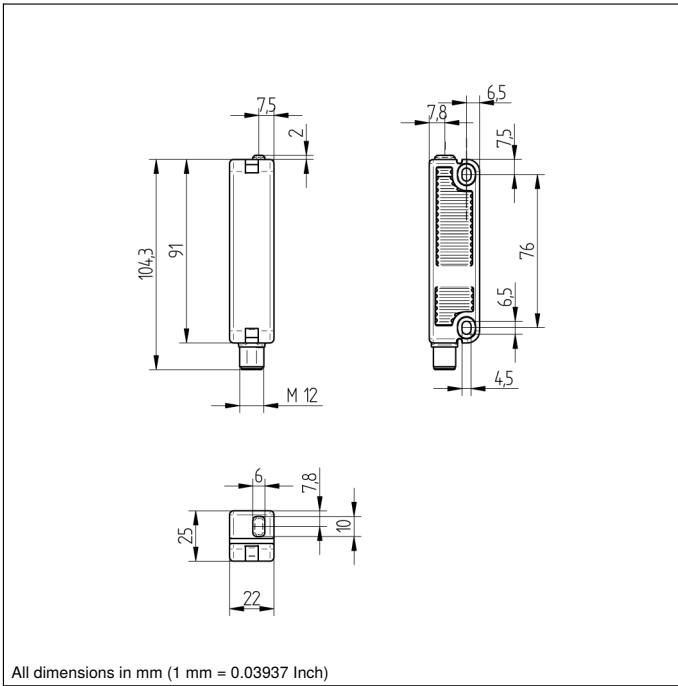
Separating safety devices can be easily protected up to cat. 4 PL e using these contactless safety switches, even during series connection. Response and risk times remain unchanged at all times. Extensive diagnosis functions boost system availability and make installation and maintenance easier. The locking version can be used as a stop and does not secure any small doors or flaps.

Technical Data

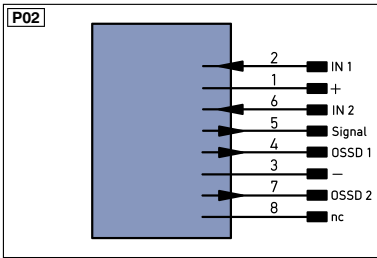
Electrical Data	
Sensor Type	Switch
Supply Voltage	20,4...26,4 V DC
Response Time	< 100 ms
Risk time	< 200 ms
Temperature Range	-25...70 °C
Storage temperature	-25...85 °C
Safety Output	OSSD
No. Safety Outputs (OSSDs)	2
PNP Safety Output/Switching Current	< 250 mA
Safety Output Voltage Drop	< 1 V
Signal 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	IP67/IP69K
Connection	M12 × 1; 8-pin
Safety-relevant Data	
Operating principle	RFID
Coding	Individual, teachable
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
Applicable actuator	SD4RAA01
Connection Diagram No.	P02
Suitable Connection Technology No.	89

Complementary Products

Gasket Set Z0047
Safety Relay SR4B3B01S
Safety Relay SR4D3B01S
Sistema Library software DNNF007



All dimensions in mm (1 mm = 0.03937 Inch)



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	ENa	Encoder A
-	Supply Voltage 0 V	nc	not connected	ENb	Encoder B
~	Supply Voltage (AC Voltage)	U	Test Input	AMIN	Digital output MIN
A	Switching Output (NO)	U	Test Input inverted	AMAX	Digital output MAX
Ā	Switching Output (NC)	W	Trigger Input	AOK	Digital output OK
V	Contamination/Error Output (NO)	O	Analog Output	SY In	Synchronization In
ṽ	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY OUT	Synchronization OUT
E	Input (analog or digital)	BZ	Block Discharge	Out	Brightness output
T	Teach Input	AW	Valve Output	M	Maintenance
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	E+	Receiver-Line		
RDY	Ready	S+	Emitter-Line		
GND	Ground	±	Grounding		
CL	Clock	SnR	Switching Distance Reduction		
E/A	Output/Input programmable	Rx+/-	Ethernet Receive Path		
IO-Link	IO-Link	Tx+/-	Ethernet Send Path		
PoE	Power over Ethernet	Bus	Interfaces-Bus A(+)/B(-)		
IN	Safety Input	La	Emitted Light disengageable		
OSSD	Safety Output	Mag	Magnet activation		
Signal	Signal Output	RES	Input confirmation		
Bl..D+/-	Ethernet Gigabit bidirect. data line (A-D)	EDM	Contacting Monitoring		
EN0..R542	Encoder 0-pulse 0-0 (TTL)	ENAR542	Encoder A/Ā (TTL)		
		ENBR542	Encoder B/B̄ (TTL)		

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
GNYE	Green/Yellow

