

Safety Switch with Lock Function

Electromechanic, Power to Unlock Principle

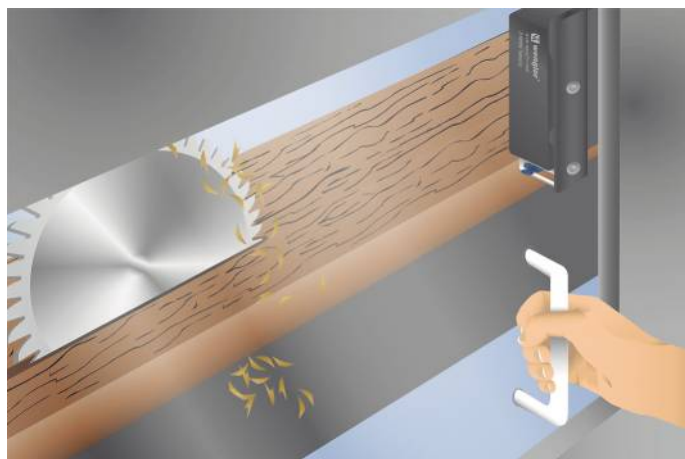
S2FP101

Part Number



- Locking force of 1000 N
- Performance Level: Cat. 4 PL e
- Power to unlock principle

The electromechanical safety switch with lock function is distinguished by a high locking force of 1000 N. As a result, only one safety switch with lock function is required in order to fulfill a safety level of category 4 PL e (EN ISO 13849-1). The safety level, as well as reaction time and risk time, remain unchanged when connected in series. Extensive diagnosis functions enhance system availability and simplify installation and maintenance. The unique star handle operating concept is especially well-suited for rotary and sliding doors.

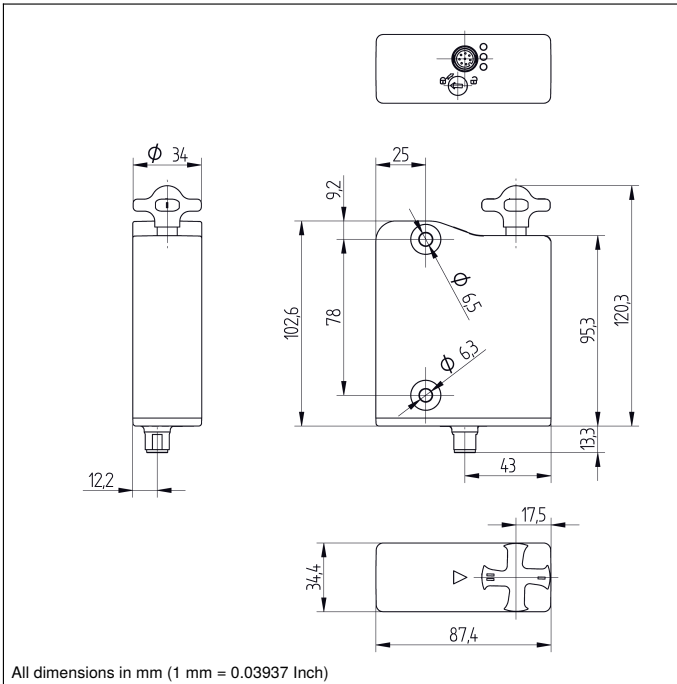


Technical Data

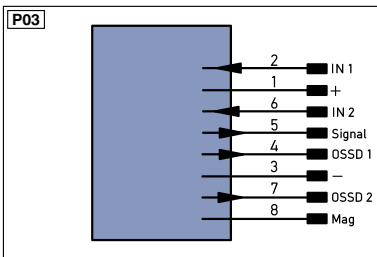
Electrical Data	
Sensor Type	Locking unit
Supply Voltage	20,4...26,4 V DC
Response Time	≤ 100 ms
Risk time	≤ 200 ms
Temperature Range	0...60 °C
Storage temperature	-10...90 °C
Safety Output	OSSD
No. Safety Outputs (OSSDs)	2
PNP Safety Output/Switching Current	250 mA
Signal Outputs	1
PNP signal output switching current	50 mA
Short Circuit Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Plastic
Degree of Protection	IP65/IP67/IP69
Connection	M12 × 1; 8-pin
Detent force, typical	25 / 50 N
Safety-relevant Data	
Operating principle	RFID
Coding	Standard
Performance Level (EN ISO 13849-1)	Cat. 4 PL e
PFHD	5,20 × E-10 1/h
Safety Integrity Level (EN 61508)	SIL3
Safety Integrity Level (EN 62061)	SILCL3
PDDb (EN 60947-5-3)	yes
Lock	Power to unlock principle
Locking Force F, guaranteed	1000 N
Function	
Series connection	yes
Actuator monitored	yes
Mechanical lock	yes
Detent	yes
Auxiliary release	yes
Applicable actuator	S2FP200
Connection Diagram No.	P03
Suitable Connection Technology No.	89
Suitable Mounting Technology No.	850

Complementary Products


Safety Relay SR4B3B01S, SR4D3B01S
Software



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	Ort	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	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	Contactorm Monitoring		
EN0 RS422	Encoder 0-pulse 0-0 (TTL)	ENAR5422	Encoder A/Ā (TTL)		
		ENBR5422	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

