

Safety Switch with Lock Function

Electromechanic, Power to Unlock Principle

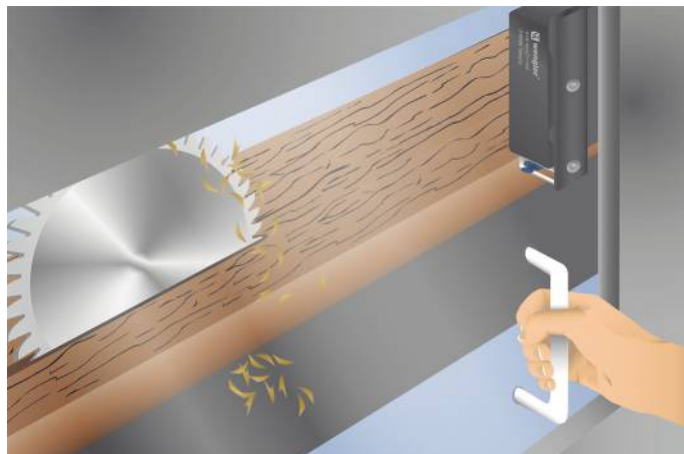
S2FP101

Part Number



- Locking force of 1150 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 1150 N. This means that only one safety switch with locking function is required to attain the Cat. 4 PL e safety level (EN ISO 13849-1). The safety level, as well as the response 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
Number of safety outputs (OSSDs)	2
PNP Safety Output/Switching Current	250 mA
Number of 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	IP66/IP67/IP69
Connection	M12 × 1; 8-pin
Latching 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
Locking Device	Power to unlock principle
Locking force F (Zh)	1150 N

Function

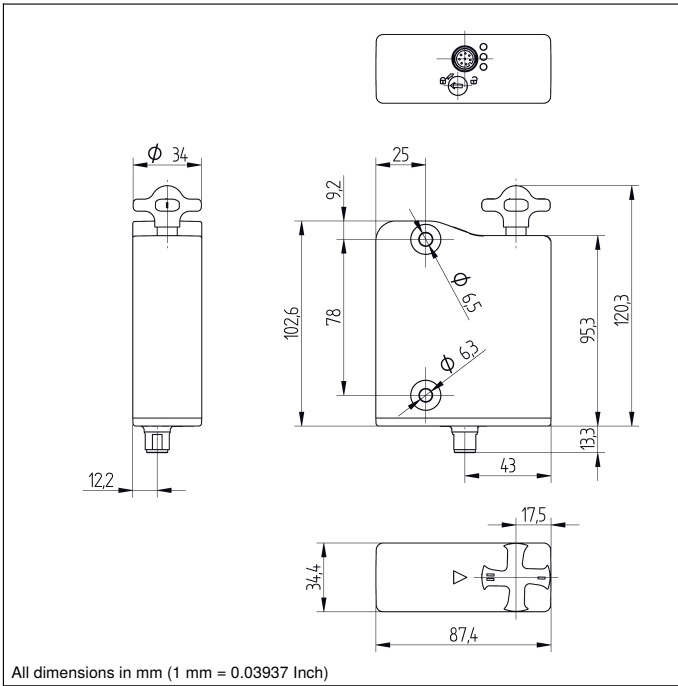
Series Connection	yes
Actuator monitored	yes
Mechanical Detent Mechanism	yes
Detent Mechanism	yes
Auxiliary release	yes

Applicable actuator	S2FP200
---------------------	---------

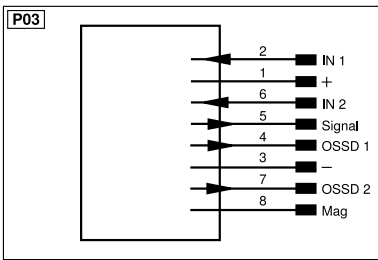
Connection Diagram No.	P03
Suitable Connection Equipment No.	89
Suitable Mounting Technology No.	850

Complementary Products

Safety Relay SR4B3B01S, SR4D3B01S
Software



All dimensions in mm (1 mm = 0.03937 Inch)



Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENb	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	Aok	Digital output OK
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	Amv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	±	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
ENo RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		

