

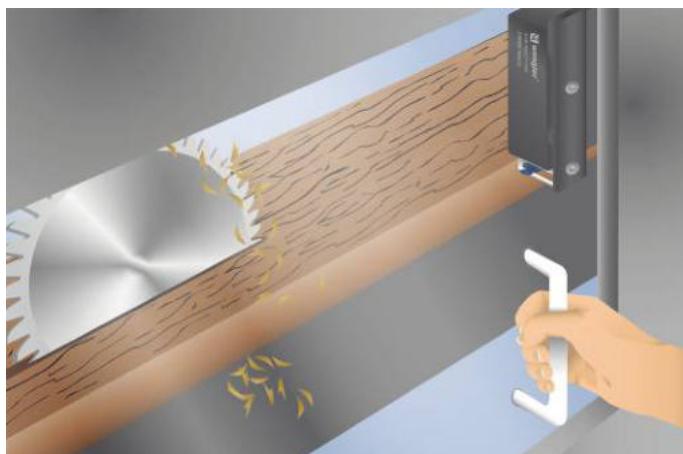
# S2FP104

Part Number



- **Locking force of 1150 N**
- **Performance Level: Cat. 4 PL e**
- **Power to lock principle**

The electromechanical safety switch with lock function is distinguished by a high locking force of 1150 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. Thanks to RFID encoding and an actuator with teach-in function, the safety switch with lock function demonstrates high levels of protection against manipulation.



## 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
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 x 1; 8-pin
Latching Force, typical	25 / 50 N

### Safety-relevant Data

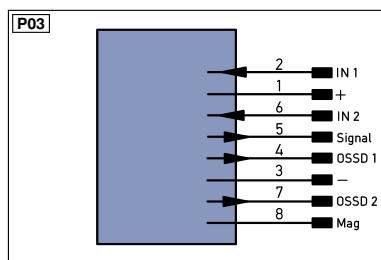
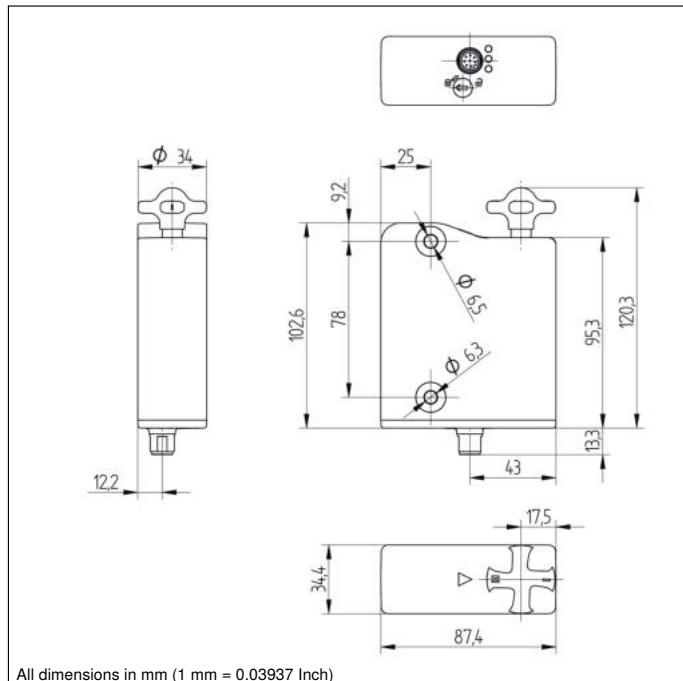
Operating principle	RFID
Coding	Individual, teachable
Performance Level (EN ISO 13849-1)	Cat. 4 PL e
PFHD	5,20 x E-10 1/h
Safety Integrity Level (EN 61508)	SIL3
Safety Integrity Level (EN 62061)	SILCL3
PDDB (EN 60947-5-3)	yes
Locking Device	Power to lock principle
Locking Force F (Zh)	1150 N

### 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


**Legend**

<b>PT</b>	Platinum measuring resistor
<b>nc</b>	not connected
<b>U</b>	Test Input
<b>Ü</b>	Test Input inverted
<b>W</b>	Trigger Input
<b>W -</b>	Ground for the Trigger Input
<b>O</b>	Analog Output
<b>O -</b>	Ground for the Analog Output
<b>BZ</b>	Block Discharge
<b>Awv</b>	Valve Output
<b>a</b>	Valve Control Output +
<b>b</b>	Valve Control Output 0 V
<b>SY</b>	Synchronization
<b>SY -</b>	Ground for the Synchronization
<b>E+</b>	Receiver-Line
<b>S+</b>	Emitter-Line
<b>±</b>	Grounding
<b>SnR</b>	Switching Distance Reduction
<b>Rx+/-</b>	Ethernet Receive Path
<b>Tx+/-</b>	Ethernet Send Path
<b>Bus</b>	Interfaces-Bus A(+)/B(-)
<b>La</b>	Emitted Light disengageable
<b>Mag</b>	Magnet activation
<b>RES</b>	Input confirmation
<b>EDM</b>	Contactor Monitoring

EN<sub>ARS422</sub> Encoder A/Ā (TTL)  
 EN<sub>BRS422</sub> Encoder B/Ā (TTL)  
 ENA Encoder A  
 ENB Encoder B  
 AMIN Digital output MIN  
 AMAX Digital output MAX  
 AOK Digital output OK  
 SY IN Synchronization IN  
 SY OUT Synchronization OUT  
 OUT Brightness output  
 M Maintenance  
 rsv reserved

Wire Colors according to IEC 60757

<b>BK</b>	Black
<b>BN</b>	Brown
<b>RD</b>	Red
<b>OG</b>	Orange
<b>YE</b>	Yellow
<b>GN</b>	Green
<b>BU</b>	Blue
<b>VT</b>	Violet
<b>GY</b>	Grey
<b>WH</b>	White
<b>PK</b>	Pink
<b>GNYE</b>	Green/Yellow

