

# Guard Locking Device

## Electromechanic, Power to Lock Principle

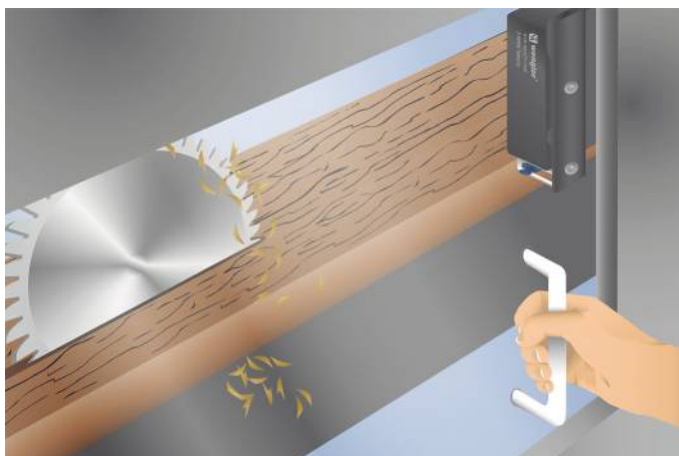
### S2FP003

Part Number



- Continuously monitored locking force of 1150 N
- Performance Level: Cat. 4 PL e
- Power to lock principle

The electromechanical guard locking device is distinguished by a high, continuously monitored locking force of 1150 N. This means that only one guard locking device is required to attain the Cat. 4 PL e safety level (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.



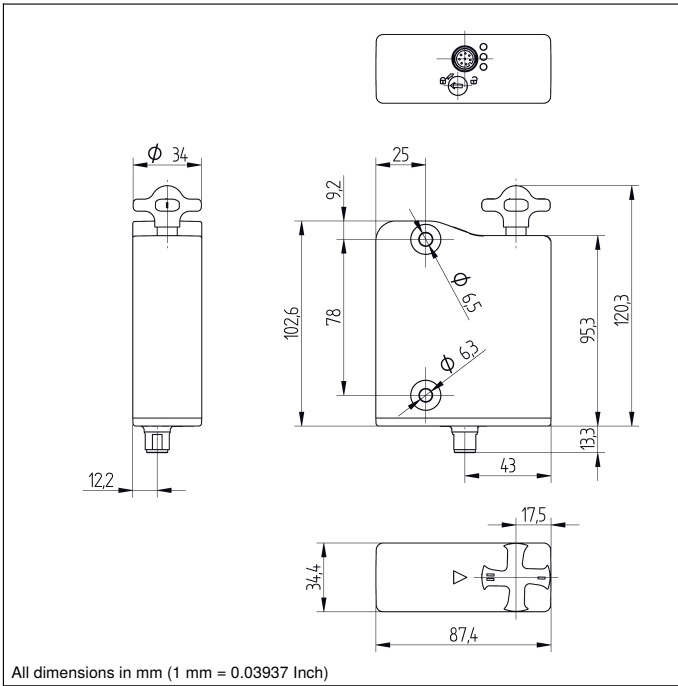
### Technical Data

| 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                    |
| 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 lock principle |
| Locking force F (Zh)                | 1150 N                  |
| Function                            |                         |
| Series Connection                   | yes                     |
| Monitored lock                      | yes                     |
| Mechanical Detent Mechanism         | yes                     |
| Detent Mechanism                    | yes                     |
| Auxiliary release                   | yes                     |
| Applicable actuator                 | S2FP200                 |
| Connection Diagram No.              | <b>P03</b>              |
| Suitable Connection Equipment No.   | <b>89</b>               |
| Suitable Mounting Technology No.    | <b>850</b>              |

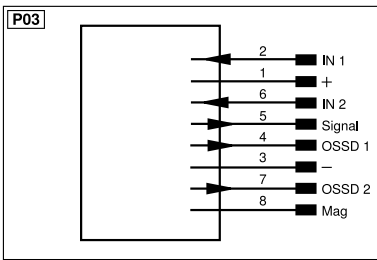
\* For locking function

### Complementary Products

Safety Relay SR4B3B01S, SR4D3B01S  
Software



All dimensions in mm (1 mm = 0.03937 Inch)



| Legend                |  |                      |                                |  |                     |
|-----------------------|--|----------------------|--------------------------------|--|---------------------|
| +                     | Supply Voltage +                           | nc                   | Not connected                  | EN <sub>RS422</sub>                    | Encoder B/B̄ (TTL)  |
| -                     | Supply Voltage 0 V                         | U                    | Test Input                     | ENA                                    | Encoder A           |
| ~                     | Supply Voltage (AC Voltage)                | Ū                    | Test Input inverted            | EN <sub>b</sub>                        | 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               |
| BI_D+/-               | Ethernet Gigabit bidirect. data line (A-D) | RES                  | Input confirmation             | PK                                     | Pink                |
| EN <sub>o</sub> RS422 | Encoder 0-pulse 0/0̄ (TTL)                 | EDM                  | Contactor Monitoring           | GNYE                                   | Green/Yellow        |
| PT                    | Platinum measuring resistor                | EN <sub>ARS422</sub> | Encoder A/Ā (TTL)              |  |                     |

