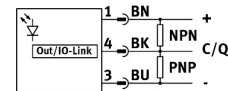


# Fork light barrier SOOF-M-FL-SM-C120-P

Part number: 553559

**FESTO**



## Data sheet

| Feature                                      | Value                                                                                                                |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Certification                                | RCM compliance mark<br>c UL us - Listed (OL)                                                                         |
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>As per EU RoHS directive                                                                  |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions                                                                |
| Note on materials                            | RoHS compliant                                                                                                       |
| Measured variable                            | Position                                                                                                             |
| Measuring principle                          | Optoelectronic                                                                                                       |
| Method of measurement                        | Fork light barrier                                                                                                   |
| Type of light                                | Red                                                                                                                  |
| Minimum object diameter                      | 0.5 mm                                                                                                               |
| Note on min. object diameter                 | 0.5 mm with standard mode<br>0.3 mm with high resolution mode<br>1.5 mm with power mode<br>0.5 mm with speed mode    |
| Ambient temperature                          | -25 °C...60 °C                                                                                                       |
| Repetition accuracy                          | 0.02 mm                                                                                                              |
| Switching output                             | Push-pull<br>NPN<br>PNP                                                                                              |
| Switching element function                   | Switchable                                                                                                           |
| Hysteresis                                   | 0.1 mm                                                                                                               |
| Max. switching frequency                     | 5000 Hz                                                                                                              |
| Note on switching frequency                  | 5000 Hz with standard mode<br>1500 Hz with high resolution mode<br>250 Hz with power mode<br>8000 Hz with speed mode |
| Max. output current                          | 100 mA                                                                                                               |
| Timer function                               | Via IO-Link®                                                                                                         |
| Short-circuit protection                     | Pulsed                                                                                                               |
| Protocol                                     | IO-Link®                                                                                                             |
| IO-Link®, protocol version                   | Device V 1.1                                                                                                         |
| IO-Link®, profile                            | Smart sensor profile                                                                                                 |
| IO-Link®, function classes                   | Binary data channel (BDC)                                                                                            |

| Feature                                        | Value                                                                                                                                  |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
|                                                | Process data variable (PDV)<br>Identification<br>Diagnostics<br>Teach channel                                                          |
| IO-Link®, communication mode                   | COM2 (38,4 kBd)                                                                                                                        |
| IO-Link®, SIO mode support                     | Yes                                                                                                                                    |
| IO-Link®, port class                           | A                                                                                                                                      |
| IO-Link®, process data width OUT               | 0 bytes                                                                                                                                |
| IO-Link®, process data width IN                | 2 Byte                                                                                                                                 |
| IO-Link®, process data content IN              | 1 bit BDC (stability)<br>1 bit BDC (switching signal)<br>12 bit PDV (signal level)                                                     |
| IO-Link®, service data contents IN             | 16-bit maximum signal level<br>16 bit Minimum signal level<br>16-bit temperature<br>32-bit switching counter<br>8-bit teach-in quality |
| IO-Link®, minimum cycle time                   | 2.3 ms                                                                                                                                 |
| IO-Link®, data memory required                 | 73 byte                                                                                                                                |
| DC operating voltage range                     | 10 V...30 V                                                                                                                            |
| Residual ripple                                | ±5%                                                                                                                                    |
| Idle current                                   | 30 mA                                                                                                                                  |
| Reverse polarity protection                    | for all electrical connections                                                                                                         |
| Electrical connection                          | 3-pin<br>M8x1<br>Plug                                                                                                                  |
| Electrical connection 1, connection type       | Plug                                                                                                                                   |
| Electrical connection 1, connection technology | M8x1 A-coded as per EN 61076-2-104                                                                                                     |
| Electrical connection 1, number of pins/wires  | 3                                                                                                                                      |
| Electrical connection 1, type of mounting      | Snap-locking<br>Screw-type lock<br>not rotatable<br>Compatible with snap-locking<br>Compatible with rotatable screw-type lock          |
| Size                                           | 120 x 60 mm clevis                                                                                                                     |
| Fork gap                                       | 120 mm                                                                                                                                 |
| Product weight                                 | 244 g                                                                                                                                  |
| Housing material                               | Die-cast zinc, coated                                                                                                                  |
| Switching status indication                    | Yellow LED                                                                                                                             |
| Setting options                                | IO-Link®<br>Potentiometer                                                                                                              |
| Degree of protection                           | IP67                                                                                                                                   |
| Insulation voltage                             | 500 V                                                                                                                                  |
| Surge resistance                               | 0.8 kV                                                                                                                                 |
| Corrosion resistance class (CRC)               | 0 - No corrosion stress                                                                                                                |
| LABS (PWIS) conformity                         | VDMA24364 Zone III                                                                                                                     |
| Contamination level                            | 3                                                                                                                                      |