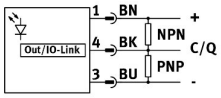
# Fork light barrier
# SOOF-M-FL-SM-C30-P

Part number: 553553




## 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 | 0.3 mm |
| Note on min. object diameter | 0.3 mm with standard mode<br>0.2 mm with high resolution mode<br>1.0 mm with power mode<br>0.3 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 |

| Feature | Value |
|---|---|
| IO-Link®, function classes | Binary data channel (BDC)<br>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 Byte |
| 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 | Clevis 30x35 mm |
| Fork gap | 30 mm |
| Product weight | 68 g |
| Housing material | Die-cast metal, coated |
| Switching status indication | LED yellow |
| 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 |