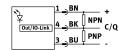
Fork light barrier SOOF-M-FL-SM-C30-P Part number: 553553







Data sheet

C UL us listed (OL) CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU ROHS Directive CE marking (see declaration of conformity) To UK instructions for EMC To UK RoHS instructions Note on materials RoHS-compliant Measured variable Position Measuring principle Optoelectronic Measurement method Fork light barrier Type of light Red Min. object diameter O.3 mm Note on min. object diameter O.3 mm with standard mode 0.2 mm with high resolution mode 1.0 mm with power mode 0.3 mm with speed mode Ambient temperature 25 °C60 °C Repetition accuracy O.02 mm Switching output Push-pull NPN PNP Switching element function Max. switching frequency Switching frequency Sould be with high resolution mode 1.0 mm with power mode 0.1 mm Max. switching frequency Sould be with light resolution mode 1.0 mm with speed mode 1.0 mm with power mode 0.02 mm Max. switching frequency Sould be with light resolution mode 1.0 mm with power mode 0.00 Hz with high resolution mode 1.0 mm with power mode 1.0 mm with power mode 8000 Hz with high resolution mode 2.0 Hz with power mode 8000 Hz with high resolution mode 2.0 Hz with power mode 8000 Hz with speed mode Max. output current Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link®	Feature	Value
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Measurement method Fork light barrier Type of light Red Min. object diameter O.3 mm Note on min. object diameter O.2 mm with high resolution mode 0.2 mm with speed mode Ambient temperature -25 °C60 °C Repetition accuracy O.02 mm Switching output Push-pull NPN PNP Switching element function Switchable Hysteresis O.1 mm Max. switching frequency Soo0 Hz Note on switching frequency Soo0 Hz Note on switching frequency Sout with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Protocol IO-Link, Protocol version Device V 1.1	Measured variable	Position
Type of light Min. object diameter Note on min. object diameter Note on min. object diameter Note on min. object diameter O.3 mm with standard mode 0.2 mm with high resolution mode 1.0 mm with speed mode Ambient temperature -25 °C60 °C Repetition accuracy O.02 mm Switching output Push-pull NPN NPN PNP Switching element function Switchable Hysteresis O.1 mm Max. switching frequency Soo0 Hz Note on switching frequency Note on switching frequency Soo0 Hz with standard mode 1500 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pused Protocol IO-Link, Protocol version Device V 1.1	Measuring principle	Optoelectronic
Min. object diameter Note on min. object diameter Note on min. object diameter O.3 mm with standard mode 0.2 mm with high resolution mode 1.0 mm with power mode 0.3 mm with speed mode Ambient temperature -25 °C60 °C Repetition accuracy O.02 mm Switching output Push-pull NPN PNP Switching element function Wisteresis O.1 mm Max. switching frequency Soon Hz Note on switching frequency Soon Hz Soon Hz with standard mode 1500 Hz with standard mode 1500 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Protocol IO-Link, Protocol version Os mm with standard mode 0.2 mm with speed mode 0.3 mm with speed mode 0.4 mm with speed mode 0.5 mm with speed mode 0.6 mm with speed mode 0.7 mm with speed mode 0.8 mm with speed mode 0.9 mm with speed mode	Measurement method	Fork light barrier
Note on min. object diameter 0.3 mm with standard mode 0.2 mm with high resolution mode 1.0 mm with power mode 0.3 mm with speed mode Ambient temperature 2.5 °C60 °C Repetition accuracy 0.02 mm Push-pull NPN PNP Switching output Switching element function Switchable Hysteresis 0.1 mm Max. switching frequency Note on switching frequency 5000 Hz Note on switching frequency 5000 Hz with high resolution mode 250 Hz with high resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link, Protocol version Device V 1.1	Type of light	Red
Ambient temperature -25 °C60 °C Repetition accuracy 0.02 mm Switching output Push-pull NPN PNP Switching element function Switchable Hysteresis 0.1 mm Max. switching frequency 5000 Hz Note on switching frequency 5000 Hz with standard mode 1500 Hz with high resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link® IO-Link, Protocol version Device V 1.1	Min. object diameter	0.3 mm
Repetition accuracy Switching output Push-pull NPN PNP Switching element function Switchable Hysteresis 0.1 mm Max. switching frequency Note on switching frequency Note on switching frequency Max. output current 100 mA Timer function Short circuit current rating Protocol IO-Link® IO-Link® Device V 1.1	Note on min. object diameter	0.2 mm with high resolution mode 1.0 mm with power mode
Switching output Push-pull NPN PNP Switching element function Switchable Hysteresis 0.1 mm Max. switching frequency 5000 Hz Note on switching frequency 5000 Hz with standard mode 1500 Hz with high resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link® Device V 1.1	Ambient temperature	-25 °C60 °C
NPN PNP PNP Switching element function Switchable Hysteresis 0.1 mm Max. switching frequency 5000 Hz Note on switching frequency Note on switching frequency Sound Hz with standard mode 1500 Hz with pigh resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link® IO-Link® Device V 1.1	Repetition accuracy	0.02 mm
Hysteresis 0.1 mm Max. switching frequency 5000 Hz Note on switching frequency 5000 Hz with standard mode 1500 Hz with high resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link, Protocol version Device V 1.1	Switching output	NPN
Max. switching frequency Note on switching frequency Sound Hz with standard mode 1500 Hz with high resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link, Protocol version Device V 1.1	Switching element function	Switchable
Note on switching frequency 5000 Hz with standard mode 1500 Hz with high resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link® IO-Link® Device V 1.1	Hysteresis	0.1 mm
1500 Hz with high resolution mode 250 Hz with power mode 8000 Hz with speed mode Max. output current 100 mA Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link® IO-Link® Device V 1.1	Max. switching frequency	5000 Hz
Timer function Via IO-Link® Short circuit current rating Pulsed Protocol IO-Link® IO-Link, Protocol version Device V 1.1	Note on switching frequency	1500 Hz with high resolution mode 250 Hz with power mode
Short circuit current rating Pulsed Protocol IO-Link® IO-Link, Protocol version Device V 1.1	Max. output current	100 mA
Protocol IO-Link® IO-Link, Protocol version Device V 1.1	Timer function	Via IO-Link®
IO-Link, Protocol version Device V 1.1	Short circuit current rating	Pulsed
, , , , , , , , , , , , , , , , , , ,	Protocol	IO-Link®
IO-Link, Profile Smart sensor profile	IO-Link, Protocol version	Device V 1.1
	IO-Link, Profile	Smart sensor profile

Feature	Value
IO-Link, Function classes	Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel
IO-Link, communication mode	COM2 (38.4 kBaud)
IO-Link, SIO-Mode support	Yes
IO-Link, Port class	A
IO-Link, Process data length OUT	0 bytes
IO-Link, Process data length IN	2 bytes
IO-Link, Process data content IN	1 bit BDC (switching signal) 1 bit BDC (stability) 12 bit PDV (signal level)
IO-Link, Service data IN	16 bit maximum signal level 16 bit minimum signal level 16 bit temperature 32 bit switching counter 8 bit teach-in quality
IO-Link, Min. cycle time	2.3 ms
IO-Link, Data storage required	73 Byte
Operational voltage range DC	10 V30 V
Residual ripple	± 5%
No-load supply current	30 mA
Reverse polarity protection	For all electrical connections
Electrical connection	3-pin M8x1 Plugs
Size	Fork 30x35 mm
Fork gap	30 mm
Product weight	68 g
Material housing	Die-cast zinc, coated
Switching status indication	Yellow LED
Setting options	IO-Link® Potentiometer
Degree of protection	IP67
Insulation voltage	500 V
Immunity to surge	0.8 kV
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Pollution degree	3