

# Fork light barriers S00F



# Fork light barriers SOOF

Product range overview

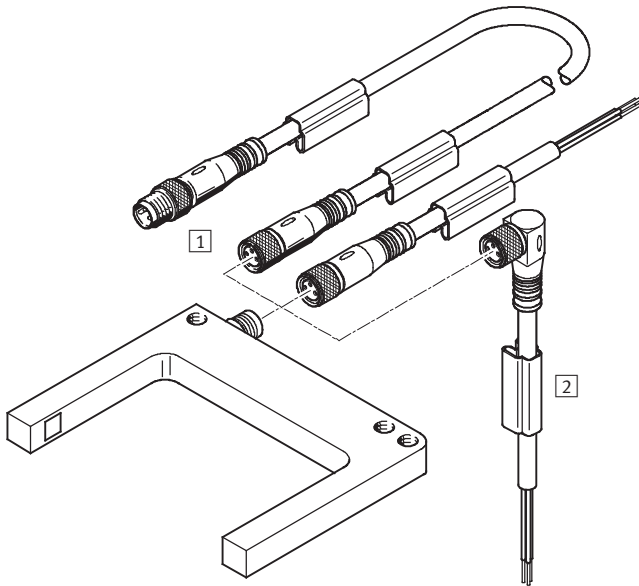


Method of measurement	Size [mm]	Min. object diameter [mm]	Max. switching frequency [Hz]	Switching output	Type of light	→ Page/ Internet	
<b>Metal</b>							
Fork light barrier	SOOF-M-...-C30	Fork 30x35	0.5	4,000	PNP	Red	5
					NPN		
	SOOF-M-...-C50	Fork 50x55	0.5	4,000	PNP		
					NPN		
	SOOF-M-...-C80	Fork 80x55	0.5	4,000	PNP		
					NPN		
	SOOF-M-...-C120	Fork 120x60	2.0	2,000	PNP		
					NPN		
<b>Polymer</b>							
Fork light barrier	SOOF-P-...-C30	Fork 30x35	0.5	2,000	PNP	Red	5
					NPN		
	SOOF-P-...-C50	Fork 50x55	0.3	2,000	PNP		
					NPN		
	SOOF-P-...-C80	Fork 80x55	0.5	2,000	PNP		
					NPN		
	SOOF-P-...-C120	Fork 120x60	0.4	2,000	PNP		
					NPN		

# Fork light barriers S00F

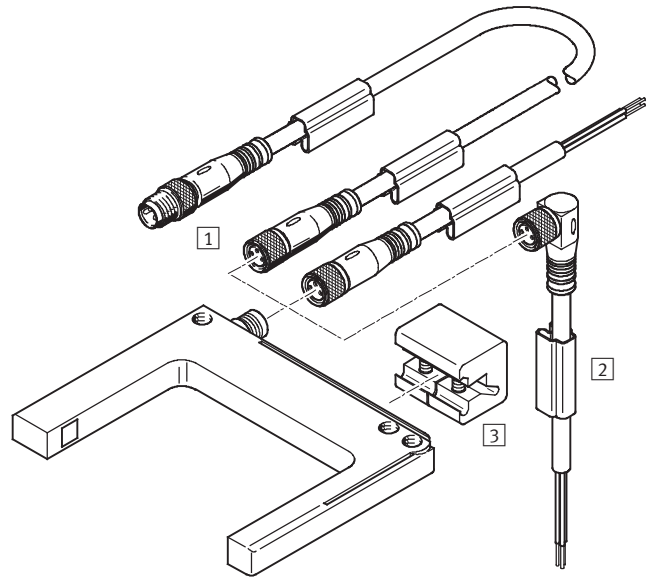
Overview of peripherals

## Metal



Accessories	→ Page/ Internet
1 Connecting cable M8x1 NEBU	8
2 Inscription label holder (included in the scope of delivery for NEBU)	-

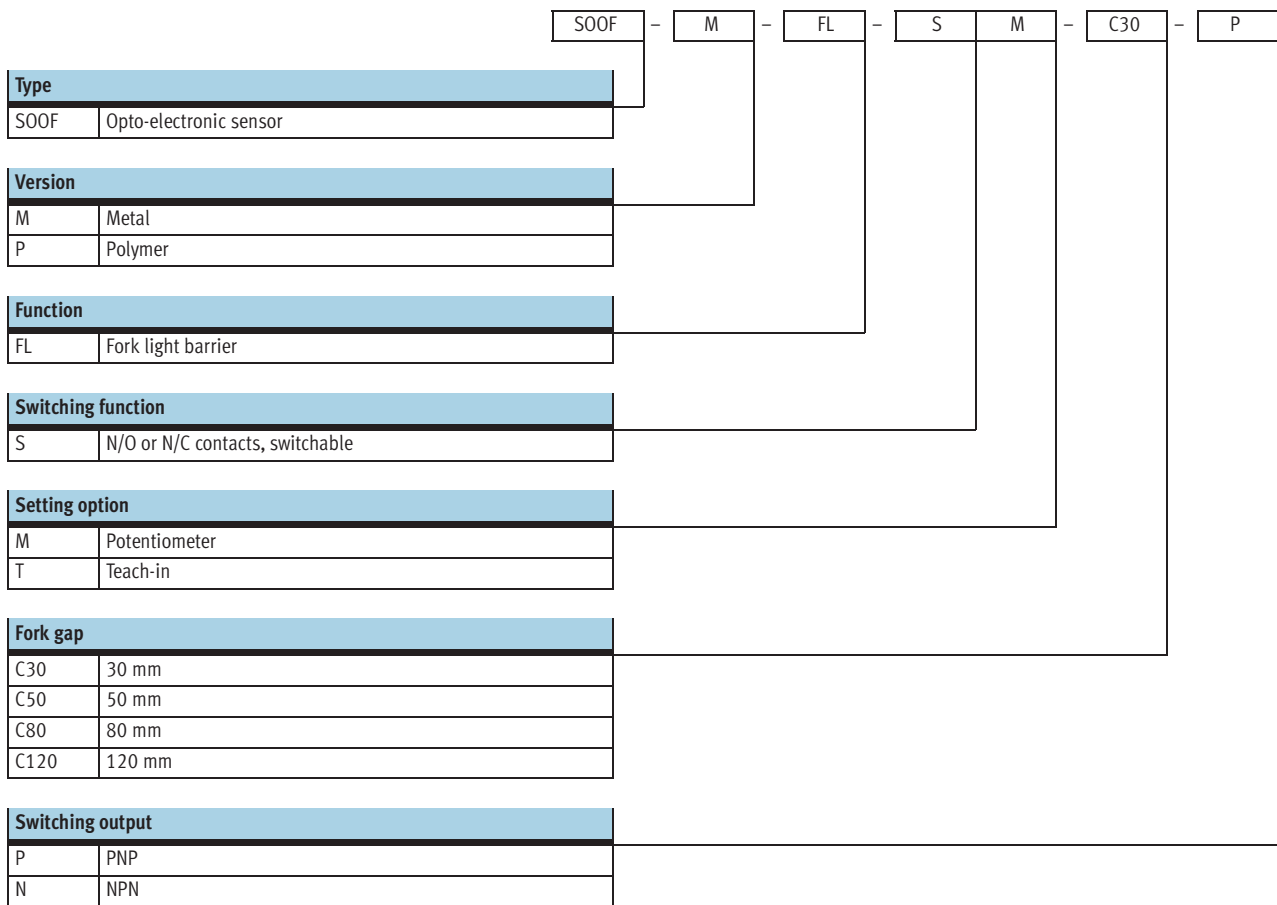
## Polymer



Accessories	→ Page/ Internet
3 Mounting SAMH	8
- Inscription label ASLR-423	8

# Fork light barriers SOOF

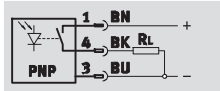
Type codes



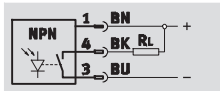
# Fork light barriers SOOF

Technical data

Function  
PNP, switchable



NPN, switchable



- Transmitter and receiver in one compact housing
- Minimum installation effort
- Sturdy housing: high shock and vibration resistance



SOOF-M



SOOF-P

General technical data									
Version	Metal					Polymer			
Fork gap	[mm]	30	50	80	120	30	50	80	120
Method of measurement		Fork light barrier				Fork light barrier			
Size	[mm]	Fork 30x35	Fork 50x55	Fork 80x55	Fork 120x60	Fork 30x35	Fork 50x55	Fork 80x55	Fork 120x60
Minimum object diameter	[mm]	0.5	0.5	0.5	2.0	0.5	0.3	0.5	0.4
Repetition accuracy	[mm]	0.02	0.04	0.06	0.06	0.03			
Hysteresis	[mm]	≤ 0.25				≤ 0.25			
Type of light		Red				Red			
Setting options		Potentiometer				Teach-in			
Switching status display		Yellow LED				Yellow LED			
Ready status display		–				Green LED			
Product weight	[g]	75	110	130	260	20	30	35	40

Electrical data										
Version	Metal					Polymer				
Fork gap	[mm]	30	50	80	120	30	50	80	120	
Max. switching frequency	[Hz]	4,000	4,000	4,000	2,000	2,000				
Operating voltage range	[V DC]	10 ... 35					10 ... 30			
Residual ripple	[%]	±5					10			
Max. output current	[mA]	200					100			
Idle current	[mA]	30	32.5	30	45	30				
Electrical connection		Plug M8x1, 3-pin					Plug M8x1, 3-pin			
Switching element function		Switchable					Switchable			
Protection against short circuit		Pulsed					Pulsed			
Reverse polarity protection		For operating voltage connections					For operating voltage connections			
Surge capacity	[kV]	0.8					0.8			
Insulation voltage	[V]	50					50			
Protection class		IP67					IP67			

Operating and environmental conditions	
Ambient temperature	[°C] –10 ... +60
Degree of contamination	3
CE mark (see declaration of conformity)	To EU EMC Directive <sup>1)</sup>
Certification	cULus listed (OL) C-Tick

1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com](http://www.festo.com) → Support → User documentation.  
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

# Fork light barriers SOOF

Technical data



Materials		
Version	Metal	Polymer
Housing	Painted die-cast zinc	PC
Note on materials	Free of copper and PTFE	-
	Contains PWIS (paint wetting impairment substances)	-
	RoHS-compliant	RoHS-compliant

## Dimensions – Metal Download CAD data → [www.festo.com](http://www.festo.com)

Fork gap 30 ... 80

Technical drawing of the Fork gap 30 ... 80 light barrier. The front view shows a housing with a width of 10 mm and a mounting hole of diameter 4.3 mm (3x). The side view shows a height of 30 mm and a width of 10 mm. Callouts 1-5 identify components: 1. Switching status display, yellow LED; 2. N/O or N/C, switchable; 3. Potentiometer; 4. Transmitter; 5. Receiver. Dimensions include H1, H2, L1, and L2.

Fork gap 120

Technical drawing of the Fork gap 120 light barrier. The front view shows a housing with a width of 10 mm and a mounting hole of diameter 4.3 mm (4x). The side view shows a height of 62 mm and a width of 12 mm. Callouts 1-5 identify components: 1. Switching status display, yellow LED; 2. N/O or N/C, switchable; 3. Potentiometer; 4. Transmitter; 5. Receiver. Dimensions include H1, H2, L1, and L2.

Fork gap H2	H1	L1	L2
30	50	60	35
50	70	80	55
80	90	80	55
120	144	90	60

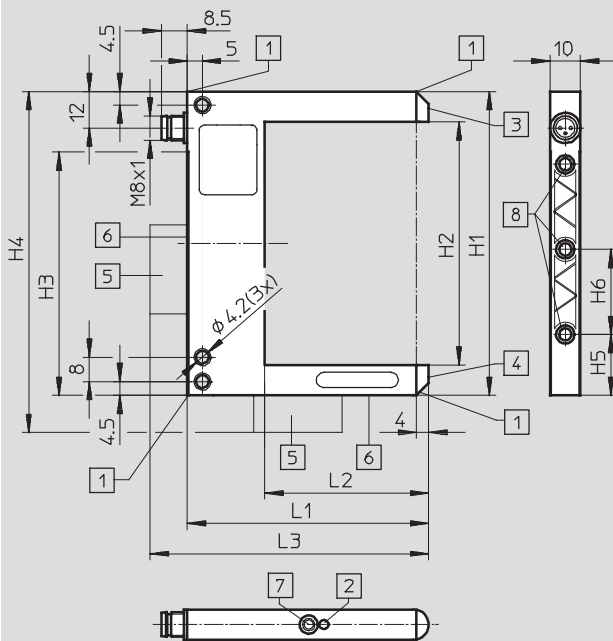
# Fork light barriers SOOF

Technical data

FESTO

## Dimensions – Polymer

Download CAD data → [www.festo.com](http://www.festo.com)

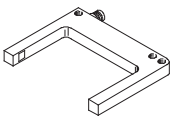
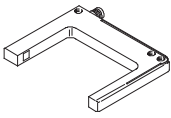


- 1) Switching status display, yellow LED
- 2) Operating status display, green LED
- 3) Receiver
- 4) Transmitter
- 5) Mounting SAMH must be ordered separately as an accessory → 8
- 6) Dovetail for mounting SAMH
- 7) Teach-in button
- 8) Threaded insert M4, max. screw-in depth 6 mm

Fork gap H2	H1	H3	H4 <sup>1)</sup>	H5	H6	L1	L2	L3 <sup>1)</sup>
30	50	30	62.2	20	–	59.5	34	71.7
50	70	50	82.2	20	28	79.5	54	91.7
80	100	80	112.2	20	2x28	79.5	54	91.7
120	140	120	152.2	20	3x28	79.5	54	91.7

1) With mounting SAMH.




## Ordering data


Version	Fork gap [mm]	Switching output	Part No.	Type
<b>Metal</b>				
	30	PNP	553 553	SOOF-M-FL-SM-C30-P
		NPN	553 554	SOOF-M-FL-SM-C30-N
	50	PNP	553 555	SOOF-M-FL-SM-C50-P
		NPN	553 556	SOOF-M-FL-SM-C50-N
	80	PNP	553 557	SOOF-M-FL-SM-C80-P
		NPN	553 558	SOOF-M-FL-SM-C80-N
	120	PNP	553 559	SOOF-M-FL-SM-C120-P
		NPN	553 560	SOOF-M-FL-SM-C120-N
<b>Polymer</b>				
	30	PNP	553 561	SOOF-P-FL-ST-C30-P
		NPN	553 562	SOOF-P-FL-ST-C30-N
	50	PNP	553 563	SOOF-P-FL-ST-C50-P
		NPN	553 564	SOOF-P-FL-ST-C50-N
	80	PNP	553 565	SOOF-P-FL-ST-C80-P
		NPN	553 566	SOOF-P-FL-ST-C80-N
	120	PNP	553 567	SOOF-P-FL-ST-C120-P
		NPN	553 568	SOOF-P-FL-ST-C120-N


# Fork light barriers SOOF

Accessories

**FESTO**

Ordering data – Connecting cables				Technical data → Internet: nebu	
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541 333	NEBU-M8G3-K-2.5-LE3
			5	541 334	NEBU-M8G3-K-5-LE3
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541 338	NEBU-M8W3-K-2.5-LE3
			5	541 341	NEBU-M8W3-K-5-LE3
	Straight socket, M8x1, 3-pin	Straight plug, M8x1, 3-pin	0.5	541 346	NEBU-M8G3-K-0.5-M8G3
			1	541 347	NEBU-M8G3-K-1-M8G3
			2.5	541 348	NEBU-M8G3-K-2.5-M8G3
			5	541 349	NEBU-M8G3-K-5-M8G3

Ordering data – Mounting		
	Part No.	Type
	553 569	SAMH-G3-Q

Ordering data – Inscription labels		
	Part No.	Type
	541 598	ASLR-423