

Fork light barriers S00F

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Fork light barriers SOOF

Product range overview

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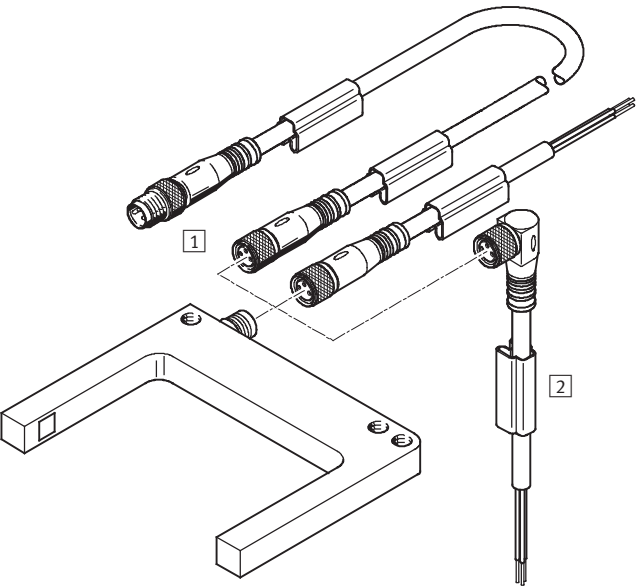
Method of measurement		Size	Min. object diameter	Max. switching frequency	Switching output	Type of light	→ Page/ Internet
		[mm]	[mm]	[Hz]			
Metal							
Fork light barrier	SOOF-M-...-C30	Fork 30x35	0.5	4,000	PNP	Red	5
					NPN		
	SOOF-M-...-C50	Fork 50x55	0.5	4,000	PNP		
					NPN		
	SOOF-M-...-C80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

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Overview of peripherals

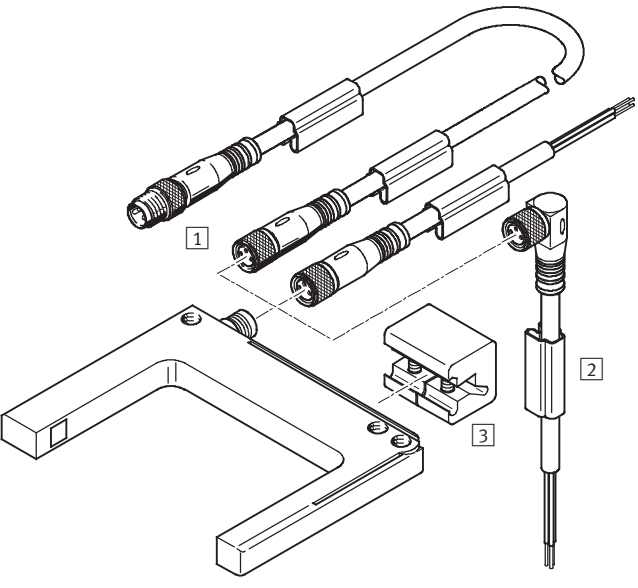
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Metal



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

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Type codes

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		S00F	-	M	-	FL	-	S	M	-	C30	-	P
Type													
S00F	Opto-electronic sensor												
Version													
M	Metal												
P	Polymer												
Function													
FL	Fork light barrier												
Switching function													
S	N/O or N/C contacts, switchable												
Setting option													
M	Potentiometer												
T	Teach-in												
Fork gap													
C30	30 mm												
C50	50 mm												
C80	80 mm												
C120	120 mm												
Switching output													
P	PNP												
N	NPN												

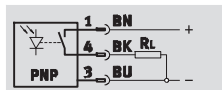
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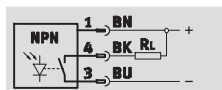
Technical data

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 ¹⁾
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 → 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.

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Technical data

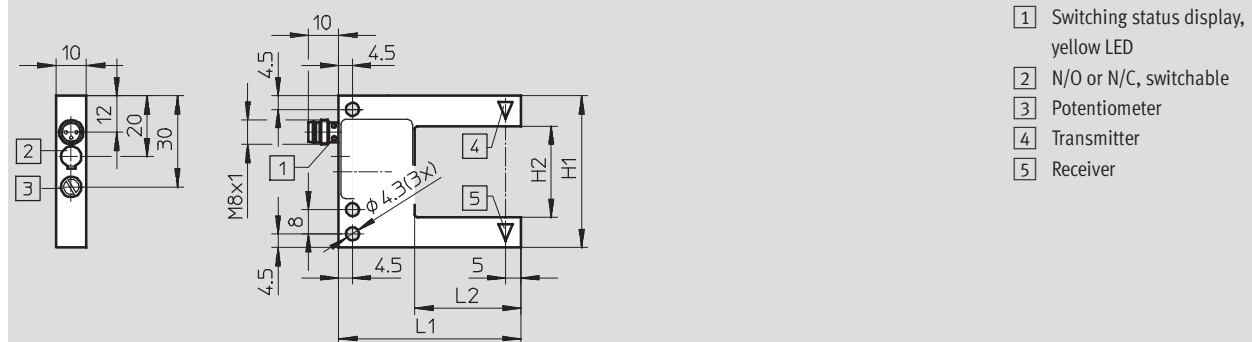
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Materials		
Version	Metal	Polymer
Housing	Painted die-cast zinc	PC
Note on materials	Free of copper and PTFE	–
	Contains PWIS (paint wetting impairment substances)	–
	RoHS-compliant	RoHS-compliant

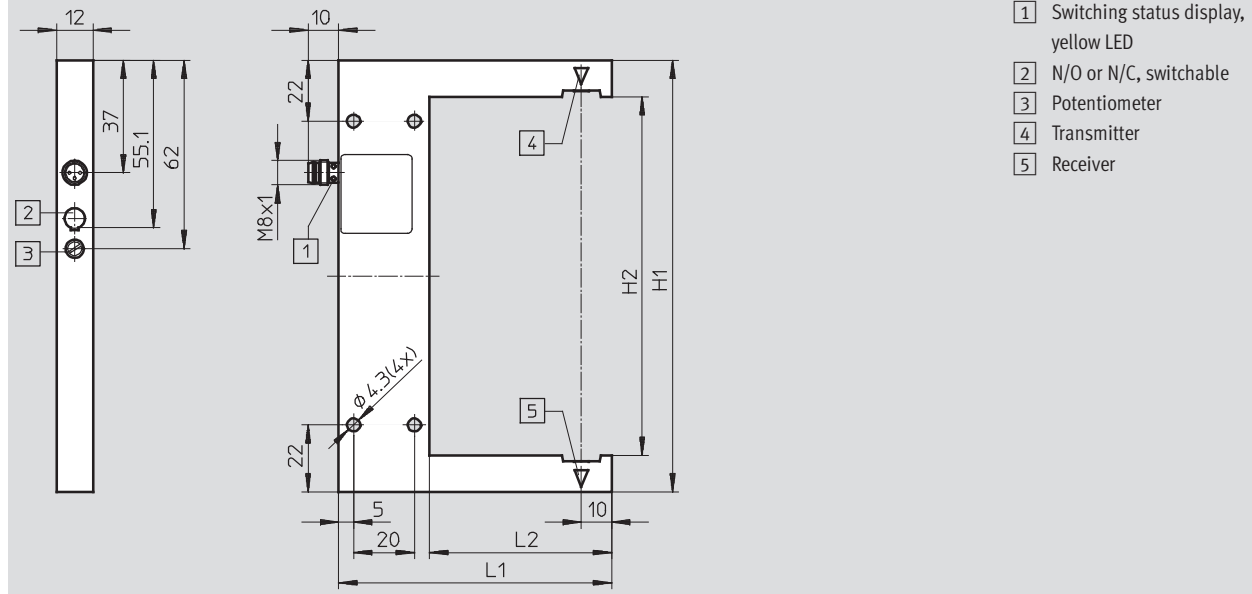
Dimensions – Metal

Download CAD Data → www.festo.com/us/cad

Fork gap 30 ... 80



Fork gap 120



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

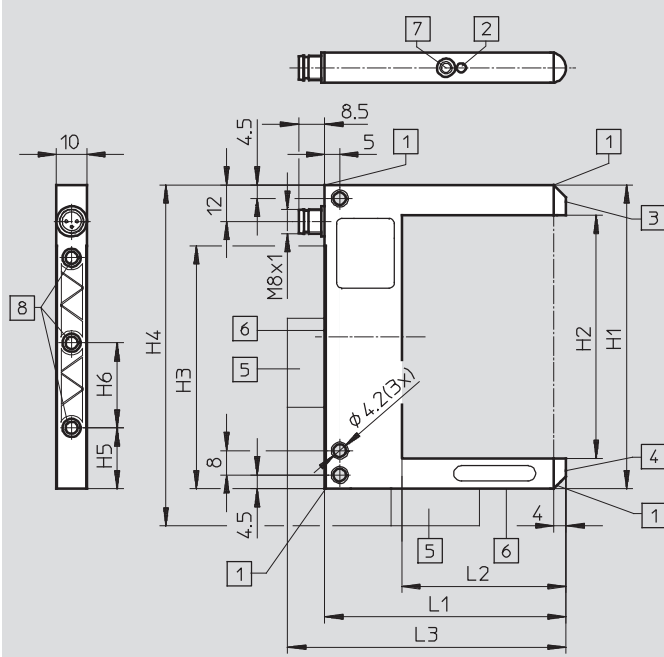
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Technical data

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Dimensions – Polymer

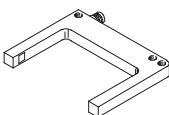
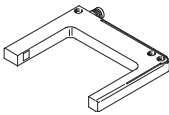
Download CAD Data → www.festo.com/us/cad



Fork gap H2	H1	H3	H4 ¹⁾	H5	H6	L1	L2	L3 ¹⁾
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


Ordering data				
Version	Fork gap [mm]	Switching output	Part No.	Type
Metal				
	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
Polymer				
	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


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Accessories

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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

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A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components
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With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



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Electromechanical actuators, motors, controllers & drives



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PLCs and I/O Devices
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To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



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