

Fork light barriers S00F

FESTO



Fork light barriers SOOF

Product range overview

FESTO

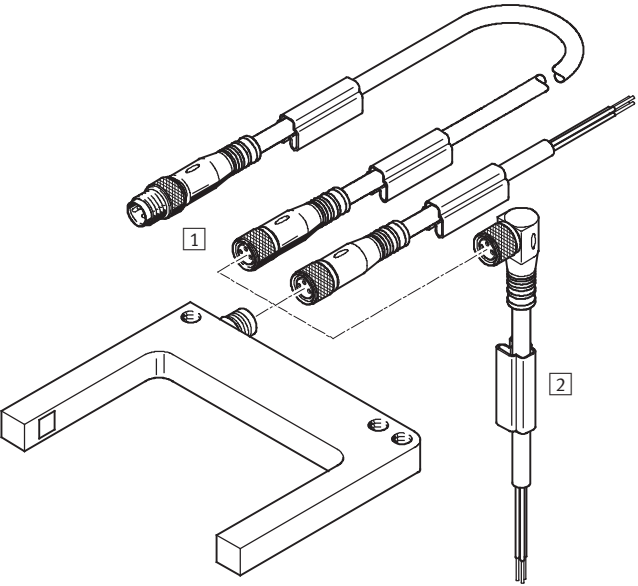
Method of measurement		Size	Min. object diameter	Max. switching frequency	Switching output	Type of light	➔ Page/ Internet
		[mm]	[mm]	[Hz]			
Metal							
Fork light barrier	SOOF-M-...-C30	Fork 30x35	0.5	4,000	PNP	Red	5
					NPN		
	SOOF-M-...-C50	Fork 50x55	0.5	4,000	PNP		
					NPN		
	SOOF-M-...-C80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

Fork light barriers S00F

Overview of peripherals

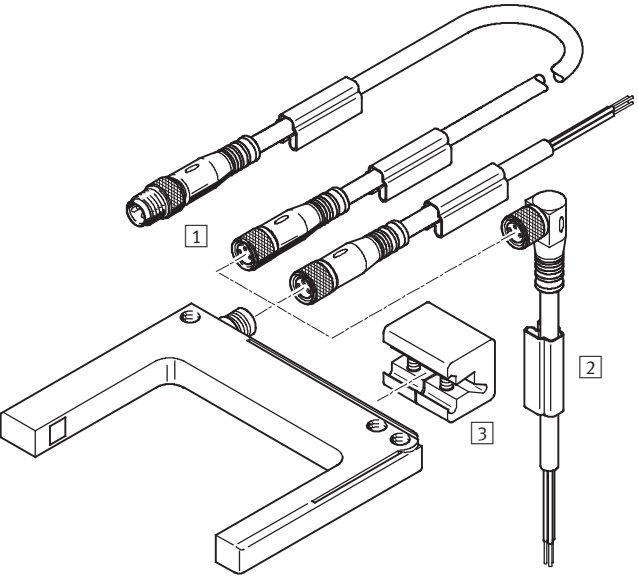


Metal



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 S00F

Type codes

FESTO

		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												

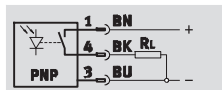
Fork light barriers SOOF

FESTO

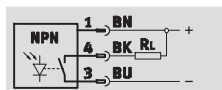
Technical data

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.

Fork light barriers S00F

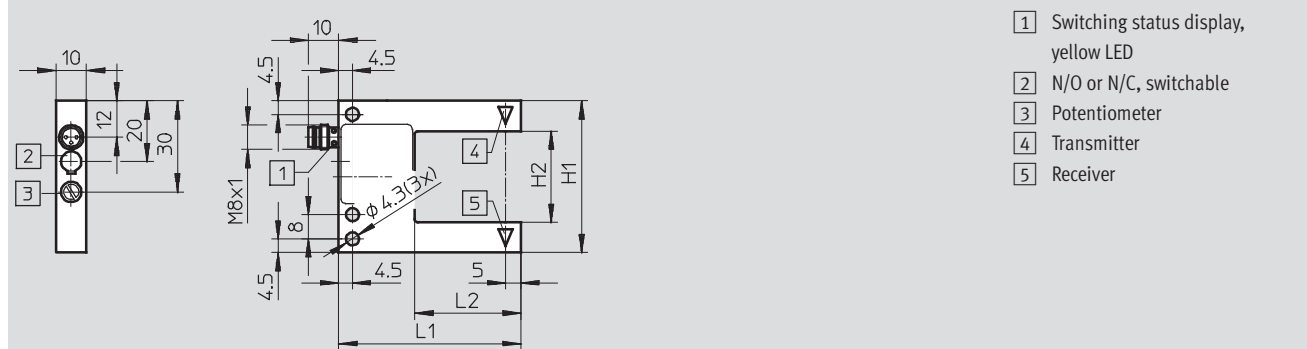
Technical data

FESTO

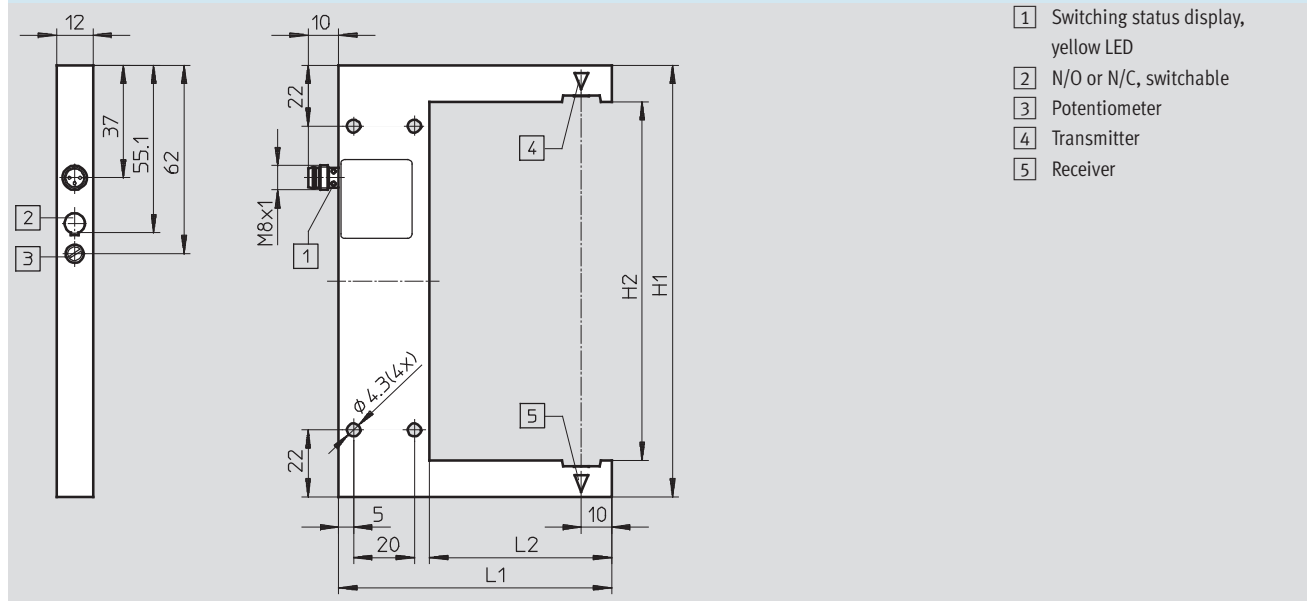
Materials		
Version	Metal	Polymer
Housing	Painted die-cast zinc	PC
Note on materials	Free of copper and PTFE	–
	Contains PWIS (paint wetting impairment substances)	–
	RoHS-compliant	RoHS-compliant

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

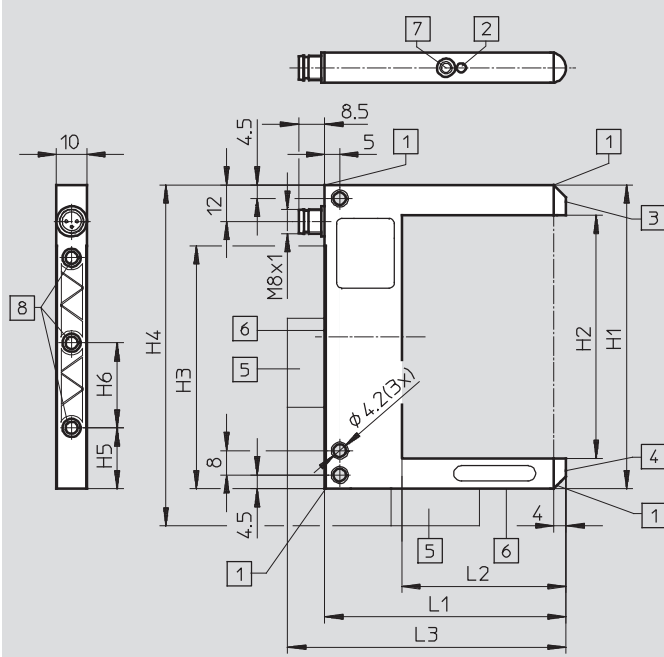
Fork light barriers SOOF

Technical data

FESTO

Dimensions – Polymer

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

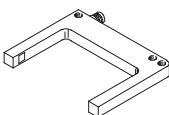
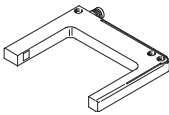


Fork gap H2	H1	H3	H4 ¹⁾	H5	H6	L1	L2	L3 ¹⁾
30	50	30	62.2	20	–	59.5	34	71.7
50	70	50	82.2	20	28	79.5	54	91.7
80	100	80	112.2	20	2x28	79.5	54	91.7
120	140	120	152.2	20	3x28	79.5	54	91.7

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


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

Product Range and Company Overview

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
Complete custom engineered solutions



Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

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



Electromechanical
Electromechanical actuators, motors, controllers & drives



Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

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.



© Copyright 2008, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. For Liability and Warranty conditions, refer to our "Terms and Conditions of Sale", available from your local Festo office. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Festo. All technical data subject to change according to technical update.



Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

Festo North America

Festo Regional Contact Center

5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Canada

USA Customers:

For ordering assistance,

Call: 1.800.99.FESTO (1.800.993.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: customer.service@us.festo.com

For technical support,

Call: 1.866.GO.FESTO (1.866.463.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: product.support@us.festo.com

Canadian Customers:

Call: 1.877.GO.FESTO (1.877.463.3786)

Fax: 1.877.FX.FESTO (1.877.393.3786)

Email: festo.canada@ca.festo.com

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
www.festo.com/us

USA Sales Offices

Appleton

North 922 Tower View Drive, Suite N
Greenville, WI 54942, USA

Boston

120 Presidential Way, Suite 330
Woburn, MA 01801, USA

Chicago

1441 East Business Center Drive
Mt. Prospect, IL 60056, USA

Dallas

1825 Lakeway Drive, Suite 600
Lewisville, TX 75057, USA

Detroit – Automotive Engineering Center

2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326, USA

New York

395 Moreland Road
Hauppauge, NY 11788, USA

Silicon Valley

4935 Southfront Road, Suite F
Livermore, CA 94550, USA

United States



USA Headquarters, East: Festo Corp., 395 Moreland Road, Hauppauge, NY 11788

Phone: 1.631.435.0800; Fax: 1.631.435.8026;

Email: info@festo-usa.com

www.festo.com/us

Canada



Headquarters: Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4

Phone: 1.905.624.9000; Fax: 1.905.624.9001;

Email: festo.canada@ca.festo.com

www.festo.ca

Mexico



Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquahuac,
54020 Tlalneapantla, Edo. de México

Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;

Email: festo.mexico@mx.festo.com

www.festo.com/mx

Central USA

Festo Corporation
1441 East Business
Center Drive
Mt. Prospect, IL 60056, USA
Phone: 1.847.759.2600
Fax: 1.847.768.9480



Western USA

Festo Corporation
4935 Southfront Road,
Suite F
Livermore, CA 94550, USA
Phone: 1.925.371.1099
Fax: 1.925.245.1286



Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan Latvia
Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com