

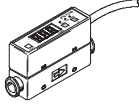
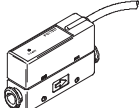
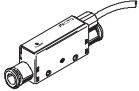
Flow sensors SFE



Flow sensors SFE

Product range overview



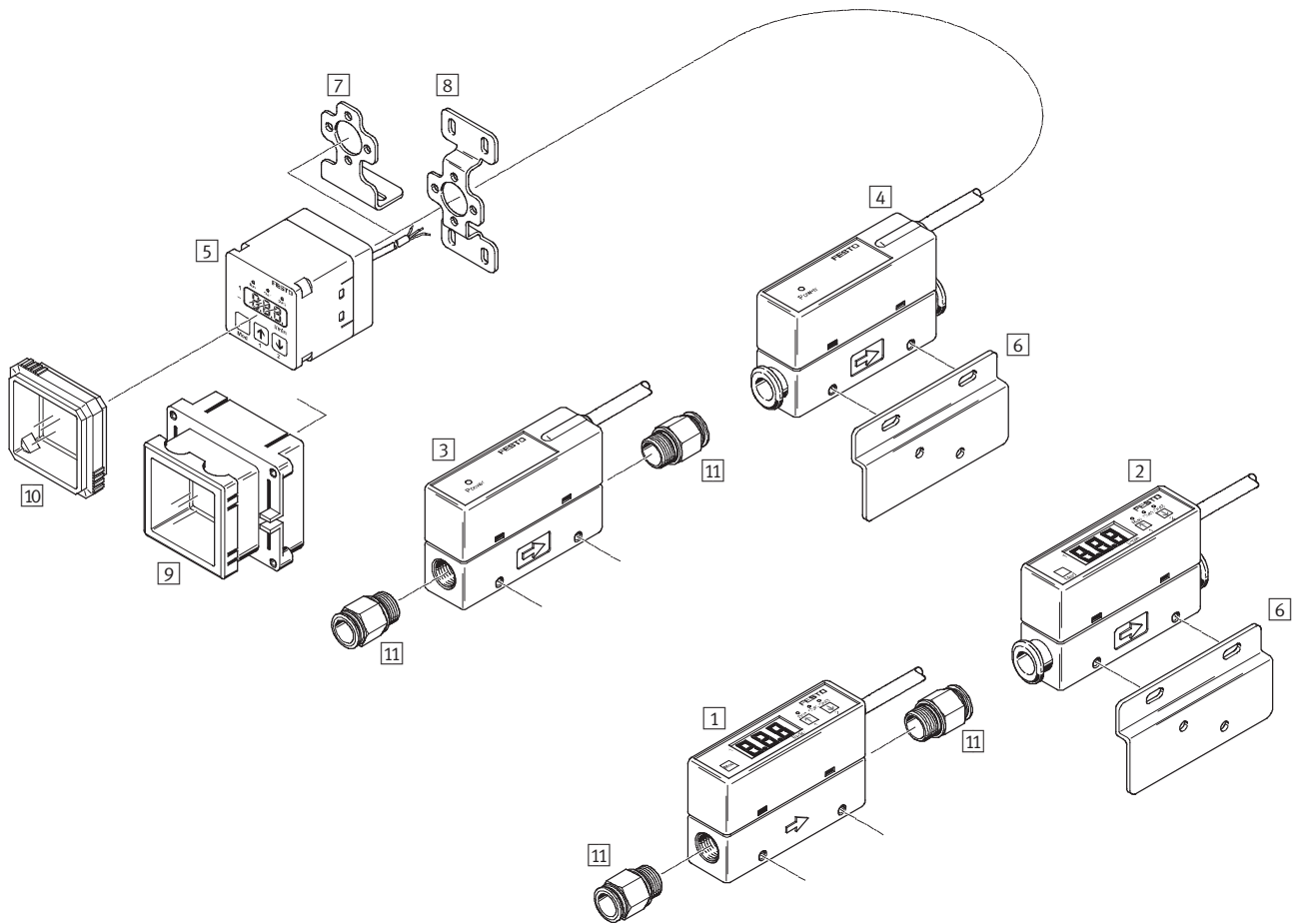
Type	Operating pressure [bar]	Flow measuring range [l/min]	Pneumatic connection	Type of mounting	Electrical output		→ Page/ Internet
					Digital	Analogue	
Flow sensor SFE3, with integrated digital display							
	-0.7 ... +7	0.05 ... 0.5	Push-in fitting 6 mm	Via through-hole, via mounting bracket	2x PNP 2x NPN	1 ... 5 V	5
		0.1 ... 1					
		0.5 ... 5					
		1 ... 10					
5 ... 50	Female thread G $\frac{1}{8}$						
Flow sensor SFET-F, unidirectional							
	-0.7 ... +7	0.05 ... 0.5	Push-in fitting 6 mm	Via through-hole, via mounting bracket	2x PNP ¹⁾ 2x NPN ¹⁾	1 ... 5 V	7
		0.1 ... 1					
		0.5 ... 5					
		1 ... 10					
5 ... 50	Female thread G $\frac{1}{8}$						
Flow sensor SFET-R, bidirectional							
	-0.9 ... +2	-0.05 ... +0.05	Push-in fitting 4 mm	Via through-hole, via mounting bracket	2x PNP ¹⁾ 2x NPN ¹⁾	1 ... 5 V	9
		-0.1 ... +0.1					
		-0.5 ... +0.5					
		-1 ... +1					
		-5 ... +5					
		-10 ... +10					

1) In combination with flow indicator. Must be ordered separately as an accessory.

Flow sensors SFE

Peripherals overview

FESTO



Mounting attachments and accessories		→ Page/Internet
1	Flow sensor SFE3-...-W18 with female thread	5
2	Flow sensor SFE3-...-WQ... with QS push-in fitting	5
3	Flow sensor SFET-...-W18 with female thread	7
4	Flow sensor SFET-...-WQ... with QS push-in fitting	7
5	Flow indicator SFEV for flow sensor SFET	11
6	Mounting bracket SFEZ-BW1	12
7	Mounting bracket SFEV-BW1	12
8	Mounting bracket SFEV-WH1	12
9	Front panel installation kit SFEV-FH1	13
10	Protective cover SFEV-SH1	13
11	Push-in fitting QS-G $\frac{1}{8}$	13

Flow sensors SFE

Type codes

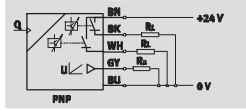
FESTO

		SFE	3	-	F	100	-	L	-	W	Q6	-	2P	B	-	K1
Type																
SFE	Flow sensor															
Design																
3	With integrated digital display															
T	Flow transmitter															
Flow input																
F	Unidirectional															
R	Bidirectional															
Flow measuring range [l/min]																
Unidirectional																
005	0.05 ... 0.5															
010	0.1 ... 1															
050	0.5 ... 5															
100	1 ... 10															
500	5 ... 50															
Bidirectional																
0005	-0.05 ... +0.05															
0010	-0.1 ... +0.1															
0050	-0.5 ... +0.5															
0100	-1 ... +1															
0500	-5 ... +5															
1000	-10 ... +10															
Medium																
L	Compressed air															
Mounting																
W	Wall or surface mounting															
Pneumatic connection																
Q4	Push-in fitting 4 mm															
Q6	Push-in fitting 6 mm															
18	Female thread G $\frac{1}{8}$															
Switching output																
2P	2x PNP															
2N	2x NPN															
Analogue output																
B	1 ... 5 V															
D	1 ... 5 V															
Electrical connection																
K1	1 m cable, open end															
K3	3 m cable, open end															

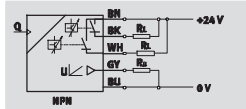
Flow sensors SFE3, with integrated digital display

Technical data

Function



Switching output 2x PNP



Switching output 2x NPN

- Switching output 2x PNP or 2x NPN
- Analogue output 1 ... 5 V
- 3½-character digital display



Technical data						
Type		SFE3-F005	SFE3-F010	SFE3-F050	SFE3-F100	SFE3-F500
General technical data						
Flow measuring range	[l/min]	0.05 ... 0.5	0.1 ... 1	0.5 ... 5	1 ... 10	5 ... 50
Pneumatic connection		QS-6				Female thread G1/8
Display range	[l/min]	0.05 ... 0.5	0.1 ... 1	0.5 ... 5	1 ... 10	5 ... 50
Type of display		3½-character, alphanumeric				
Mounting position		Vertical, horizontal				
Accuracy FS ¹⁾	[%]	8	5			
Electrical data						
Switching output		2x PNP 2x NPN				
Analogue output	[V]	1 ... 5				
Switching element function		N/O contact N/C contact				
Switching function		Window comparator Threshold comparator				
Operating voltage range DC	[V]	12 ... 24				
Electrical connection		Cable				
Protection class		IP40				

1) % FS = % of the measuring range (full scale)

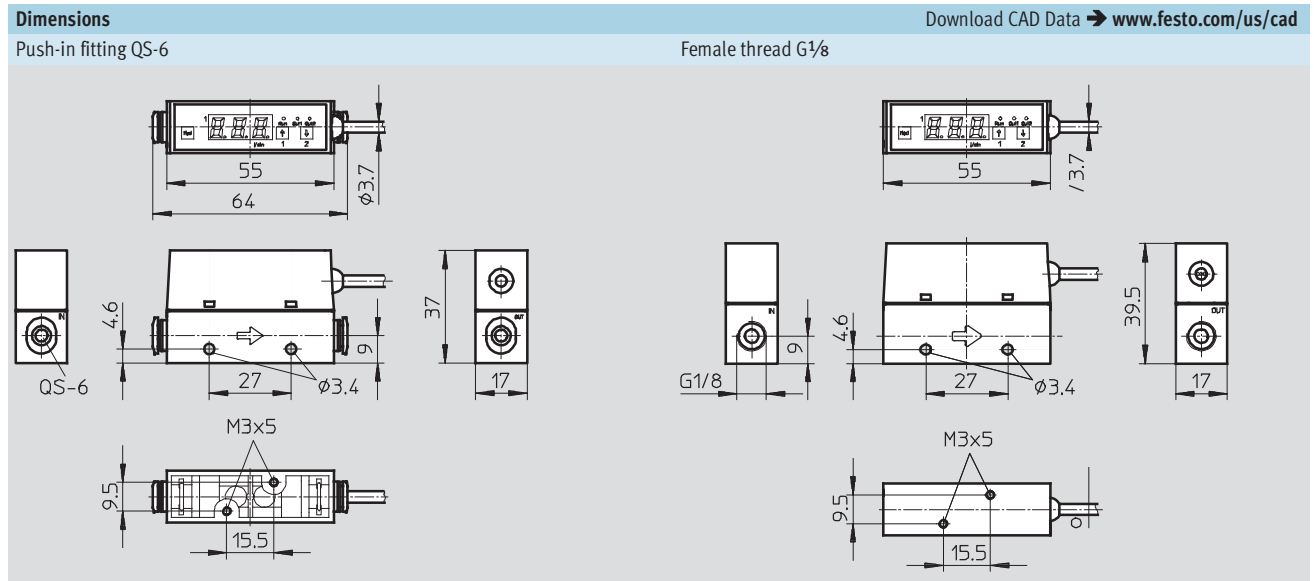
Operating and environmental conditions	
Operating pressure	[bar] -0.7 ... +7
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [1:4:2] Nitrogen
Ambient temperature	[°C] 0 ... 50
CE mark (see declaration of conformity)	To EU EMC Directive
Certification	C-Tick

Materials						
Type		SFE3-F005	SFE3-F010	SFE3-F050	SFE3-F100	SFE3-F500
Housing		Polyamide				Polyamide, aluminium
Cable sheath		Polyvinyl chloride				
Note on materials		Contains PWIS (paint-wetting impairment substances)				

Flow sensors SFE3, with integrated digital display



Technical data

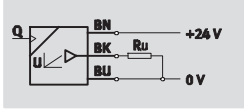


Ordering data					
Version	Flow measuring range [l/min]	Switching output			
		2x PNP		2x NPN	
		Part No.	Type	Part No.	Type
	0.05 ... 0.5	538519	SFE3-F005-L-WQ6-2PB-K1	538524	SFE3-F005-L-WQ6-2NB-K1
	0.1 ... 1	538520	SFE3-F010-L-WQ6-2PB-K1	538525	SFE3-F010-L-WQ6-2NB-K1
	0.5 ... 5	538521	SFE3-F050-L-WQ6-2PB-K1	538526	SFE3-F050-L-WQ6-2NB-K1
	1 ... 10	538522	SFE3-F100-L-WQ6-2PB-K1	538527	SFE3-F100-L-WQ6-2NB-K1
	5 ... 50	538523	SFE3-F500-L-W18-2PB-K1	538528	SFE3-F500-L-W18-2NB-K1

Flow sensors SFET, unidirectional

Technical data

Function



- Analogue output 1 ... 5 V
- Connection of a separate digital display SFEV-F possible



Technical data						
Type		SFET-F005	SFET-F010	SFET-F050	SFET-F100	SFET3-F500
General technical data						
Flow measuring range	[l/min]	0.05 ... 0.5	0.1 ... 1	0.5 ... 5	1 ... 10	5 ... 50
Pneumatic connection		QS-6				Female thread G1/8
Mounting position		Vertical, horizontal				
Linearity error FS ¹⁾	[%]	8	5			
Electrical data						
Analogue output	[V]	1 ... 5				
Operating voltage range DC	[V]	12 ... 24				
Electrical connection		Cable				
Protection class		IP40				

1) % FS = % of the measuring range (full scale)

Operating and environmental conditions		
Operating pressure	[bar]	-0.7 ... +7
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [1:4:2] Nitrogen
Ambient temperature	[°C]	0 ... 50
CE mark (see declaration of conformity)		To EU EMC Directive
Certification		C-Tick

Materials						
Type		SFET-F005	SFET-F010	SFET-F050	SFET-F100	SFET-F500
Housing		Polyamide				Polyamide, aluminium
Cable sheath		Polyvinyl chloride				
Note on materials		Contains PWIS (paint-wetting impairment substances)				

Flow sensors SFET, unidirectional

Technical data

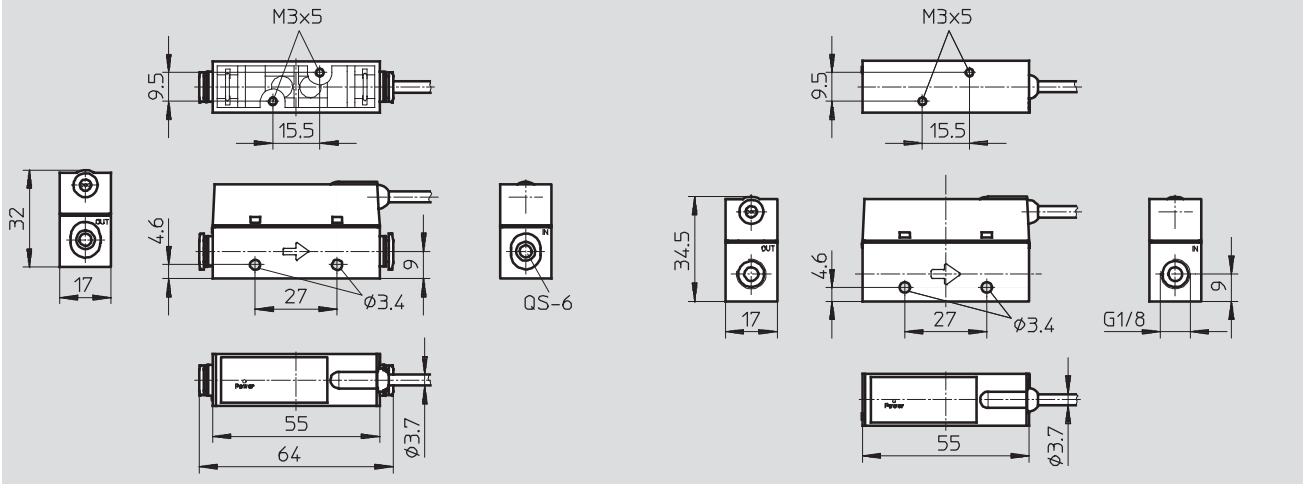
FESTO

Dimensions

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

Push-in fitting QS-6

Female thread G1/8



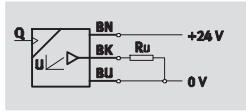
Ordering data

Version	Flow measuring range [l/min]	Part No.	Type
	0.05 ... 0.5	538529	SFET-F005-L-WQ6-B-K1
	0.1 ... 1	538530	SFET-F010-L-WQ6-B-K1
	0.5 ... 5	538531	SFET-F050-L-WQ6-B-K1
	1 ... 10	538532	SFET-F100-L-WQ6-B-K1
	5 ... 50	538533	SFET-F500-L-W18-B-K1

Flow sensors SFET, bidirectional

Technical data

Function



- Suitable for vacuum
- Bidirectional flow
- Analogue output 1 ... 5 V
- Connection of a separate digital display SFEV-R possible



Technical data							
Type		SFET-R0005	SFET-R0010	SFET-R0050	SFET-R0100	SFET-R0500	SFET-R1000
General technical data							
Flow measuring range	[l/min]	-0.05 ... +0.05	-0.1 ... +0.1	-0.5 ... +0.5	-1 ... +1	-5 ... +5	-10 ... +10
Pneumatic connection		QS-4					
Mounting position		Vertical, horizontal					
Linearity error FS ¹⁾		5					
Electrical data							
Analogue output	[V]	1 ... 5					
Operating voltage range DC	[V]	12 ... 24					
Electrical connection		Cable					
Protection class		IP40					

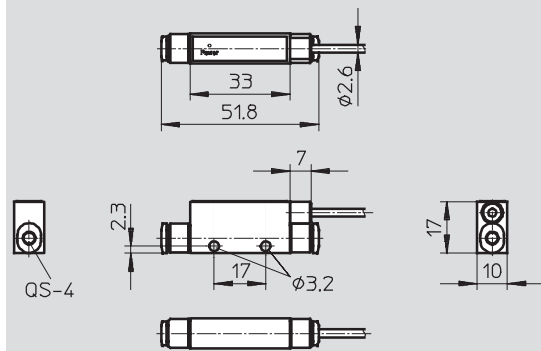
1) % FS = % of the measuring range (full scale)

Operating and environmental conditions		
Operating pressure	[bar]	-0.9 ... +2
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [1:4:2] Nitrogen
Ambient temperature	[°C]	0 ... 50
CE mark (see declaration of conformity)		To EU EMC Directive
Certification		C-Tick

Materials	
Housing	Polyamide
Cable sheath	Polyvinyl chloride
Note on materials	Contains PWIS (paint-wetting impairment substances)

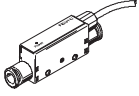
Dimensions Download CAD Data → www.festo.com/us/cad

Push-in fitting QS-4



Flow sensors SFET, bidirectional

Technical data

Ordering data			
Version	Flow measuring range [l/min]	Part No.	Type
	-0.05 ... +0.05	538534	SFET-R0005-L-WQ4-D-K3
	-0.1 ... +0.1	538535	SFET-R0010-L-WQ4-D-K3
	-0.5 ... +0.5	538536	SFET-R0050-L-WQ4-D-K3
	-1 ... +1	538537	SFET-R0100-L-WQ4-D-K3
	-5 ... +5	538538	SFET-R0500-L-WQ4-D-K3
	-10 ... +10	538539	SFET-R1000-L-WQ4-D-K3

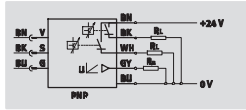
Flow sensors SFE

Accessories

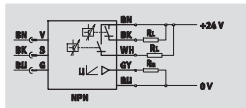


Flow indicator SFEV for flow sensor SFET

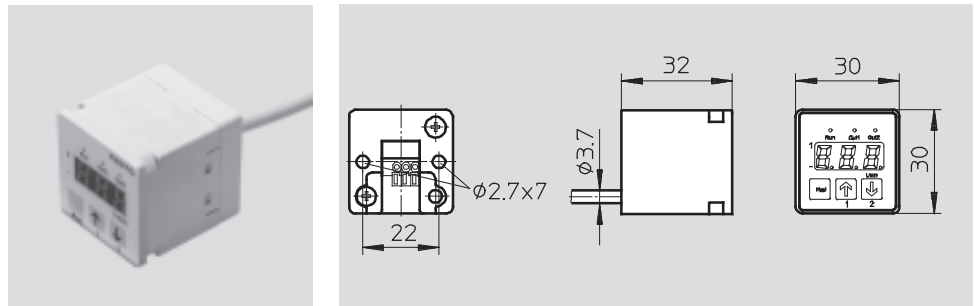
Function



Switching output 2x PNP



Switching output 2x NPN



Electrical data	
Type of display	3½-character, alphanumeric
Switching output	2x PNP
	2x NPN
Analogue output [V]	1 ... 5
Switching element function	N/C contact, N/O contact
Switching function	Window comparator
	Threshold comparator
Operating voltage range DC [V]	12 ... 24
Electrical connection	Cable
Protection class	IP40

Operating and environmental conditions	
Ambient temperature [°C]	0 ... 50
CE mark (see declaration of conformity)	To EU EMC Directive
Certification	C-Tick

Materials	
Housing	Polyamide
Cable sheath	Polyvinyl chloride
Note on materials	Contains PWIS (paint-wetting impairment substances)

Ordering data		Download CAD Data → www.festo.com/us/cad				
Version	Analogue output [V]	Display range [l/min]	Switching output			
			2x PNP		2x NPN	
			Part No.	Type	Part No.	Type
For flow sensor SFET-F, unidirectional						
	1 ... 5	0.05 ... 0.5	538540	SFEV-F005-L-2PB-K1	538545	SFEV-F005-L-2NB-K1
		0.1 ... 1	538541	SFEV-F010-L-2PB-K1	538546	SFEV-F010-L-2NB-K1
		0.5 ... 5	538542	SFEV-F050-L-2PB-K1	538547	SFEV-F050-L-2NB-K1
		1 ... 10	538543	SFEV-F100-L-2PB-K1	538548	SFEV-F100-L-2NB-K1
		5 ... 50	538544	SFEV-F500-L-2PB-K1	538549	SFEV-F500-L-2NB-K1
For flow sensor SFET-R, bidirectional						
	1 ... 5	-0.05 ... +0.05	538550	SFEV-R0005-L-2PD-K1	538556	SFEV-R0005-L-2ND-K1
		-0.1 ... +0.1	538551	SFEV-R0010-L-2PD-K1	538557	SFEV-R0010-L-2ND-K1
		-0.5 ... +0.5	538552	SFEV-R0050-L-2PD-K1	538558	SFEV-R0050-L-2ND-K1
		-1 ... +1	538553	SFEV-R0100-L-2PD-K1	538559	SFEV-R0100-L-2ND-K1
		-5 ... +5	538554	SFEV-R0500-L-2PD-K1	538560	SFEV-R0500-L-2ND-K1
		-10 ... +10	538555	SFEV-R1000-L-2PD-K1	538561	SFEV-R1000-L-2ND-K1

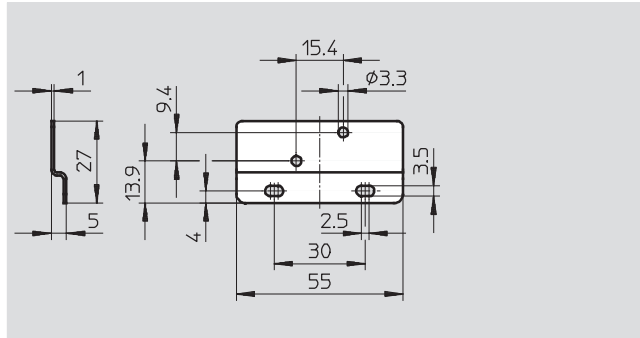
Flow sensors SFE

Accessories



Mounting bracket SFEZ-BW1

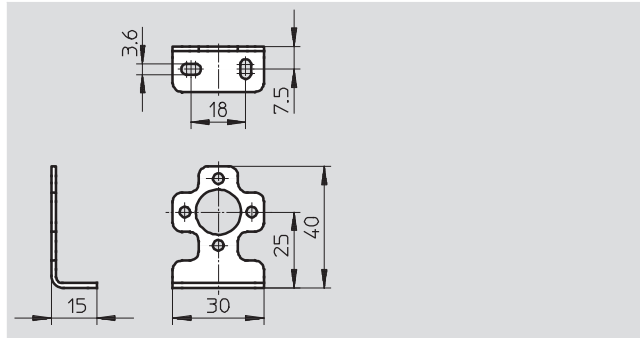
Material:
Nickel-plated steel
Free of copper and PTFE



Ordering data		
Use	Part No.	Type
Flow sensors SFE3, SFET	538562	SFEZ-BW1

Mounting bracket SFEV-BW1

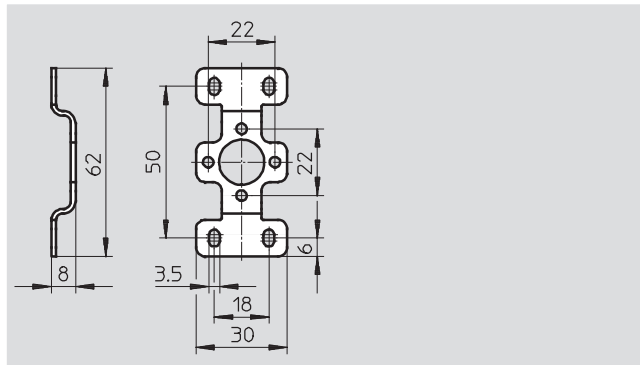
Material:
Nickel-plated steel
Free of copper and PTFE



Ordering data		Download CAD Data → www.festo.com/us/cad
Use	Part No.	Type
Flow indicator SFEV	538563	SFEV-BW1

Mounting bracket SFEV-WH1

Material:
Nickel-plated steel
Free of copper and PTFE



Ordering data		Download CAD Data → www.festo.com/us/cad
Use	Part No.	Type
Flow indicator SFEV	538564	SFEV-WH1

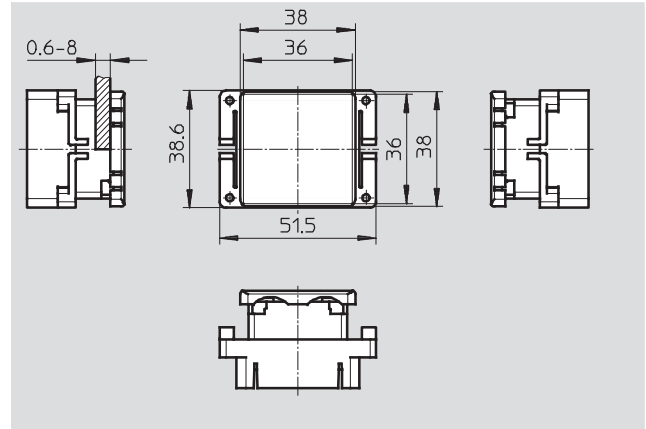
Flow sensors SFE

Accessories



Front panel installation kit SFEV-FH1

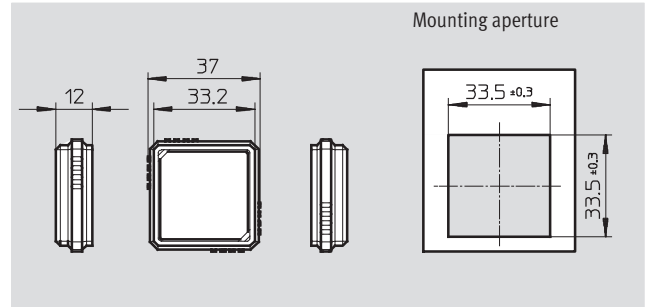
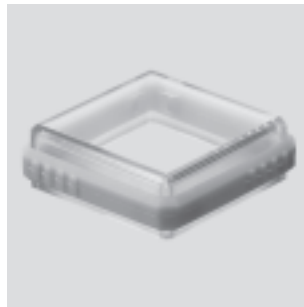
Material:
Reinforced polyamide
Free of copper and PTFE



Ordering data		Download CAD Data → www.festo.com/us/cad	
Use	Part No.	Type	
Flow indicator SFEV	538565	SFEV-FH1	

Protective cover SFEV-SH1

Material:
Reinforced polyamide
Free of copper and PTFE



Ordering data		Download CAD Data → www.festo.com/us/cad	
Use	Part No.	Type	
Flow indicator SFEV	538566	SFEV-SH1	

Ordering data – Push-in fittings		Technical data → Internet: quick star	
	Threaded connection	Push-in fitting for tubing O.D. [mm]	Part No. Type
	G $\frac{1}{8}$	4	186095 QS-G $\frac{1}{8}$ -4
		6	186096 QS-G $\frac{1}{8}$ -6
		8	186098 QS-G $\frac{1}{8}$ -8

Product Range and Company Overview

A Complete Suite of Automation Services

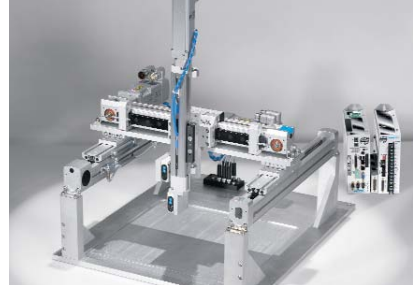
Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



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 Tlalneantla, 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