

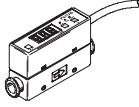
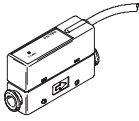
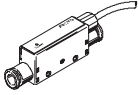
# Flow sensors SFE



# Flow sensors SFE

Product range overview



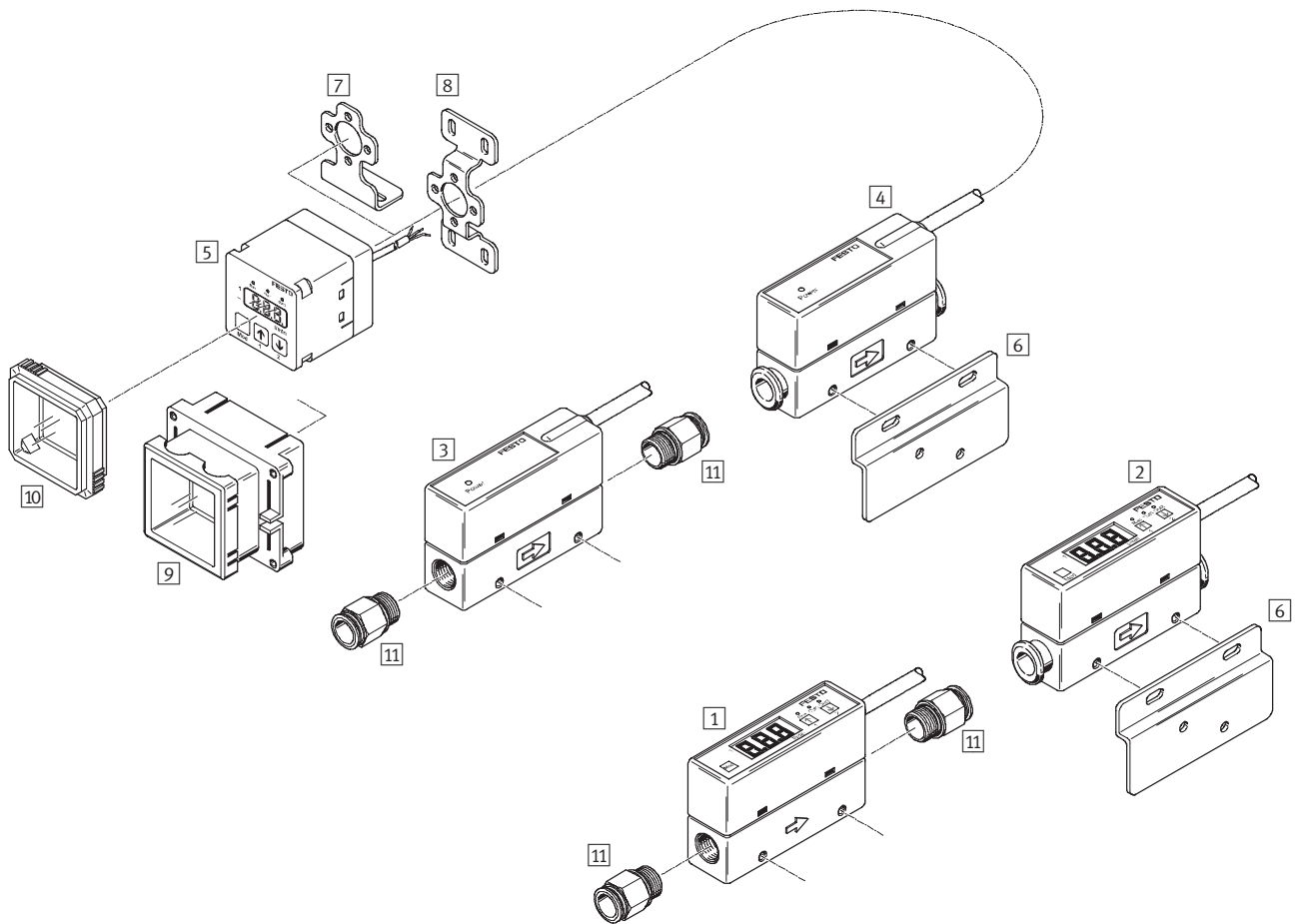
Type	Operating pressure [bar]	Flow measuring range [l/min]	Pneumatic connection	Type of mounting	Electrical output		→ Page/ Internet
					Digital	Analogue	
<b>Flow sensor SFE3, with integrated digital display</b>							
	-0.7 ... +7	0.05 ... 0.5	Push-in fitting 6 mm	Via through-hole, via mounting bracket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

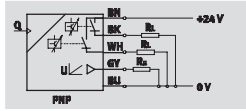
		SFE	3	-	F	100	-	L	-	W	Q6	-	2P	B	-	K1
<b>Type</b>																
SFE	Flow sensor															
<b>Design</b>																
3	With integrated digital display															
T	Flow transmitter															
<b>Flow input</b>																
F	Unidirectional															
R	Bidirectional										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

# Flow sensors SFE3, with integrated digital display

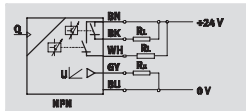
Technical data

Function

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



Switching output 2x PNP



Switching output 2x NPN



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				
Accuracy FS <sup>1)</sup>	[%]	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	Air quality class 3:6:2 to DIN ISO 8573-1 Nitrogen
Ambient temperature	[°C] 0 ... 50
CE mark (see declaration of conformity)	To EU EMC Directive
Certification	C-Tick

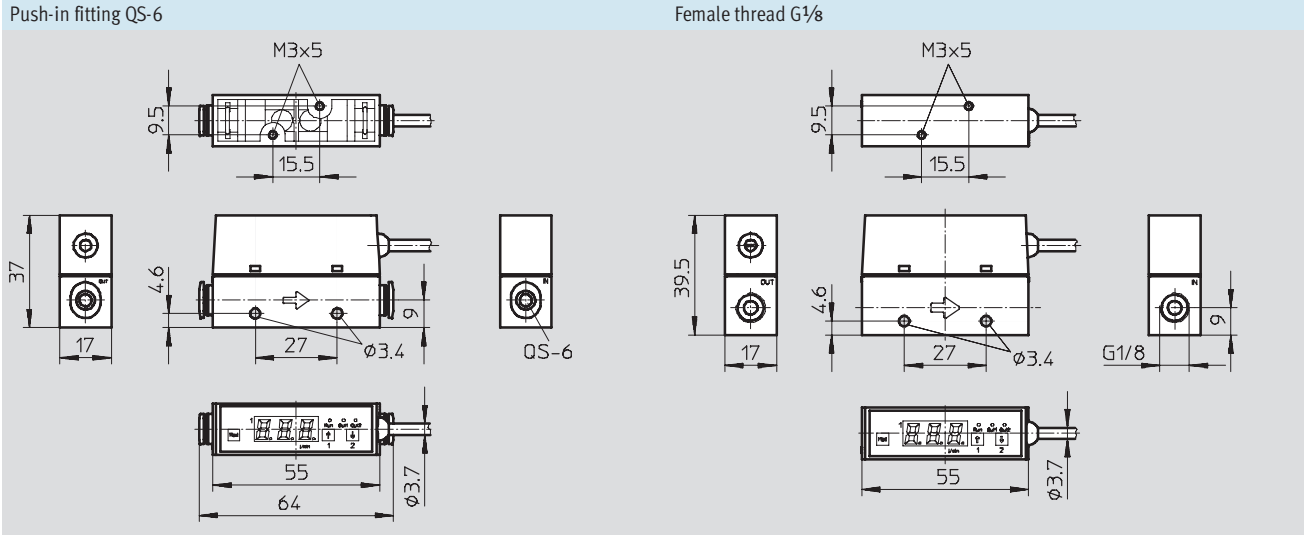
Materials						
Type		SFE3-F005	SFE3-F010	SFE3-F050	SFE3-F100	SFE3-F500
Housing		Polyamide				Polyamide, aluminium
Cable sheath		Polyvinyl chloride				
Note on materials		Contains PWIS (paint-wetting impairment substances)				

# Flow sensors SFE3, with integrated digital display

Technical data

**FESTO**

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

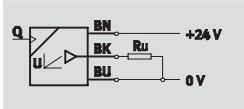


Ordering data					
Version	Flow measuring range [l/min]	Switching output			
		2x PNP		2x NPN	
		Part No.	Type	Part No.	Type
	0.05 ... 0.5	538519	SFE3-F005-L-WQ6-2PB-K1	538524	SFE3-F005-L-WQ6-2NB-K1
	0.1 ... 1	538520	SFE3-F010-L-WQ6-2PB-K1	538525	SFE3-F010-L-WQ6-2NB-K1
	0.5 ... 5	538521	SFE3-F050-L-WQ6-2PB-K1	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
Linearity error FS <sup>1)</sup>	[%]	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	Air quality class 3:6:2 to DIN ISO 8573-1
	Nitrogen
Ambient temperature	[°C] 0 ... 50
CE mark (see declaration of conformity)	To EU EMC Directive
Certification	C-Tick

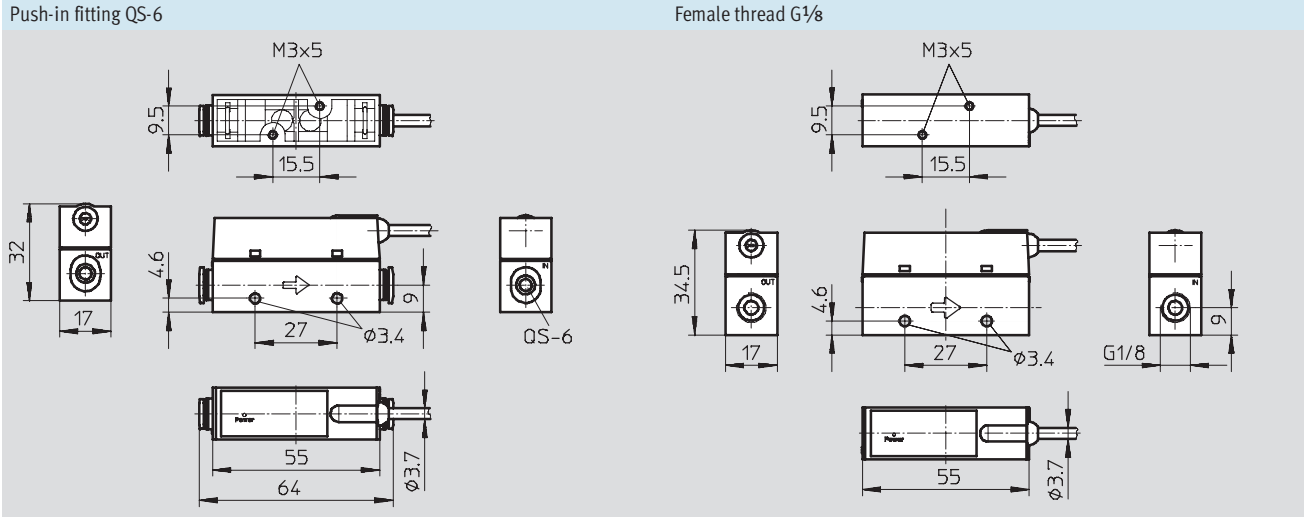
Materials						
Type		SFET-F005	SFET-F010	SFET-F050	SFET-F100	SFET-F500
Housing		Polyamide				Polyamide, aluminium
Cable sheath		Polyvinyl chloride				
Note on materials		Contains PWIS (paint-wetting impairment substances)				

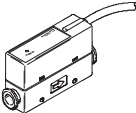
# Flow sensors SFET, unidirectional

Technical data

**FESTO**

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



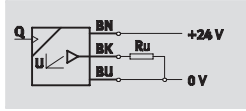
Ordering data			
Version	Flow measuring range [l/min]	Part No.	Type
	0.05 ... 0.5	538529	SFET-F005-L-WQ6-B-K1
	0.1 ... 1	538530	SFET-F010-L-WQ6-B-K1
	0.5 ... 5	538531	SFET-F050-L-WQ6-B-K1
	1 ... 10	538532	SFET-F100-L-WQ6-B-K1
	5 ... 50	538533	SFET-F500-L-W18-B-K1



# 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



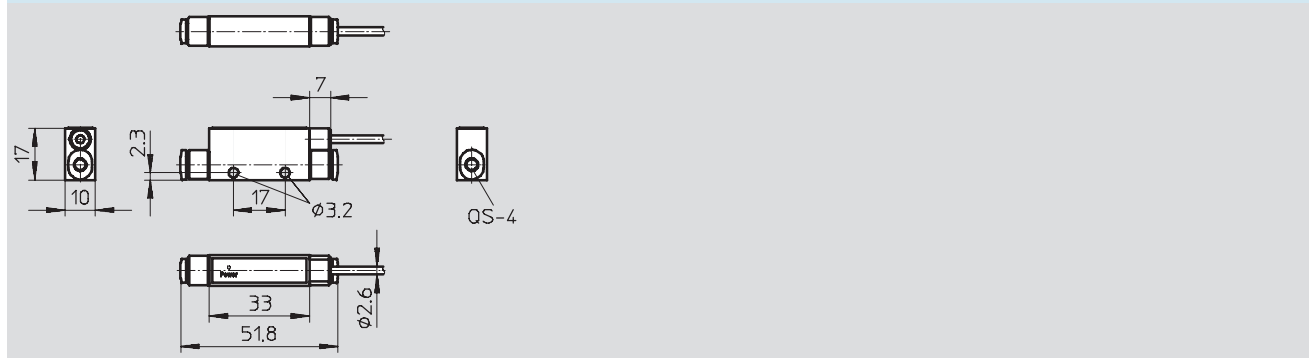
Technical data							
Type		SFET-R0005	SFET-R0010	SFET-R0050	SFET-R0100	SFET-R0500	SFET-R1000
General technical data							
Flow measuring range	[l/min]	-0.05 ... +0.05	-0.1 ... +0.1	-0.5 ... +0.5	-1 ... +1	-5 ... +5	-10 ... +10
Pneumatic connection		QS-4					
Linearity error FS <sup>1)</sup>		5					
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		Air quality class 3:6:2 to DIN ISO 8573-1
		Nitrogen
Ambient temperature	[°C]	0 ... 50
CE mark (see declaration of conformity)		To EU EMC Directive
Certification		C-Tick

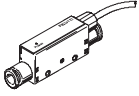
Materials	
Housing	Polyamide
Cable sheath	Polyvinyl chloride
Note on materials	Contains PWIS (paint-wetting impairment substances)

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



# 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

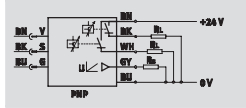
# Flow sensors SFE

Accessories

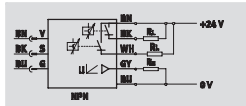


## Flow indicator SFEV for flow sensor SFET

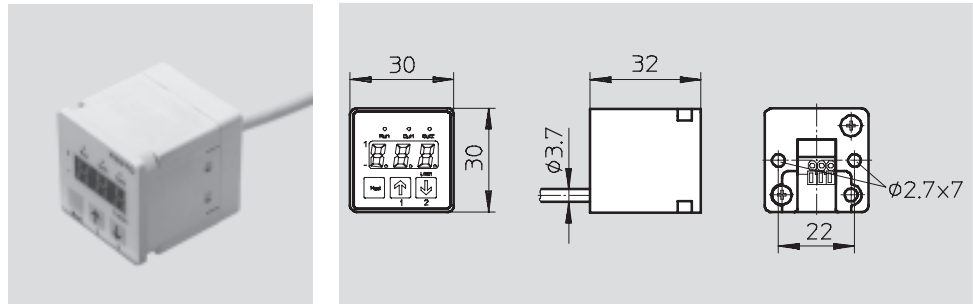
Function



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
Switching function	Window 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 → <a href="http://www.festo.com">www.festo.com</a>					
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	

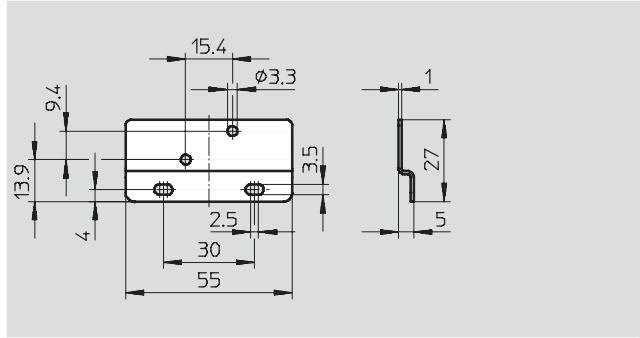
# Flow sensors SFE

Accessories



## Mounting bracket SFEZ-BW1

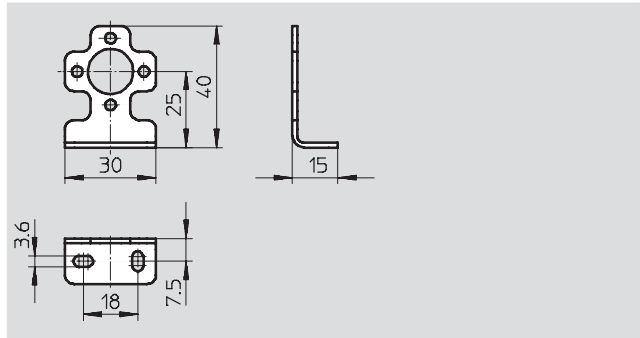
Material:  
Nickel-plated steel  
Free of copper and PTFE



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

## Mounting bracket SFEV-BW1

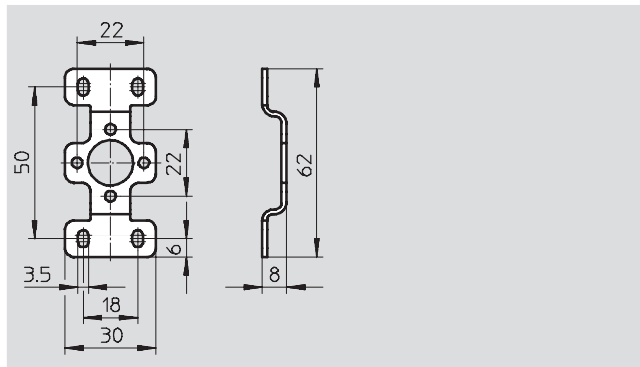
Material:  
Nickel-plated steel  
Free of copper and PTFE



Ordering data		Download CAD data → <a href="http://www.festo.com">www.festo.com</a>
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 → <a href="http://www.festo.com">www.festo.com</a>
Use	Part No.	Type
Flow indicator SFEV	538564	SFEV-WH1

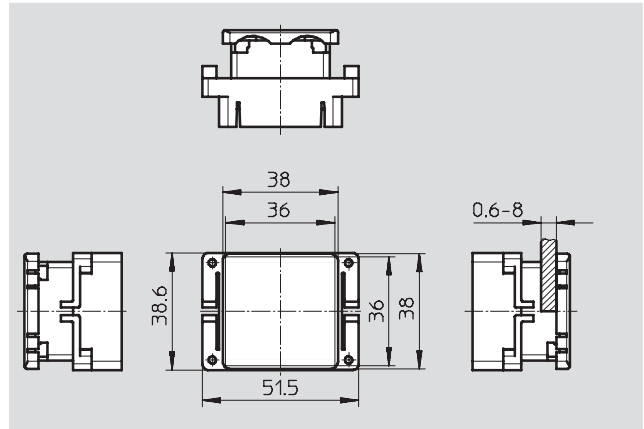
# Flow sensors SFE

Accessories



## Front panel installation kit SFEV-FH1

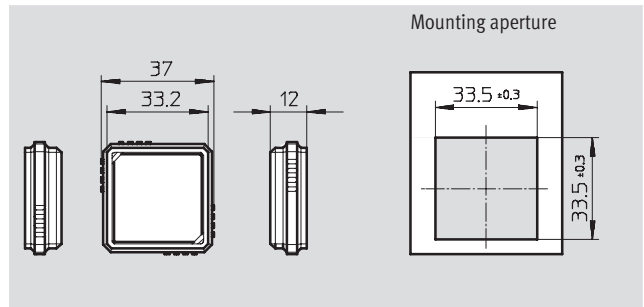
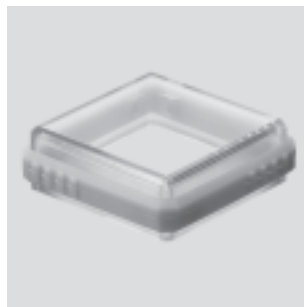
Material:  
Reinforced polyamide  
Free of copper and PTFE



Ordering data		Download CAD data → <a href="http://www.festo.com">www.festo.com</a>
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 → <a href="http://www.festo.com">www.festo.com</a>
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