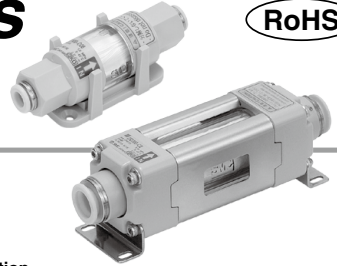


Clean Air Filter

SFD Series



How to Order

SFD 10 0 - C08

Clean air filter

Size

Symbol	Max. flow rate
10	100 L/min (ANR)
11	120 L/min (ANR)
20	500 L/min (ANR)

Case material

Symbol	Material
0	Resin
1	Aluminum
2	Stainless steel

Symbol 1 and 2 are made to order. For details, refer to page 431.

Option

Symbol	Option
Nil	None
B	Bracket (SFD100 and 110 only)

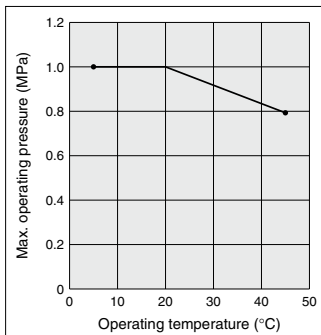
* The brackets are provided with the SFD200 series as a standard product. (Nil)

Port size

Symbol	Connection size	Applicable size	
		SFD100, 110	SFD200
C04	ø4	●	—
C06	ø6	●	—
C08	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●
O2	Rc 1/4	●	●
N02	NPT 1/4	●	●
F02	G 1/4	●	●

Made to Order Different diameters for IN and OUT ports are Made to Order. For details, refer to page 432.

Relationship between Operating Temperature and Max. Operating Pressure



Specifications

Model	SFD10□	SFD11□	SFD20□
Port size	One-touch fittings ø4, ø6, ø8 Rc, NPT, G 1/4		One-touch fittings ø8, ø10, ø12 Rc, NPT, G 1/4
Fluid	Air (Nitrogen)		
Air flow capacity (at inlet pressure 0.7 MPa)	Up to 100 L/min (ANR)	Up to 120 L/min (ANR)	Up to 500 L/min (ANR)
Nominal filtration rating ^{Note 1)}	0.01 μm (99.99%)		
Operating pressure range ^{Note 2)}	- 100 kPa to 1.0 MPa (in case of nitrogen: 0.99 MPa)		
Operating temperature	5 to 45°C		
Initial pressure drop	0.03 MPa (at inlet pressure 0.7 MPa, maximum flow)		
Element proof differential pressure ^{Note 3)}	0.5 MPa		
Proof pressure	1.5 MPa		
Element service life	1 year, or when the pressure drop reaches 0.1 MPa.		

Note 1) Measured under SMC's specified conditions.

Note 2) The maximum operating pressure varies depending on temperature. Refer to the graph that shows the relationship between operating temperature and maximum operating pressure on the left.

Note 3) This means that the element does not break at 0.5 MPa. See "Specific Product Precautions".

Model	Port size	Rated flow (L/min (ANR))	Weight
SFD100	ø4 (One-touch fittings)	60	35 g
	ø6 (One-touch fittings)	80	35 g
	ø8 (One-touch fittings)	100	35 g
	Rc, NPT, G 1/4	100	35 g
	Rc, NPT, G 1/4	100	60 g
SFD101 ^{Note 2)}	Rc, NPT, G 1/4	100	150 g
SFD102 ^{Note 2)}	Rc, NPT, G 1/4	100	150 g
SFD110	ø4 (One-touch fittings)	70	35 g
	ø6 (One-touch fittings)	100	35 g
	ø8 (One-touch fittings)	120	35 g
	Rc, NPT, G 1/4	120	35 g
	ø8 (One-touch fittings)	300	190 g
SFD200	ø10 (One-touch fittings)	400	190 g
	ø12 (One-touch fittings)	500	190 g
	Rc, NPT, G 1/4	500	260 g

Note 1) The maximum flow rate when the inlet pressure is 0.7 MPa.

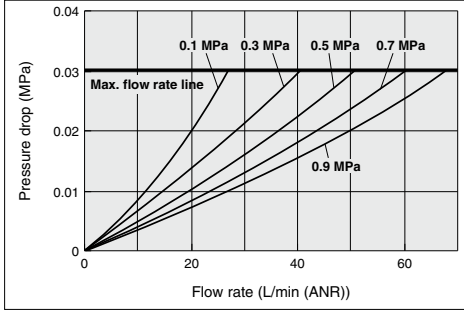
Note 2) SFD101 and SFD102 are produced upon receipt of order.



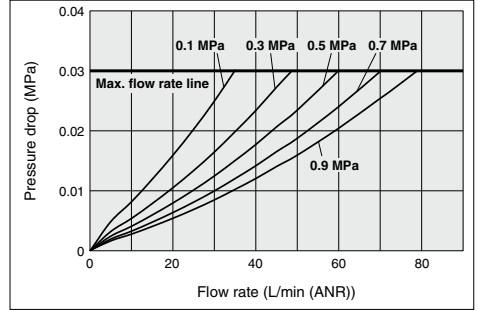
SFD Series

Flow Rate Characteristics

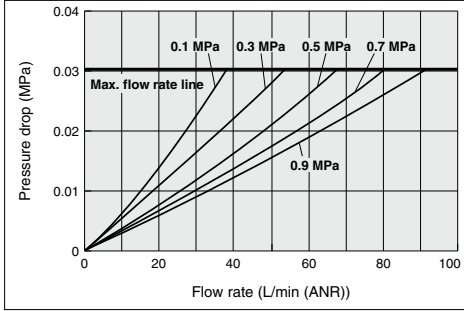
SFD100-C04



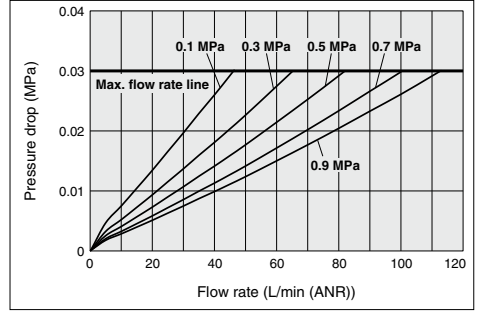
SFD110-C04



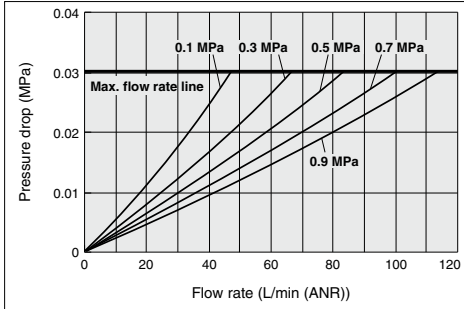
SFD100-C06



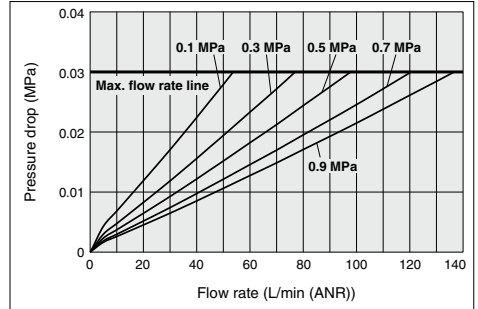
SFD110-C06



SFD100-C08, -02, -N02, -F02

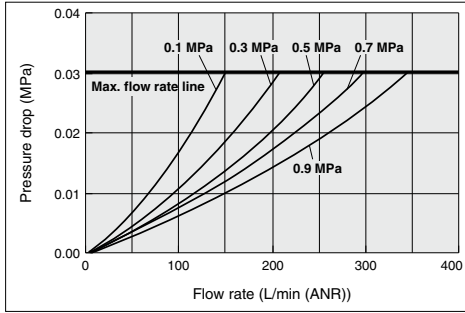


SFD110-C08, -02, -N02, -F02

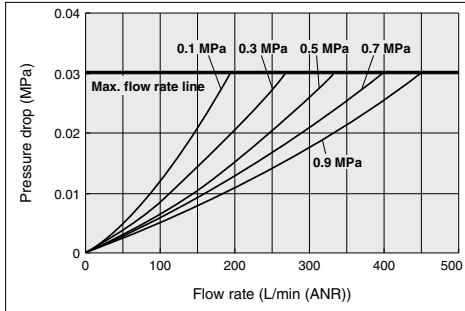


Flow Rate Characteristics

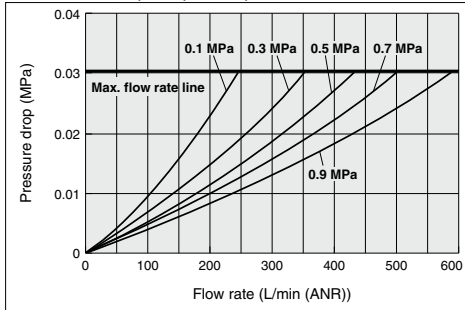
SFD200-C08



SFD200-C10

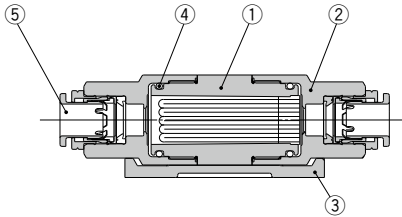


SFD200-C12, -02, -N02, -F02

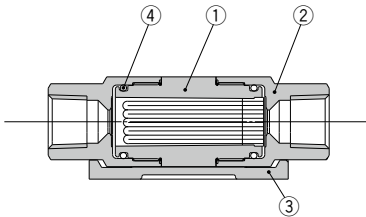


Construction

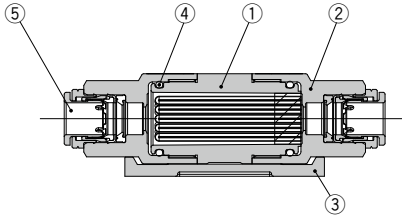
SFD100-C□



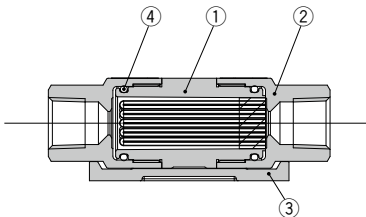
SFD100-□02



SFD110-C□



SFD110-□02



Component Parts

No.	Description	Material	Note
1	Element	PC, Polyolefin, PU, PET, ABS	
2	Cover	PBT	
3	Bracket	PBT	
4	O-ring	H-NBR	
5	Cassette	PP, EPDM, Stainless steel	

Replacement Parts

No.	Description	Material	Note
1	Bracket set	SFD-BR100	With 2 countersunk head screws (M3)

Component Parts

No.	Description	Material	Note
1	Element	PC, Polyolefin, PU, PET, ABS	
2	Cover	PBT	
3	Bracket	PBT	
4	O-ring	H-NBR	

Replacement Parts

No.	Description	Material	Note
1	Bracket set	SFD-BR100	With 2 countersunk head screws (M3)

Component Parts

No.	Description	Material	Note
1	Element	PC, Polyolefin, PU	
2	Cover	PBT	
3	Bracket	PBT	
4	O-ring	H-NBR	
5	Cassette	PP, EPDM, Stainless steel	

Replacement Parts

No.	Description	Material	Note
1	Bracket set	SFD-BR100	With 2 countersunk head screws (M3)

Component Parts

No.	Description	Material	Note
1	Element	PC, Polyolefin, PU	
2	Cover	PBT	
3	Bracket	PBT	
4	O-ring	H-NBR	

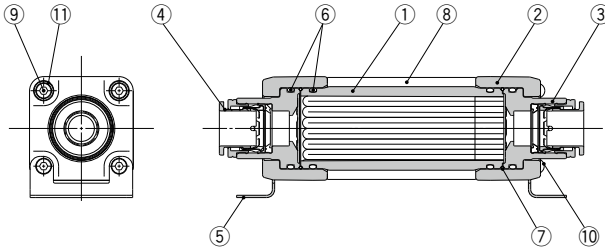
Replacement Parts

No.	Description	Material	Note
1	Bracket set	SFD-BR100	With 2 countersunk head screws (M3)

SFD Series

Construction

SFD200-C□



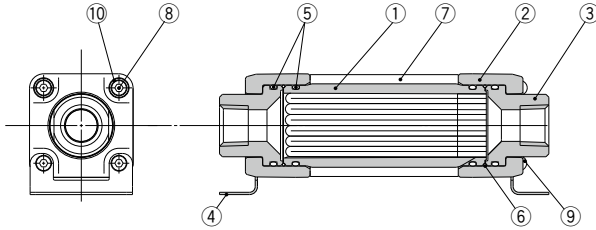
Component Parts

No.	Description	Material	Note
1	Element	PC, Polyolefin, PU	
2	Cover	Aluminum alloy	
3	Fitting body	PBT	
4	Cassette	PP, EPDM, Stainless steel	
5	Bracket	Stainless steel alloy	
6	O-ring A	H-NBR	
7	O-ring B	H-NBR	
8	Rod cover	Stainless steel alloy	
9	Tie-rod	Stainless steel alloy	
10	Cap nut	Stainless steel alloy	
11	Plain washer	Stainless steel alloy	

Replacement Parts

No.	Description	Material	Note
1	Element set	SFD-EL200	With 3 O-rings

SFD200-□02



Component Parts

No.	Description	Material	Note
1	Element	PC, Polyolefin, PU	
2	Cover	Aluminum alloy	
3	Fitting body	Stainless steel alloy	
4	Bracket	Stainless steel alloy	
5	O-ring A	H-NBR	
6	O-ring B	H-NBR	
7	Rod cover	Stainless steel alloy	
8	Tie-rod	Stainless steel alloy	
9	Cap nut	Stainless steel alloy	
10	Plain washer	Stainless steel alloy	

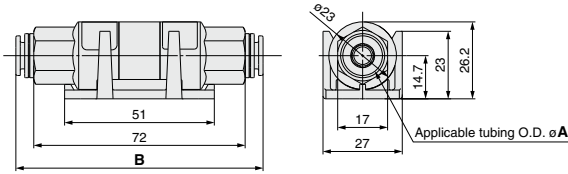
Replacement Parts

No.	Description	Material	Note
1	Element set	SFD-EL200	With 3 O-rings

SFD Series

Dimensions

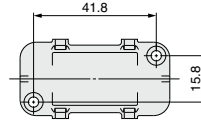
SFD100-C□/SFD110-C□



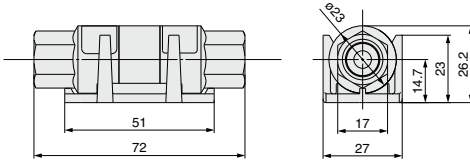
SFD100-C□ Dimensions

Model	A	B
SFD100-	C04	81
	C06	81
	C08	82

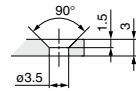
Bracket mounting dimensions



SFD100-□02/SFD110-□02



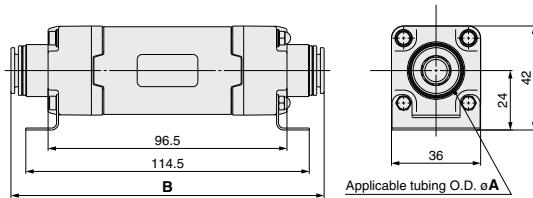
Hole shape for bracket mounting



* Use a countersunk head screw (M3) for bracket mounting.

* Including the bracket mounting dimensions, the SFD100 and SFD110 have the same dimensions.

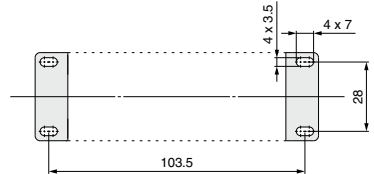
SFD200-C□



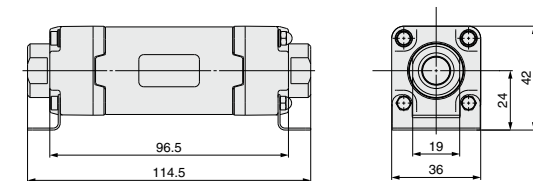
SFD200-C□ Dimensions

Model	A	B
SFD200-	C08	125
	C10	126
	C12	126

Bracket mounting dimensions



SFD200-□02



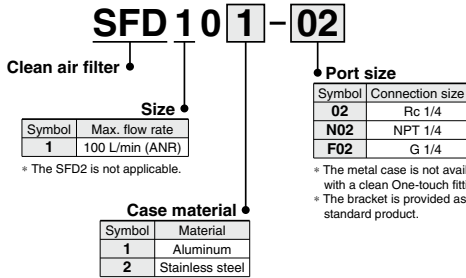
SFD Series

Made to Order Specifications 1

Please contact SMC for detailed specifications, delivery and prices.



1 Metal Case



Metal case suitable for an atmosphere exposed to organic solvents and chemicals



Specifications

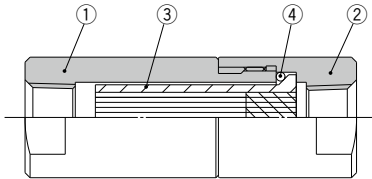
The specifications are the same as the standard product. Refer to "Specifications" on page 427.

Flow Rate Characteristics

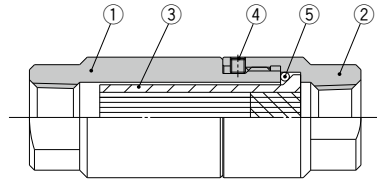
The flow rate characteristics are the same as the SFD100-02. Refer to "Flow Rate Characteristics" on page 428.

Construction

SFD101-02



SFD102-02



Component Parts

No.	Description	Material	Note
1	Case	Aluminum alloy	
2	Cover	Aluminum alloy	
3	Element	PC, Polyolefin, PU, PET, ABS	
4	O-ring	FKM	

Component Parts

No.	Description	Material	Note
1	Case	Stainless steel alloy	
2	Cover	Stainless steel alloy	
3	Element	PC, Polyolefin, PU, PET, ABS	
4	Hex. socket head set screw	Stainless steel alloy	
5	O-ring	FKM	

Replacement Parts

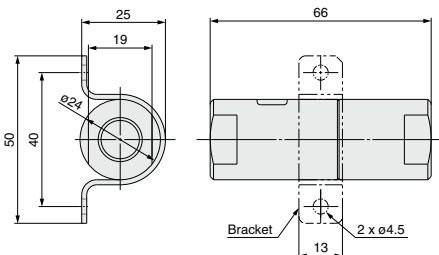
No.	Description	Part no.	Note
1	Element set	SFD-EL101	With O-ring
2	Bracket	SFD-BR101	Material: Stainless steel 304

Replacement Parts

No.	Description	Part no.	Note
1	Element set	SFD-EL101	With O-ring
2	Bracket	SFD-BR101	Material: Stainless steel 304

Dimensions

SFD101-02



SFD102-02

