

Clean Air Filter

SFD Series

RoHS

How to Order

SFD 1 0 0 - C08

Clean air filter

Size

Symbol	Max. flow rate
1	100 L/min (ANR)
2	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 325.

Option

Symbol	Option
Nil	None
B	Bracket (SFD100 only)

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

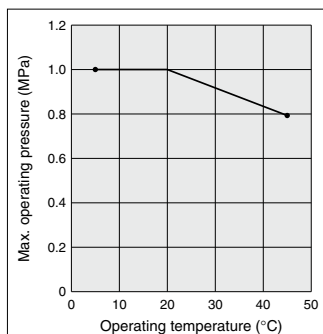
Port size

Symbol	Connection size	Note
C04	ø4	SFD100 only
C06	ø6	Clean One-touch fittings (KP series)
C08	ø8	SFD100/200
C10	ø10	SFD200 only
C12	ø12	SFD200 only
02	Rc 1/4	
N02	NPT 1/4	Female thread
F02	G 1/4	SFD100/200



Different diameters for IN and OUT ports are Made to Order. For details, refer to page 326.

Relationship between Operating Temperature and Max. Operating Pressure



Specifications

Model	SFD10□	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 (Nitrogen)
Air flow capacity	Up to 100 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)) ^{Note 1)}	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
SFD101 ^{Note 2)}	Rc, NPT, G 1/4	100	60 g
SFD102 ^{Note 2)}	Rc, NPT, G 1/4	100	150 g
SFD200	ø8 (One-touch fittings)	300	190 g
	ø10 (One-touch fittings)	400	190 g
	ø12 (One-touch fittings)	500	190 g
	Rc, NPT, G 1/4	500	260 g

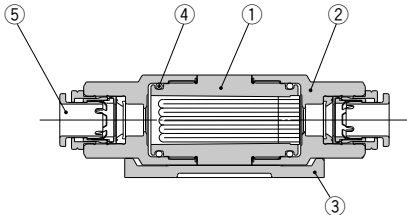
Note 1) The maximum flow rate when the inlet pressure is 0.7 MPa.

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

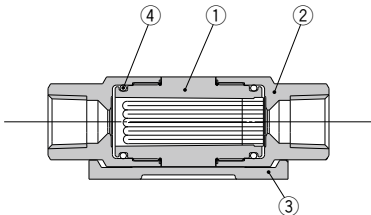


Construction

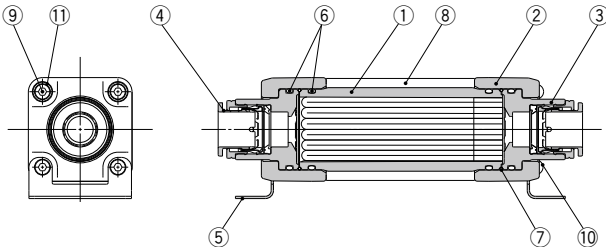
SFD100-C□



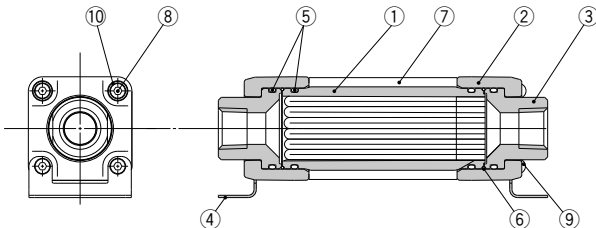
SFD100-□02



SFD200-C□



SFD200-□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	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

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