

Clean Gas Filter: Disposable Type/Multiple Disc Type **SFC100 Series**



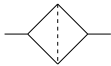
Precision filtration for compressed air, nitrogen, used in the semiconductor process

PTFE membrane with high reliability

Filtration 0.01 μm (Filtering efficiency 99.99%)



Symbol



How to Order

SFC 10 0 - 02

Clean gas filter
Disposable type
(Multiple disc type)

Port size

Symbol	Port size
02	Rc, TSJ, URJ 1/4
03	Rc, TSJ, URJ 3/8

Model type

Symbol	Rated flow rate L/min (ANR)
10	Up to 240

Connection

Symbol	Connection (IN, OUT)
0	Rc
2	TSJ
5	URJ

Model

Model	Rated flow rate L/min (ANR) <small>Note)</small>	Connection	Filtration area cm ²	Weight kg
SFC100-02	240	Rc 1/4 (Female thread)	300	0.35
SFC100-03		Rc 3/8 (Female thread)		0.36
SFC102-02		TSJ 1/4		0.40
SFC102-03		TSJ 3/8		0.41
SFC105-02		URJ 1/4		0.44
SFC105-03		URJ 3/8		0.49

Note) Inlet pressure 0.7 MPa, at pressure drop 0.02 MPa

SFC100 Series

Specifications

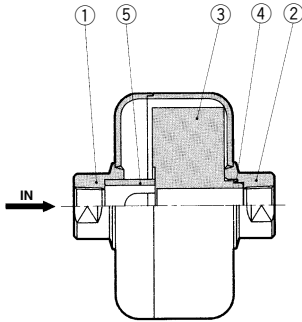
Fluid	Air, Nitrogen	
Operating pressure <small>Note 1)</small>	Max. 0.99 MPa, Vacuum 1.3×10^{-6} kPa	
Operating temperature	5 to 120°C	
Element proof differential pressure	Max. 0.42 MPa	
Element reverse differential pressure	Max. 0.07 MPa	
Filtration <small>Note 2)</small>	0.01 μm (Filtering efficiency 99.99%)	
Helium leak volume	4.0×10^{-9} Pa·m ³ /sec or less	
Main material	Case/Cover	Stainless steel 316 (Interior/Exterior: Electrolytic polishing)
	Filter medium	PTFE membrane
	Seal	PTFE

Note 1) The maximum operating pressure is 0.99 MPa since this product does not conform to the High Pressure Gas Safety Law.

Use under conditions where pressure fluctuations (pulsations) exceeding 0.1 MPa do not occur.

Note 2) Based on SMC's measuring conditions.

Construction

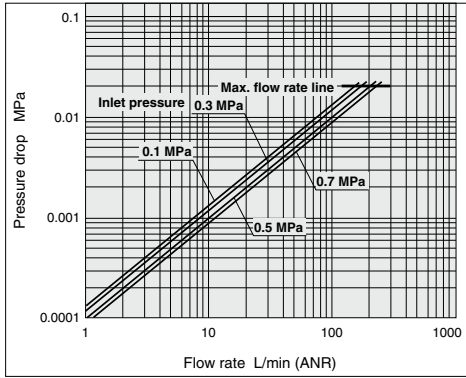


No.	Description	Material	Note
1	Case 1	Stainless steel 316	Electrolytic polishing (Interior/Exterior)
2	Case 2		
3	Element	PTFE, PVDF	
4	O-ring	PTFE	
5	Spacer	PVDF	

Clean Gas Filter: Disposable Type/Multiple Disc Type **SFC100 Series**

Flow Rate Characteristics Fluid: Compressed air Inlet temperature: 20°C

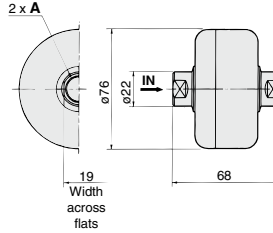
SFC10□



Dimensions

SFC100-02: Rc 1/4

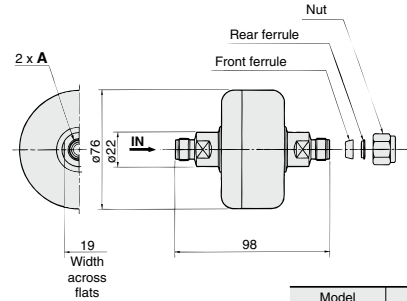
SFC100-03: Rc 3/8



Model	A
SFC100-02	Rc 1/4
SFC100-03	Rc 3/8

SFC102-02: TSJ 1/4 (Tube Swage Joint)

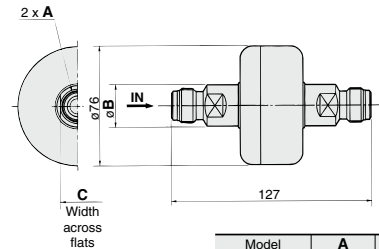
SFC102-03: TSJ 3/8 (Tube Swage Joint)



Model	A
SFC102-02	TSJ 1/4
SFC102-03	TSJ 3/8

SFC105-02: URJ 1/4 (Union Ring Joint)

SFC105-03: URJ 3/8 (Union Ring Joint)



Model	A	B	C
SFC105-02	URJ 1/4	22	19
SFC105-03	URJ 3/8	26.5	22

SF Series

Made to Order

Please contact SMC for detailed dimensions, specifications and lead times.



Case/Cover material: Aluminum alloy

Part No.: SFB100-02X8

Specifications

Fluid	Air	
Operating pressure	Max. 0.99 MPa	
Max. operating temperature	80°C	
Element proof differential pressure	Max. 0.5 MPa	
Element reverse differential pressure	Max. 0.07 MPa	
Filtration <small>Note)</small>	0.01 μm (Filtering efficiency 99.99%)	
Connection	Rc 1/4	
Filtration area	10 cm ²	
Element part no.	ED301S-X10V	
Weight	0.06 kg	
Main material	Case/Cover	A2017 (Clear anodized)
	Seal	Fluororubber (FKM)
	Element	PTFE membrane

Dimensions are identical to the standard models. For details, refer to page 411.
Note) Based on SMC's measuring conditions.

Strainer with other nominal filtration (1,2,5,10,20,40,70,100 μm)

The filtration other than the standard filtration accuracy, 120 μm, is available with the clean gas strainer.

Part No.: SFB200-02-S **002** **V** **-X40**

Nominal filtration

Symbol	Nominal filtration μm <small>Note 1)</small>	Rated flow rate L/min (ANR) <small>Note 2)</small>
001	1	5
002	2	10
005	5	15
010	10	30
020	20	50
040	40	80
070	70	130
100	100	250

Note 1) Nominal filtration refers to value used to categorize raw material.

Note 2) Maximum flow rate at inlet pressure 0.7 MPa.
Other specifications and dimensions are identical to the standard models. For details, refer to pages 409 and 411.

O-ring

Symbol	Material
N	NBR
V	FKM
T	PTFE

Element Part No.

Part No.: ES001S- **002** **N** **X25**

Nominal filtration

Symbol	Nominal filtration μm
001	1
002	2
005	5
010	10
020	20
040	40
070	70
100	100

O-ring

Symbol	Material
N	NBR
V	FKM
T	PTFE