Air Preparation Equipment Industrial Filters

Air Preparation Equipment

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Air Preparation Equipment

1 Indication of replacement of elements, inspection items

The following describes the general contents of the element replacement and regular check.

Main line filter/mist separator/micro mist separator replacement standards and inspection items

Replacement standards

<Element replacement timing>

a. For AFF2C to 22C, 37B, 75B, AM 150C to 550C, 650, and 850

The pressure drop reaches 0.1 MPa or two years have elapsed after operation start, whichever comes earlier. [The pressure drop can be checked using the equipment with the element service indicator (-T) or differential pressure gauge (made to order specifications).]

b. For AFF75A to 220A, AMD8□□ to AMD10□□ (Free standing type)

The pressure drop reaches 0.1 MPa or one year has elapsed after operation start, whichever comes earlier. Check the pressure drop using the pressure gauge. (Equipment with pressure gauge: -G)

c. For AME

If red spots appear on the element surface before the standards (a) shown above are satisfied, replace the element.

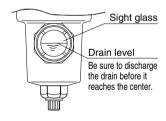
d. For AMF

If oil odor is found at the outlet before the standards (a) or (b) shown above are satisfied, replace the element.

When replacing the element, replace also the O-ring and gasket with new ones. For details about how
to replace the O-ring and gasket, Refer to relevant pages that describe the replacement parts in detail.

■ Inspection items

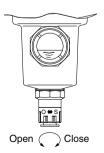
- ① If the element reaches the replacement timing, immediately replace the element with a new one. If the element is used continuously without replacement, the element may be damaged.
- ② Be sure to discharge the drain accumulated in the filter container. If the drain is not discharged, the accumulated drain flows to the outlet. When using the AFF2C to 22C, 37B, 75B, AM□150C to 550C, 650, or 850 with the drain cock, drain guide, or ball valve, discharge the drain before the drain level reaches the center of the sight glass. If the drain is not discharged, the drain flows to the outlet. Be sure to discharge the drain and check the discharge status while referring to the figure on the right.



- 3 With auto drain
 - This auto drain functions to discharge the drain when the drain level reaches the upper portion of the sight glass.
 - For the AFF2C to 22C, 37B, AM□150C to 550C, and 650 with the auto drain, the drain is automatically discharged with the knob tightened to the "S" side during normal operation. Additionally, the drain can also be discharged manually.

<Manual operation procedure>

A manual knob is provided at the end of the auto drain. This knob is tightened to the "S" side during normal operation. When the knob is loosened to the "O" side, the drain can be discharged. (Note that the drain gushes from the drain port if the pressure remains inside the filter.)



■ Probable troubles (Reference)

Refer to the "Troubleshooting". (p. 276)

2 Troubleshooting

The following describes the general contents of the troubleshooting.

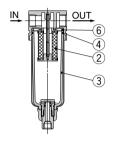
Trouble (Symptom)	Cause	Corrective action
The pressure drop is large.	The flow rate is excessive.	Use the equipment at a flow rate that is lower than the maximum flow rate diagram stated on the catalog or review the filter size.
	The element is used continuously even after its service life has expired.	Replace the element.
Oily content or solid foreign object comes to the secondary side.	The flow rate is excessive.	Use the equipment at a flow rate that is lower than the maximum flow rate diagram stated on the catalog or review the filter size.
	The element is used continuously even after its service life has expired.	Replace the element.
	The drain discharge is faulty.	[Manual drain] Discharge the drain before it reaches the center of the sight glass. [Auto drain] Clean the inside or replace the auto drain.
	Oily content, such as grease flows out from the equipment installed on the secondary side of the filter.	Install the AM series at the end of the pipe.
	Ambient air is entangled. (When used for the air blow.)	Perform the air blow in a clean environment. The nozzle becomes negative pressure and the ambient air is entangled. This may cause oily content or solid foreign object to enter the blow air.
	The cleaning of the pipe on the secondary side is insufficient.	Clean the inside of the pipe on the secondary side.
The drain leaks outside.	The seat is faulty.	Check the O-ring for foreign object sticking Check the O-ring for kink, flaw, crack, or deterioration.
The drain leaks from	The seat is faulty (foreign object is sticking).	Clean the inside or replace the auto drain.
the float type auto drain.	The operation is faulty.	Clean the inside or replace the auto drain.
	The supply pressure is insufficient.	Check the air supply capability. N.O. type 0.1 MPa N.C. type 0.15 MPa

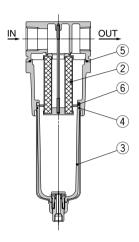
AMJ Series

Construction

AMJ3000, 4000

AMJ5000





* The numbers correspond with those in the "Construction" of the AMJ series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material		Part no.		Note
INO.	No. Description	Ivialeriai	AMJ3000	AMJ4000	AMJ5000	Note
2	Element assembly	_	AMJ-EL3000	AMJ-EL4000	AMJ-EL5000	
3	Bowl assembly Note)	_	AMJ-CA30-□	AMJ-CA40-□	AMJ-CA40-□	
4	O-ring	NBR	C3SFP-260S	C4SFP-260S	C4SFP-260S	
5	O-ring	NBR	_	_	111710	
6	Spacer	NBR	AMJ-SA001	AMJ-SA002	AMJ-SA003	

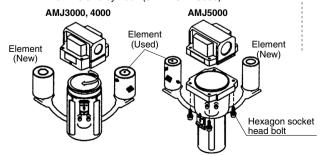
Note) The spacer 6 is not included in the bowl assembly.

Maintenance

⚠ Caution

Replace the element when one of followings occurs.

- Pressure drop reaches 0.02 MPa.
- Element operates for 2 years.
- Element model number: AMJ-EL****
- * **** is AMJ size symbol. (ex: AMJ-EL3000)



2. How to replace element assembly.

First, discharge the pressure in the case. (Make pressure 0 MPa)

- Remove case (housing).
- Replace element.
- Assemble case (housing).
- * () for AMJ5000.

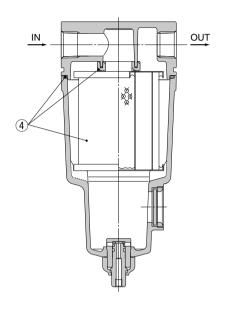


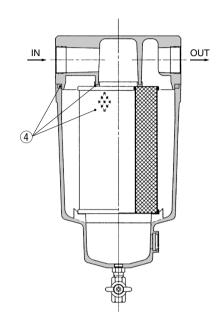
AMG Series

Construction

AMG150C to AMG550C, AMG650

AMG850





* The numbers correspond with those in the "Construction" of the AMG series in the Best Pneumatics catalog.

Replacement Parts

	J.400									
No	Description*1	Motorial	Applicable				Model			
INO.	Description	Iwateriai	model*2	AMG150C	AMG250C	AMG350C	AMG450C	AMG550C	AMG650	AMG850
4	Element	Resin,	Except option F	AMG-EL150	AMG-EL250	AMG-EL350	AMG-EL450	AMG-EL550	AMG-EL650	AMG-EL850
4	assembly	others	For option F	AMG-EL150-F	AMG-EL250-F	AMG-EL350-F	AMG-EL450-F	AMG-EL550-F	_	_

- *1) Element assembly: With gasket (1 pc.) and O-ring (1 pc.)
- *2) F option, the rubber material: In the case of fluororubber

Maintenance

1.Element replacement

extremely dirty air might cause clogging due to deteriorated oil or rust. Replacement is necessary regularly. (When pressure drop reach 0.1MPa or replace element with new one when element has been used for 2 years.)

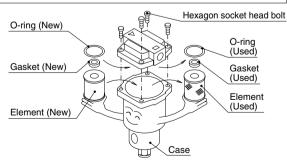
Element (gasket, O-ring accessory) model number:

* *** is AMG size symbol. (Ex: AMG-EL150)

2. How to replace element assembly

First, discharge the pressure in the body. (Make pressure 0 MPa)

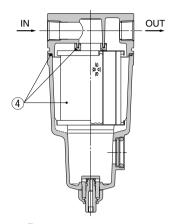
- Remove four hexagon socket head bolts.
- Replace element, gasket, O-ring.
- Tighten hexagon socket head bolts.



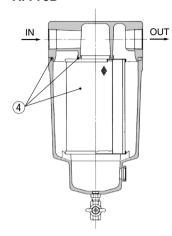
AFF Series

Construction

AFF2C to AFF22C, AFF37B



AFF75B



* The numbers correspond with those in the "Construction" of the AFF series in the Best Pneumatics catalog.

Replacement Parts

No	Description*1 Mater		Applicable				Model			
NO.	Description	ivialenai	model*2	AFF2C	AFF4C	AFF8C	AFF11C	AFF22C	AFF37B	AFF75B
	Element	Cotton paper,	Except option F	AFF-EL2B	AFF-EL4B	AFF-EL8B	AFF-EL11B	AFF-EL22B	AFF-EL37B	AFF-EL75B
4	assembly	others	For option F	AFF-EL2B-F	AFF-EL4B-F	AFF-EL8B-F	AFF-EL11B-F	AFF-EL22B-F	_	_

^{*1)} Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

Maintenance

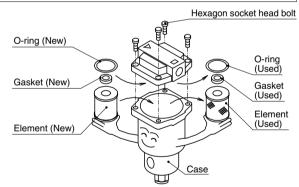
1.Replace the element when one of followings occurs.

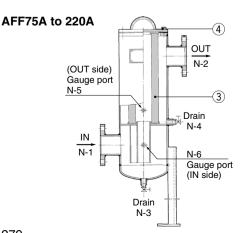
- Pressure drop reaches 0.1 MPa.
- Element operates for 2 years.
 Element assembly (gasket, O-ring accessory) model number:
 AFF-FI ***
- * *** is AFF size symbol. (ex.: AFF-EL2B)

2. How to replace element assembly

First, discharge the pressure in the body. (Make pressure 0 MPa.)

- Remove four hexagon socket head bolts.
- Replace element, gasket, O-ring.
- Tighten hexagon socket head bolts.





Replacement Parts

No	Description	Motorial	Otr	Mo	odel	
INO.	Description	Malenai	Qty.	AFF75A AFF125A	AFF150A	AFF220A
3	Element	_	1	EC700-003N	EC800-003N	EC900-003N
4	Seal	NBR	1	AL-33S	AL-34S	AL-35S





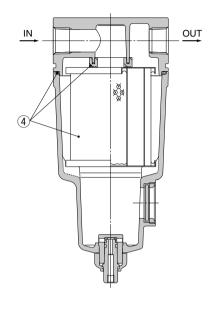
^{*2)} F option, the rubber material: In the case of fluororubber

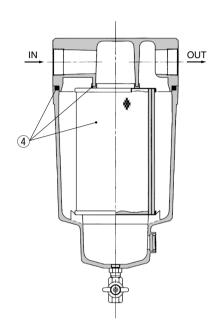
AM Series

Construction

AM150C to AM550C, AM650

AM850





* The numbers correspond with those in the "Construction" of the AM series in the Best Pneumatics catalog.

Replacement Parts

NI-	Description*1 Material	Applicable				Model				
NO.		Material	model*2	AM150C	AM250C	AM350C	AM450C	AM550C	AM650	AM850
4	Element	Glass fiber,	Except option F	AM-EL150	AM-EL250	AM-EL350	AM-EL450	AM-EL550	AM-EL650	AM-EL850
	assembly	others	For option F	AM-EL150-F	AM-EL250-F	AM-EL350-F	AM-EL450-F	AM-EL550-F	_	_

- *1) Element assembly: With gasket (1 pc.) and O-ring (1 pc.)
- st 2) F option, the rubber material: In the case of fluororubber

Maintenance

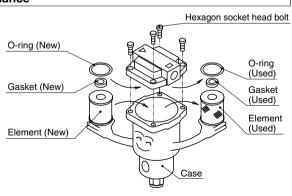
Replace the element when one of followings occurs.

- Pressure drop reaches 0.1 MPa.
- Element operates for 2 years.
 Element assembly (gasket, O-ring accessory) model number:
 AM-EL***
- * *** is AM size symbol. (ex.: AM-EL150)

2. How to replace element assembly

First, discharge the pressure in the body. (Make pressure 0 MPa.)

- Remove four hexagon socket head bolts.
- Replace element, gasket, O-ring.
- Tighten hexagon socket head bolts.



Actuators

Modular F.R.L. ssure Control Equipmer

ir Preparation Equipment

ndustrial Filters

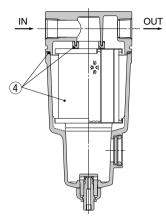
Replacement Procedure

Industrial Filters

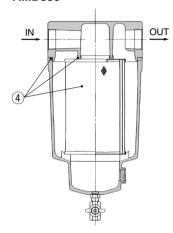
AMD Series

Construction

AMD150C to AMD550C, AMD650



AMD850



* The numbers correspond with those in the "Construction" of the AMD series in the Best Pneumatics catalog.

Replacement Parts

No	Description*1	Motorial	Applicable				Model			
INO.	Description	Wateriai	model*2	AMD150C	AMD250C	AMD350C	AMD450C	AMD550C	AMD650	AMD850
4	Element	Glass fiber,	Except option F	AMD-EL150	AMD-EL250	AMD-EL350	AMD-EL450	AMD-EL550	AMD-EL650	AMD-EL850
4	assembly	others	For option F	AMD-EL150-F	AMD-EL250-F	AMD-EL350-F	AMD-EL450-F	AMD-EL550-F	_	_

^{*1)} Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

Maintenance

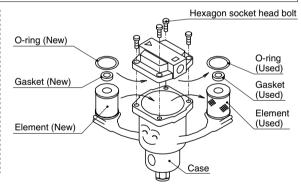
1.Replace the element when one of followings occurs.

- Pressure drop reaches 0.1 MPa.
- Element operates for 2 years (1 year for free standing type).
 Element assembly (gasket, O-ring accessory) model number:
 AMD-EL***
- * *** is AMD size symbol. (ex.: AMD-EL150)

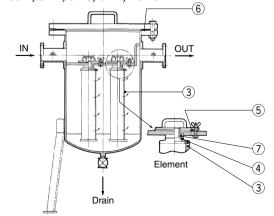
2. How to replace element assembly

First, discharge the pressure in the body. (Make pressure 0 MPa.)

- Remove four hexagon socket head bolts.
- Replace element, gasket, O-ring.
- Tighten hexagon socket head bolts.



AMD80□, 81□, 9□0, 9□1, 10□0



Replacement Parts

Model applicable	③ Element		Seal (Material: NBR)		Seal (Material: N	BR)	Gaske (Material: V#68	-	O-ring (Material: NBR)	
filter	Kit no.	Qty.	Kit no.	Qty.	Kit no.	Qty.	Kit no.	Qty.	Kit no. (Nominal)	Qty.
AMD800 AMD810		1		1	OD112XID90XT3	1	AL-61S	1		1
AMD801 AMD811		1		1	_	_	AL-60S	1		1
AMD900 AMD910	63174	3 63148	63148	3	OD112XID90XT3	3	AL-63S	1	(1A-G35)	3
AMD901 AMD9111		3		3	_	_	AL-62S	1		3
AMD1000 AMD1010		5	5		OD112XID90XT3	5	AL-31S	1		5

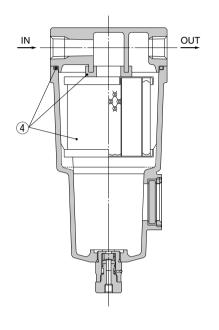
^{*2)} F option, the rubber material: In the case of fluororubber

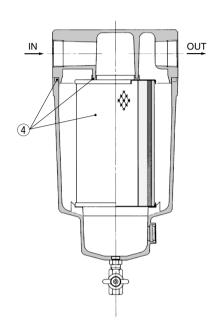
AMH Series

Construction

AMH150C to AMH550C, AMH650

AMH850





* The numbers correspond with those in the "Construction" of the AMH series in the Best Pneumatics catalog.

Replacement Parts

			-							
No	Description*1	scription*1 Material	Applicable				Model			
INO.	Description		model*2	AMH150C	AMH250C	AMH350C	AMH450C	AMH550C	AMH650	AMH850
4	Element	Glass fiber,	Except option F	AMH-EL150	AMH-EL250	AMH-EL350	AMH-EL450	AMH-EL550	AMH-EL650	AMH-EL850
4	assembly	others	For option F	AMH-EL150-F	AMH-EL250-F	AMH-EL350-F	AMH-EL450-F	AMH-EL550-F	_	_

- *1) Element assembly: With gasket (1 pc.) and O-ring (1 pc.)
- *2) F option, the rubber material: In the case of fluororubber

Maintenance

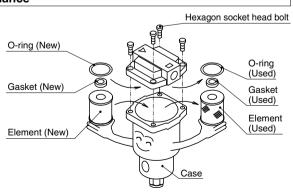
Replace the element when one of followings occurs.

- Pressure drop reaches 0.1 MPa.
- Element operates for 2 years.
 Element assembly (gasket, O-ring accessory) model number:
 AMH-EL***
- * *** is AMH size symbol. (ex.: AMH-EL150)

2. How to replace element assembly

First, discharge the pressure in the body. (Make pressure 0 MPa.)

- Remove four hexagon socket head bolts.
- Replace element, gasket, O-ring.
- Tighten hexagon socket head bolts.



Actuators

Modular F.R.L. Pressure Control Equipme

Air Preparation Equipment

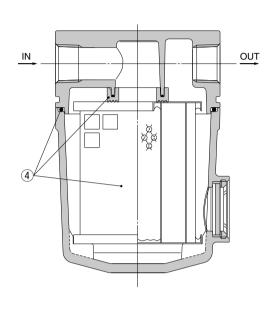
Industrial Filter

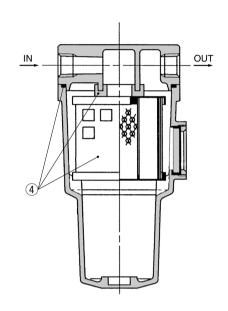
AME Series

Construction

AME150C to AME550C

AME650, AME850





* The numbers correspond with those in the "Construction" of the AME series in the Best Pneumatics catalog.

Replacement Parts

No	Description*1	Material	Applicable				Model			
INO.	Description	Malenai	model*2	AME150C	AME250C	AME350C	AME450C	AME550C	AME650	AME850
	Element	Glass fiber,	Except option F	AME-EL150	AME-EL250	AME-EL350	AME-EL450	AME-EL550	AME-EL650	AME-EL850
4	assembly	others	For option F	AME-EL150-F	AME-EL250-F	AME-EL350-F	AME-EL450-F	AME-EL550-F	_	_

^{*1)} Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

Maintenance

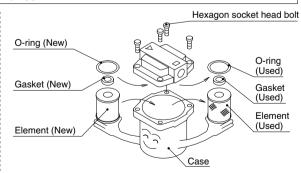
Replace the element when one of followings occurs.

- Red spots appear on the element surface.
- Operated for 2 years, or pressure drop reaches 0.1 MPa.
 Element assembly (gasket, O-ring accessory) model number:
 AME-EL***
- * *** is AME size symbol. (ex.: AME-EL150)

2. How to replace element assembly

First, discharge the pressure in the body. (Make pressure 0 MPa.)

- Remove four hexagon socket head bolts.
- Replace element, gasket, O-ring.
- Tighten hexagon socket head bolts.



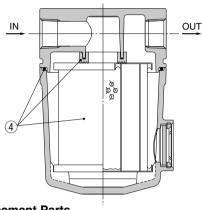
^{*2)} F option, the rubber material: In the case of fluororubber

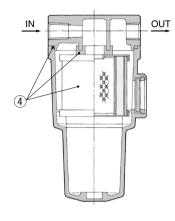
AMF Series

Construction

AMF150C to AMF550C

AMF650, AMF850





* The numbers correspond with those in the "Construction" of the AMF series in the Best Pneumatics catalog.

Replacement Parts

No	Description*1	Material	Applicable				Model			
INO.	Description	Malenai	model*2	AMF150C	AMF250C	AMF350C	AMF450C	AMF550C	AMF650	AMF850
	Element	Glass fiber,	Except option F	AMF-EL150	AMF-EL250	AMF-EL350	AMF-EL450	AMF-EL550	AMF-EL650	AMF-EL850
4	assembly	others	For option F	AMF-EL150-F	AMF-EL250-F	AMF-EL350-F	AMF-EL450-F	AMF-EL550-F	_	_

^{*1)} Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

Maintenance

1.Element replacement

Since element life depend on odor concentration of compressed air, it can not be specified. Confirm deodorizing capacity remaining period, and replace the element periodically afterwards.

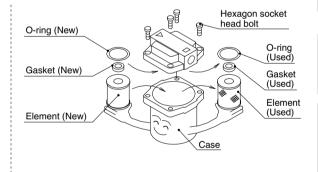
Replace the element when you smell oil on the outlet side. Replace the element with new one when element has been used for 2 years, or when pressure drop reaches 0.1 MPa. Element assembly (gasket, O-ring accessory) model number: AMF-EL***

* *** is AMF size symbol. (ex.: AMF-EL150)

2. How to replace element assembly

First, discharge the pressure in the body. (Make pressure 0 MPa.)

- Remove four hexagon socket head bolts.
- Replace element, gasket, O-ring.
- Tighten hexagon socket head bolts.



AMF80 , 90 , 1000 N-4 Pressure outlet (IN side) IN N-1 Drain N-3

Replacement Parts

	(3)		(4)		(5)		(6)		(7)	
Model applicable	Elemer	nt	Seal	BR)	Seal (Material: NI	BR)	Gaske (Material: V#68		O-ring (Material: NBF	R)
filter	Kit no.	Qty.	Kit no.	Qty.	Kit no.	Qty.	Kit no.	Qty.	Kit no. (Nominal)	ty.
AMF800		1		1	OD112XID90XT3	1	AL-61S	1		1
AMF801		1		1	_	_	AL-60S	1	KA00061	1
AMF900	63271	3	63148	3	OD112XID90XT3	3	AL-63S	1	1A-G35	3
AMF901		3		3	_	_	AL-62S	1	' ' ' ;	3
AMF1000		5		5	OD112XID90XT3	5	AL-31S	1] [5

^{*2)} F option, the rubber material: In the case of fluororubber

SMC

Industrial Filters

Indication of replacement of elements, inspection items

■ Replacement standards

<Element replacement>

The differential pressure (pressure drop) between the primary side and secondary side reaches 0.1 MPa. Additionally, even if any differential pressure does not occur, replace the element once every two years.

■ Inspection items

Check each seal part for leak periodically.

Check the pressure/temperature periodically to make sure that the filter is within its operable range. If the differential pressure reaches 0.1 MPa during operation, stop the operation and replace the element with a new one.

Remove the dust accumulated in the bowl periodically.

How to Select Element Order Number for Replacement



The element number for replacement is written on the nameplate.



Element number for replacement

Order the element no. written in here.

If the information written on the nameplate cannot be confirmed, please specify the element number as described below.

Order Example

* Element number for FGGSB-20-B002NA



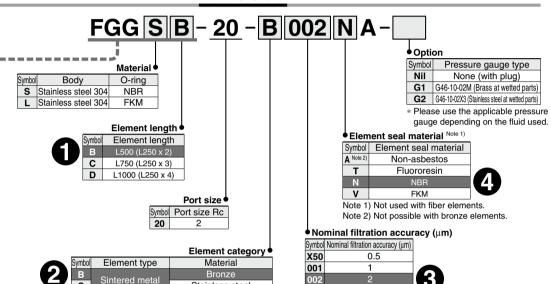
Check the product number of the industrial filter. Confirm the items written on the right.

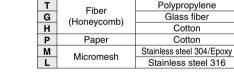
DElement length

- * The element length is the total length of combined short elements.
- 2Element category

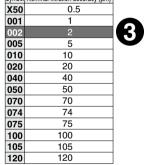
Nominal filtration accuracy

How to Order

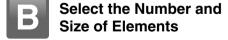




s



Note) For a comparison with the nominal filtration accuracy according to the element category, refer to pages 289 and 290.



* Please select accordingly from the following two selection types of numbers and sizes.

FGGSB Note 1) FGGSC Note 1) FGGSD Note 1) FGGLB Note 1) FGGLC Note 1) FGGLD Note 1) Model 7 Note 2) Number of elements 14 21 28 14 21 28 ø65 x Element size L1000 L250 1.500 1750 1250 1750 L1000 Cover Stainless steel 304 Case Main Stainless steel 304 materials NBR FKM O-ring SS400 (Chromatic plating)

Stainless steel

Cotton

Cotton

Note 1) Cannot be used with gases.

Specifications

Note 2) In the case of a sintered metal element or paper element.



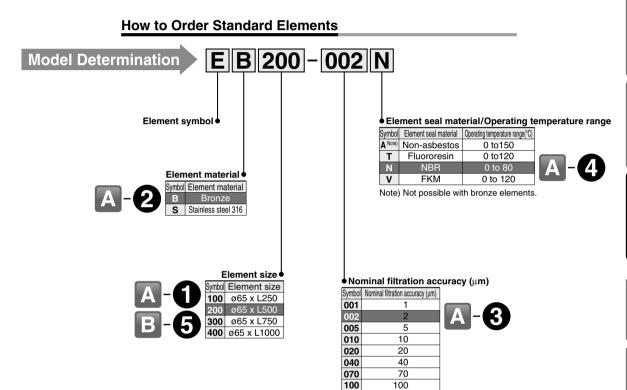
There are various types of elements for replacement. Select respective element type according to the type of industrial filter you are using.



Element Model Determination

Specify the element type by filling out the element number with the respective codes of the items selected in sections A and B.

* As for the number of orders, specify it by item **⑤**, "number of elements", in section B. The number of orders is 7 in this example.



120

120

Elements Sintered Metal/Fiber

Sintered Metal Filter Elements

- Outstanding mechanical strength, heat resistance and chemical resistance.
- Formed by sintering finely powdered metal, so a high filtration accuracy can be obtained.
- Even if clogging progresses, the element can be reused by cleaning.
- Main applications

Ideal as a check filter for keeping fluid clean. All types of gases, fluids, general solvents and high-temperature fluids



△ Caution

Bronze element, but may have been discolored by moisture in the atmosphere, the characteristics are not affected.

Fiber Elements

- Four types of materials with different characteristics are available so the filters are applicable to any application.
- Elements are economical because particle capturing capacity is excellent, and element life is long.
- Elements are disposable so maintenance and replacement are easy.
- Main applications

Cotton	Cleaning water, General neutral fluids, General solvents, Dry air
Polypropylene	Plating fluids, General acids, Alkali fluids, Industrial water, Cooling water
Glass fiber	Acid fluids, High-temperature fluids



Specifications

poomounono					
Material		Bronze	Stainless steel 316		
Operating temperature (C°) Note 2)	0 to 150	0 to 150		
Nominal filtration accura	ιcy (μm)	1, 2, 5, 10, 20, 40, 70, 100, 120			
Max. differential pressure re	esistance	0.7 MPa			
Element replacement differentia	l pressure	0.1 MPa			
Acid		Cannot be used.	Can be used. Note 1)		
Chemical resistance	Alkali	Can be used depending on conditions.	Can be used.		
Element category of How to Order		В	S		

Note 1) Cannot be used with hydrochloric acid, hydrofluoric acid or phosphoric acid.

Note 2) Varies depending on the seal material used.

How to Order Standard Elements



Element material

Symbol	Element material
В	Bronze
S	Stainless steel 316

Element size

Symbol	Element size
100	ø65 x L250
200	ø65 x L500
300	ø65 x L750
400	ø65 x L1000

Nominal filtration accuracy (μm)

Symbol	Nominal filtration accuracy (µm)
001	1
002	2
005	5
010	10
020	20
040	40
070	70
100	100
120	120

Element seal material/Operating temperature range

Symbol	Element seal material	Operating temperature range(°C)
A Note)	Non-asbestos	0 to 150
Т	Fluororesin	0 to 120
N	NBR	0 to 80
٧	FKM	0 to 120

Note) Not possible with bronze elements.

Replacement Seal

ricpiaccinciii ocai							
Symbol	part no.	Quantity					
Α	AL-7S						
Т	AL-6S	2					
N	AL-8S	2					
٧	AL-9S						

Specifications

- p								
Material	Core material	Operating temperature (°C)	Nominal filtration accuracy (µm)	Differential pressure resistance (Max.)	Element replacement differential pressure			
Cotton	Stainless steel 304	-20 to 100	0.5, 1, 5, 10, 20, 50, 75, 100					
Polypropylene	Polypropylene	0 to 60	0.5, 1, 5, 10, 20, 50, 75, 100	0.2 MPa	0.1 MPa			
Glass fiber	Stainless steel 316	0 to 400	1, 5, 10, 20					

Note) Size for all is ø65 x L250. Different lengths are available as a special order up to 750 mm, only for cotton and polypropylene.

How to Order Standard Elements

nt material	Cotton Polypropylene		Glass fiber
material	Stainless steel 304	Polypropylene	Stainless steel 316
0.5	EH10G	EHM10A	_
1	EH39R10GV	EHM39R10AY	EHK27R10S
5	EH23R10GV	EHM23R10AY	EHK19R10S
10	EH19R10GV	EHM19R10AY	EHK15R10S
20	EH15R10G	EHM15R10A	EHK10R10S
50	EH11R10G	EHM11R10A	_
75	EH10R10G	EHM10R10A	_
100	EH8R10G	EHM8R10A	_
category of to Order	Н	Т	G
	material 0.5 1 5 10 20 50 75 100 category of	material Stainless steel 304 0.5 EH10G 1 EH39R10GV 5 EH23R10GV 10 EH19R10GV 20 EH15R10G 50 EH11R10G 75 EH10R10G 100 EH8R10G category of L	material Stainless steel 304 Polypropylene 0.5 EH10G EHM10A 1 EH39R10GV EHM39R10AY 5 EH23R10GV EHM23R10AY 10 EH19R10GV EHM19R10AY 20 EH15R10G EHM15R10A 50 EH11R10G EHM11R10A 75 EH10R10G EHM10R10A 100 EH8R10G EHM8R10A

Note) Element seals are not used for fiber elements.



Paper Elements

- Cartridges are pleated for a large filtration area, and elements are economical due to their long service life.
- Main applications

Ideal for filtration of hydraulic oil. lubricating oil, fuel oil, oils for the liquid gas industry, dry inert gases, and dry air.



Micromesh Elements

- Stainless steel metal mesh has high filtration accuracy.
- Outstanding heat and chemical resistance. Applicable to a wide range of applications.
- ▶ Pleated type has 3 times the filtration area of a cylinder.
- Filters are economical because they can be cleaned and repeatedly used.
- Main applications

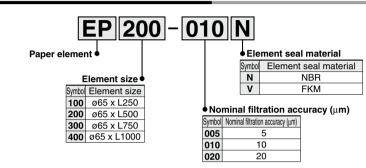
Please use 40 microns or less as a high-precision filter, and 74 microns or higher as a high-grade strainer. All types of gases and fluids, high-temperature fluids.



Specifications

Material	Filter paper (Cotton, Phenol resin impregnated paper)
Operating temperature (C°)	0 to 80
Nominal filtration accuracy (μm)	5, 10, 20
Max. differential pressure resistance	0.6 MPa
Adhesive used	Epoxy resin
Element replacement differential pressure	0.1 MPa
Element category of How to Order	Р

How to Order Standard Elements

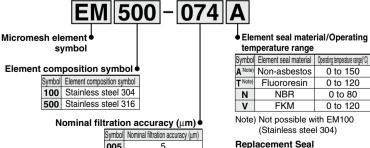


Specifications

specifications						
Model		EM100	EM500			
Materials		Stainless steel 304	Stainless steel 316			
Jointing material		Epoxy resin	_			
Operating temperature (C°) Note 2)		-5 to 100	-180 to 300			
Nominal filtration accuracy (μm)		5, 10, 20, 40, 74, 105				
Max. differential pressure re	sistance	0.7 MPa				
Element replacement differential	pressure	0.1	MPa			
Acid		Cannot be used.	Can be used. Note 1)			
Chemical resistance Alkali		Can be used.	Can be used.			
Element category of How t	o Order	М	L			

Note 1) Cannot be used with hydrochloric acid, hydrofluoric acid or phosphoric acid. Note 2) Varies depending on the seal material used.

How to Order Standard Elements



Oyillbui	rivorilliai ilittation accuracy (µin)	
005	5	Repl
010	10	Symbol
020	20	Α
040	40	Т
074	74	N
105	105	V

(Size ø65 x L250)

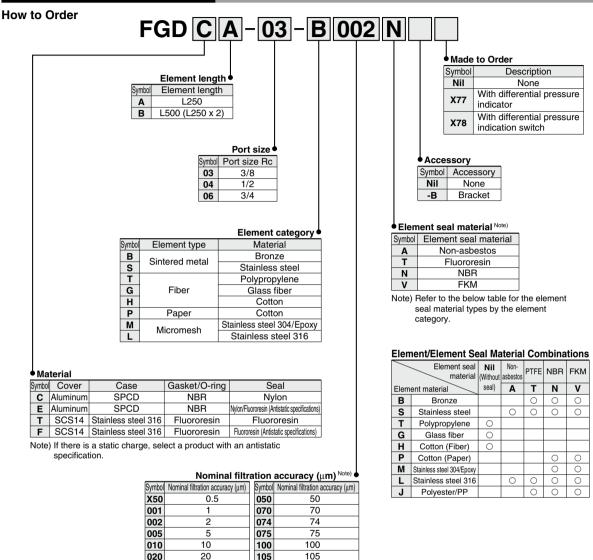
Symbol	part no.	Quantity
Α	AL-7S	
Т	AL-6S	2
N	AL-8S	4
٧	AL-9S	



FGD Series 1



Replacement Parts and Seal List



Note) For a comparison with the nominal filtration accuracy according to the element category, refer to the Best Pneumatics catalog.

120

40

Specifications

Model		FGDCA	FGDCA FGDCB		FGDEB	FGDTA	FGDTB	FGDFA	FGDFB
Number of elements		1	1 2 Note)		2 Note)	1	2 Note)	1	2 Note)
Element size		ø65 x L250	ø65 x L500 (L250 x 2)	ø65 x L250	ø65 x L500 (L250 x 2)	ø65 x L250	ø65 x L500 (L250 x 2)	ø65 x L250	ø65 x L500 (L250 x 2)
	Cover		Alum	inum		SCS14			
Main	Case		SP	CE		Stainless steel 316			
materials	Gasket/ O-ring		NE	3R		Fluororesin			
	Seal	Ny	vlon	Nylon/Fl	uororesin	Fluororesin			

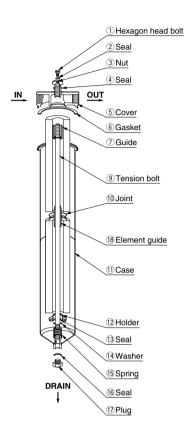
120

Note) 1 element (ø65 x L500) in the case of a sintered metal element or paper element.





Replacement Parts and Seal List



Parts descriptions and functions

(Figure shows the product with two FGD□B elements.)

Note) There is no compatibility between the FGDT/F and FGDC/E as the seal structure on the gasket portion is different. Use the cover and case of the same model.

- Refer to pages 287 and 288 for selection.
- Refer to pages 289 and 290 for the replacement element type.
- * The numbers correspond with those in the "Replacement Parts and Seal List" of the FGD series in the Best Pneumatics catalog.

Parts Descriptions and Functions

No.	Description	Material	Function		
1	Hexagon head bolt	Stainless steel or iron	Plug to release air in the housing		
2	Seal	Resin			
3	Nut	Stainless steel or iron	Tightens the cover.		
4	Seal	Resin			
(5)	Cover	Stainless steel or Aluminum	The lid of the filter body		
6	Gasket	Resin or rubber			
7	Guide	Stainless steel	Seals the gap between the element and tension bolt.		
9	Tension bolt	Stainless steel or iron	Connects the case and cover.		
10	Joint	Stainless steel	Seals the area between elements. (when two FGD□B elements are used)		
11)	Case	Stainless steel or iron	Filter body		
12	Holder	Stainless steel	Seals the elements.		
13	Seal	Resin or rubber			
14)	Washer	Stainless steel			
15	Spring	Stainless steel	Stabilizes the element.		
16	Seal	Resin			
17	Plug	Stainless steel or iron	Drainage discharging plug		
18	Element guide	Stainless steel or iron			

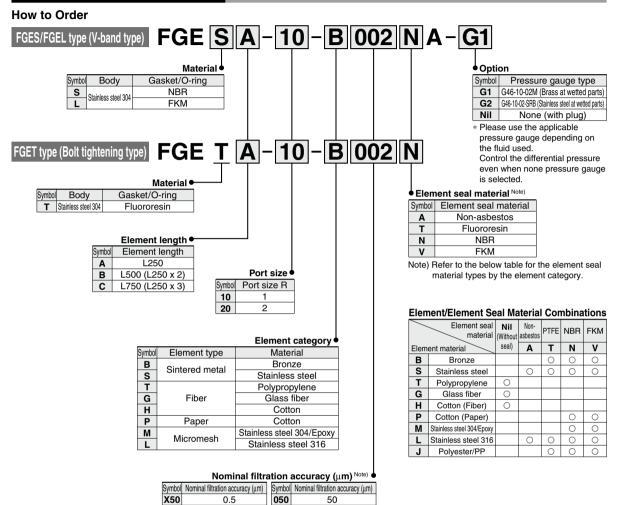
Replacement F	Parts					
Description Part no.		Applicable model	Part no. (Kit contents)			
	FGD-KT001	FGDC	①, ②, ③, ④: 1 pc. each			
Nut kit	FGD-KT002	FGDE				
NUL KIL	FGD-KT003	FGDT	(1, 2, 3, 4. 1 pc. each			
	FGD-KT004	FGDF				
Replacement	FGD-CV005-04	FGDT/F	(5)			
cover	FGD-CV006-04	FGDC/E				
Joint	FGD-OP001	FGD□	10			
	KT-FGDC	FGDC				
Seal kit	KT-FGDE	FGDE	2, 4, 6, 3, 6: 1 pc. each			
Sear Kit	KT-FGDT	FGDT	2, 4, 0, 0, 0. 1 pc. each			
	KT-FGDF	FGDF				
	FGD-CA002	FGDT/F(L250)	7, 9, 11, 12, 13, 14, 15, 16, 17			
Replacement case	FGD-CA003	FGDT/F(L500)	: 1 pc. each			
assembly	FGD-CA004	FGDC/E(L250)	Note) Only the FGD-CA003 and CA005 includes (8) element			
	FGD-CA005	FGDC/E(L500)	guide in the set.			

Industrial Filter

FGE Series 1



Replacement Parts and Seal List



Note) For a comparison with the nominal filtration accuracy according to the element category, refer to the Best Pneumatics catalog.

Specifications

Model		FGESA Note 1)	FGESB Note 1)		FGESC Note 1) FGELA Note 1)		FGELB Note 1)		FGELC Note 1)		FGETA	FGETB		FGETC		
Number of	elements	4	4 Note 2)	8	4 Note 2)	12	4	4 Note 2)	8	4 Note 2)	12	4	4 Note 2)	8	4 Note 2)	12
Element size		ø65 to 70 x L250			ø65 to 70 x L750		ø65 to 70 x L250			ø65 to 70 x L750		ø65 x L250	ø65 x L500	ø65 x L250	ø65 x L750	ø65 x L250
	Cover		Stainless steel 304													
	Case		Stainless steel 304													
Main materials	Gasket	_					_	_				Fluororesin Fluororesin			Fluororesin	
materials	O-ring		NBR FKM —													
	Legs						SS40	0 (Chro	matic p	lating)						

Note 1) Cannot be used with gases.

Note 2) In the case of a sintered metal element or paper element.

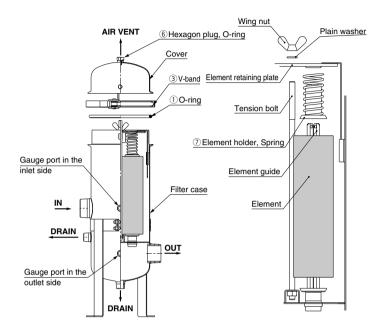


FGE Series 2

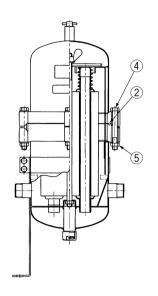


Replacement Parts and Seal List

FGES/FGEL type (V-band type)



FGET type (Bolt tightening type)



NI-	Description	Otri	Applicable model						
No.	Description	Qty.	FGES	FGEL	FGET				
1	O-ring	1	FGE-KT001	FGE-KT002	_				
2	Gasket	1	_	_	AL-19S				
3	V-band	1	CY-	24S	_				
4	Hexagon head bolt	4	_	_	CB00021				
5	Hexagon nut	4	_	_	DA00110				
	Hexagon plug	1	FOF OD007	ECE OBOOG					
6	O-ring	1	FGE-OP007	FGE-OP008	_				

FGE-OP005

4

Spring

Element holder

- Refer to pages 287 and 288 for selection.
- Refer to pages 289 and 290 for the replacement element type.
- * The numbers correspond with those in the "Replacement Parts and Seal List" of the FGE series in the Best Pneumatics catalog.

Industrial Filter

FGG Series (1



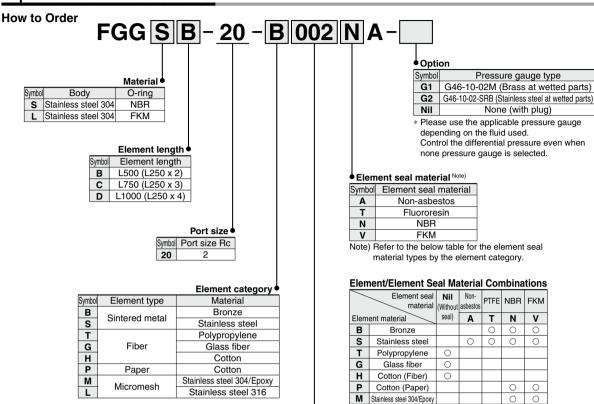
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0

0

L Stainless steel 316

Replacement Parts and Seal List



Nominal filtration accuracy (μm) Note)

Symbol	Nominal filtration accuracy (µm)	Symbol	Nominal filtration accuracy (µm)
X50	0.5	050	50
001	1	070	70
002	2	074	74
005	5	075	75
010	10	100	100
020	20	105	105
040	40	120	120

Note) For a comparison with the nominal filtration accuracy according to the element category, refer to the Best Pneumatics catalog.

Specifications

opoomout	peomodiano													
Mode	el	FGGS	B Note 1)	FGGS	C Note 1)	FGGS	FGGSD Note 1)		FGGLB Note 1)		FGGLC Note 1)		FGGLD Note 1)	
Number of elements		7 Note 2)	14	7 Note 2)	21	7 Note 2)	28	7 Note 2)	14	7 Note 2)	21	7 Note 2)	28	
Element size		ø65 x L500	ø65 x L250	ø65 x L750	ø65 x L250	ø65 x L1000	ø65 x L250	ø65 x L500	ø65 x L250	ø65 x L750	ø65 x L250	ø65 x L1000	ø65 x L250	
	Cover		Stainless steel 304											
Main	Case	Stainless steel 304												
materials O-ring NBR				FKM										
	Legs					SS	400 (Chro	matic plati	ng)					

Note 1) Cannot be used with gases.

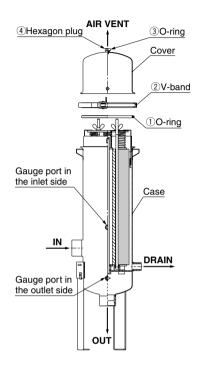
Note 2) In the case of a sintered metal element or paper element.

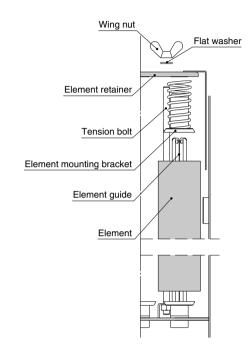


FGG Series 2



Replacement Parts and Seal List





Replacement Parts

No.	Description	Qty.	Applicab	le model		
NO.		Qty.	FGGS	FGGL		
1	O-ring	1	FGF-KT01	FGF-KT02		
2	V-band	1	CY-	27S		
3	O-ring	1	FGE-OP007	FGE-OP008		
4	Hexagon plug	1	FGE-OP007	FGE-OP008		

Refer to pages 287 and 288 for selection.

 Refer to pages 289 and 290 for the replacement element type.

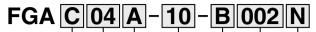
* The numbers correspond with those in the "Replacement Parts and Seal List" of the FGG series in the Best Pneumatics catalog.

FGA Series



Replacement Parts and Seal List





Vessel material (wetted parts)

Symbol	Vessel material (wetted parts)
С	SS400
S	Stainless steel 304

Number of arranged elements

Symbol	Number of arranged elements	Symbol	Number of arranged elements
04	4	29	29
07	7	34	34
09	9	37	37
18	18	53	53
22	22	83	83

Element length •

Element length			
L250			
L500 (L250 x 2)			
L750 (L250 x 3)			
L1000 (L250 x 4)			

AIR VENT

Symbol Port size 10 25 (1^B) 14 40 (1 1/2^B) 20 50 (2^B) 24 65 (2 1/2^B) 30 80 (3^B) 40 100 (4^B) 60 150 (6^B)

Port size

Note) The connection method is JIS 10KFF flange connection.

Symbol Element type Material

В	Sintered metal	Bronze
S		Stainless steel
Т		Polypropylene
G	Fiber	Glass fiber
Н		Cotton
Р	Paper	Cotton
M	Micromesh	Stainless steel 304/Epoxy
	Micromesii	Stainless steel 316

Element seal material Note)

Symbol	Element seal material
Α	Non-asbestos
Т	Fluororesin
N	NBR
V	FKM

Note) Refer to the below table for the element seal material types by the element category.

Nominal filtration accuracy (μm) Note)

Symbol	Nominal filtration accuracy (µm)	Symbo	Nominal filtration accuracy (μm)
X50	0.5	050	50
001	1	070	70
002	2	074	74
005	5	075	75
010	10	100	100
020	20	105	105
040	40	120	120

Note) For a comparison with the nominal filtration accuracy according to the element category, refer to the Best Pneumatics catalog.

Element/Element Seal Material Combinations

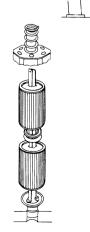
	Element seal material		NiI (Without	Non- asbestos	PTFE	NBR	FKM
EI	lem	ent material	seal)	Α	Т	N	٧
E	В	Bronze			0	0	0
•	s	Stainless steel		0	0	0	0
-	Т	Polypropylene	0				
(G	Glass fiber	0				
ŀ	Н	Cotton (Fiber)	0				
ı	Р	Cotton (Paper)				0	0
P	VI	Stainless steel 304/Epoxy				0	0
I	L	Stainless steel 316		0	0	0	0

Applicable Element Specifications

Description	Material	Nominal filtration accuracy (µm)	Size	
Sintered metal	Bronze	1, 2, 5, 10, 20, 40	ø65 x L250 ø65 x L500 ø65 x L750 ø65 x L1000	
Omerca metar	Stainless steel 316	70, 100, 120		
Paper	Cotton (Phenol)	5, 10, 20	ø65 x L250 ø65 x L500 ø65 x L750 ø65 x L1000	
	Cotton	0.5, 1, 5, 10, 20	ø65 x L250	
Fiber	Polypropylene	50, 75, 100		
	Glass fiber	1, 5, 10, 20		
Micromesh	Stainless steel 304	5, 10, 20, 40	ø65 x L250	
wicioniesii	Stainless steel 316	74, 105	000 X L250	

 Refer to pages 289 and 290 for the replacement element type.

* The numbers correspond with those in the "Replacement Parts and Seal List" of the FGA series in the Best Pneumatics catalog.



BACKWASH.

Element mounting figure



FGB Series

The Replacement Procedure is on p. 549

Replacement Parts and Seal List

FGB C 04 A - 10 - B 002 N

				-
Vessel	material	(wetted	parts)	۰ (

Symbol	Vessel material (wetted parts)
С	SS400
S	Stainless steel 304

Number of arranged elements

Symbol	Number of arranged elements	Symbol	Number of arranged elements
04	4	30	30
07	7	36	36
13	13	55	55
19	19	83	83

AIR VENT

BACK

Element length

Symbol	Element length
Α	L250
В	L500 (L250 x 2)
С	L750 (L250 x 3)
D	L1000 (L250 x 4)

 Symbol
 Port size

 10
 25 (1^B)

 14
 40 (1 1/2^B)

 20
 50 (2^B)

24

30 80 (3^B) 40 100 (4^B) 60 150 (6^B) Note) The connection method is JIS 10KFF

65 (2 1/2^B)

flange connection.

● Element seal material Note 1)

Symbol Element seal material			
A Note 2)	Non-asbestos		
Т	Fluororesin		
N	NBR		
٧	FKM		

Note 1) Not used with fiber elements.

Note 2) Not possible with bronze elements.

Nominal filtration accuracy (μm) Note

Symbol	Nominal filtration accuracy (μm)	Symbol	Nominal filtration accuracy (μm)
X50	0.5	050	50
001	1	070	70
002	2	074	74
005	5	075	75
010	10	100	100
020	20	105	105
040	40	120	120

Note) For a comparison with the nominal filtration accuracy according to the element category, refer to the Best Pneumatics catalog.

Element category

Symbol	Element type	Material	
В	Sintered metal	Bronze	
S	Sintered metal	Stainless steel	
Т		Polypropylene	
G	Fiber	Glass fiber	
Н		Cotton	
P	Paper	Cotton	
M	Micromesh	Stainless steel 304/Epoxy	
L	WILCIOITIESTI	Stainless steel 316	

Applicable Element Specifications

Applicable Element Specifications						
Description	Material	Nominal filtration accuracy (µm)	Size			
Sintered metal	Bronze 1, 2, 5, 10, 20, 40		ø65 x L250 ø65 x L500			
Sintered metal	Stainless steel 316	70, 100, 120	ø65 x L750 ø65 x L1000			
Paper	Cotton (Phenol)	5, 10, 20	ø65 x L250 ø65 x L500 ø65 x L750 ø65 x L1000			
	Cotton	0.5, 1, 5, 10, 20	ø65 x L250			
Fiber	Polypropylene	50, 75, 100				
	Glass fiber	1, 5, 10, 20				
Micromesh	Stainless steel 304	5, 10, 20, 40	ø65 x L250			
wicromesn	Stainless steel 316	74, 105	905 X L250			

 Refer to pages 289 and 290 for the replacement element type.

Element mounting figure



The numbers correspond with those in the "Replacement Parts and Seal List" of the FGB series in the Best Pneumatics catalog.

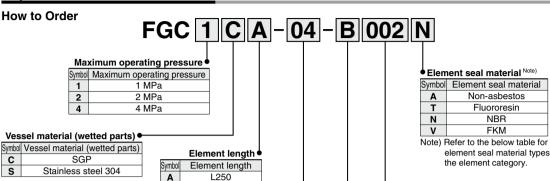
Industrial Filter

FGC Series



Replacement Parts and Seal List

AIR VENT



Port size

Symbol	Port size
04	15 (1/2 ^B)
06	20 (3/4 ^B)
10	25 (1 ^B)

L500 (L250 x 2)

В

OUT

Note) The connection method is flange connection, as indicated below.

FGC1: JIS 10KFF flange connection FGC2: JPI300^{Lb}RF flange connection FGC4: JPI600^{Lb}RF flange connection

Element category

Symbol	Element type	Material	
В	Sintered metal	Bronze	
S	Sintered metal	Stainless steel	
Т		Polypropylene	
G	Fiber	Glass fiber	
Н		Cotton	
Р	Paper	Cotton	
M	Micromesh	Stainless steel 316/Epoxy	
L	Micromesn	Stainless steel 316	

- ,				
Α	Non-asbestos			
T Fluororesin				
N	NBR			
V FKM				
Note) Refer to the below table for				

element seal material types by

Nominal filtration accuracy (μm) Note)

0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Symbol Nominal filtration accuracy (µm) Symbol Nominal filtration a	accuracy (µm)
X50 0.5 050 50	
001 1 070 70	
002 2 074 74	
005 5 075 75	
010 10 100 100	
020 20 105 105	
040 40 120 120	

Note) For a comparison with the nominal filtration accuracy according to the element category, refer to the Best Pneumatics catalog.

Element/Element Seal Material Combinations

	Element seal material		Non- asbestos	PTFE	NBR	FKM
Elem	ent material	seal)	Α	Т	N	٧
В	Bronze			0	0	0
S	Stainless steel		0	0	0	0
Т	Polypropylene	0				
G	Glass fiber	0				
Н	Cotton (Fiber)	0				
Р	Cotton (Paper)				0	0
M	Stainless steel 304/Epoxy				0	0
L	Stainless steel 316		0	0	0	0

Applicable Element Specifications

Description	Material	Nominal filtration accuracy (μm)	Size	
Cintered metal	Bronze	1, 2, 5, 10, 20, 40	ø65 x L250	
Sintered metal	Stainless steel 316	70, 100, 120	ø65 x L500	
Paper	Cotton (Phenol)	5, 10, 20	ø65 x L250 ø65 x L500	
	Cotton	0.5, 1, 5, 10, 20		
Fiber	Polypropylene	50, 75, 100	ø65 x L250	
	Glass fiber	1, 5, 10, 20		
Micromesh	Stainless steel 304	5, 10, 20, 40		
wicromesn	Stainless steel 316	74, 105	ø65 x L250	

 Refer to pages 289 and 290 for the replacement element type.

* The numbers correspond with those in the "Replacement Parts and Seal List" of the FGC series in the Best Pneumatics catalog.



Element mounting figure



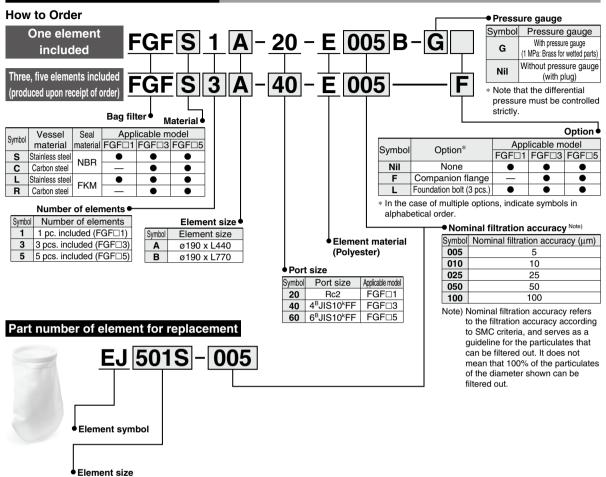
The Replacement Procedure is on p. 555











Specifications

Symbol

501S

601S

Element size

ø190 x L440

ø190 x L770

Opcon	opcomodiono								
Model		FGF□1A-20	FGF□1B-20	FGF□3A-40	FGF□3B-40	FGF□5A-60	FGF□5B-60		
	Material		Polyester						
	Nominal filtration accuracy		5, 10, 25, 50, 100 μm						
Element	Element replacement differential pressure	0.1 MPa Note 1)							
Element	Number of elements	1 element included 3 elements included 5 elements included				s included			
	Size	ø190 x L440	ø190 x L770	ø190 x L440	ø190 x L770	ø190 x L440	ø190 x L770		
	Filtration area	1800 cm ²	3400 cm ²	5400 cm ²	10200 cm ²	9000 cm ²	17000 cm ²		

Note 1) Control the element replacement so that the differential pressure does not exceed 0.1 MPa.

Applicable model

For FGF□□A

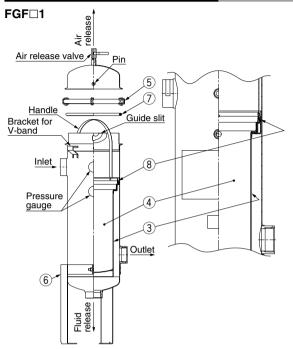
For FGF□□B

Bag Filter

FGF Series 2



Replacement Parts and Seal List

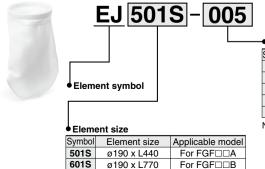


Replacement Parts

Description	Part No.	Material	Qty.	Applicable model Note)
Dookst	FGF-BT01	Stainless steel 204	1	FGF□1A
Dasket	FGF-BT02	Stairliess steel 304	1	FGF□1B
Element	EJ501S-□	Dolyootor	1	FGF□1A
Element	EJ601S-□	Folyestel	1	FGF□1B
V-band	FGF-BA01	Stainless steel	1	FGF□1□
Legs assembly (with bolt, nut, flat washer)	FGF-OP01 (Set)	Carbon steel	1	FGF□1□
0 ====	FGF-KT01	NBR	1	FGFS1□
O-ring	FGF-KT02	FKM	1	FGFL1□
Holder assembly (with O-ring)	FGF-KT03 (Set)	Polypropylene/ NBR	1	FGFS1□
	FGF-KT04 (Set)	Polypropylene/ FKM	1	FGFL1□
	Basket Element V-band Legs assembly (with bolt, nut, flat washer) O-ring Holder assembly	Basket	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Basket

Note) Refer to "How to Order" on page 300 for the $\hfill\Box$ part of the model number.

Part number of element for replacement



FGF□3□-40		
FGF□5□-60	Davit for cover	Nut
Air release valve Pressure gauge	Center bo Center bo Outlet Outlet	Spring washer Retainer

Replacement Parts

Kep	eplacement Parts								
No.	Description	Part No.	Material	Qty.	Applicable model Note)				
		BT-3S	Stainless	3	FGF□3A-40				
3	Basket	D1-33	steel 304	5	FGF□5A-60				
3	Dasket	BT-4S	Stainless	3	FGF□3B-40				
		D1-40	steel 304	5	FGF□5B-60				
4	Element	Refer to	Polyester	3	FGF□3□-40				
	Liement	"How to Order".	1 Olyestei	5	FGF□5□-60				
		AL-26S		1	FGFS3□-40				
	O-ring	AL-200	NBR	'	FGFC3□-40				
11		AL-27S		1	FGFS5□-60				
					FGFC5□-60				
• • •		AL-23S AL-24S	FKM	1	FGFL3□-40				
					FGFR3□-40				
					FGFL5□-60				
					FGFR5□-60				
			NBR	3	FGFS3□-40				
		AL-20S			FGFC3□-40				
		AL-200		5	FGFS5□-60				
12	Gasket				FGFC5□-60				
	dushet			3	FGFL3□-40				
		AL-21S	FKM	5	FGFR3□-40				
		AL-213			FGFL5□-60				
					FGFR5□-60				
Note: Defends with the Order than the Control of the Indian the In									

Note) Refer to "How to Order" on page 300 for the \square part of the model number.

Nominal filtration accuracy Note

- Nom	Nominal filtration accuracy (1986)					
Symbol Nominal filtration accuracy (µm)						
005	5 5					
010 10						
025	25					
050	50					
100	100					

* The numbers correspond with those in the "Replacement Parts and Seal List" of the FGF series in the Best Pneumatics catalog.

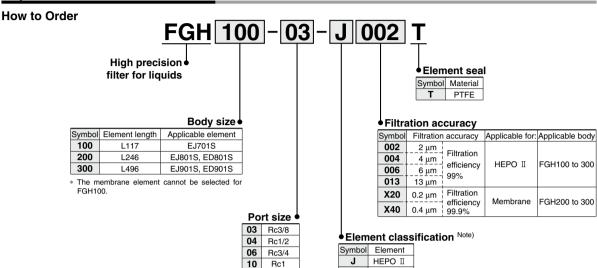
Note) Nominal filtration accuracy refers to the filtration accuracy according to SMC criteria, and serves as a guideline for the particulates that can be filtered out. It does not mean that 100% of the particulates of the diameter shown can be filtered out.



FGH Series 1

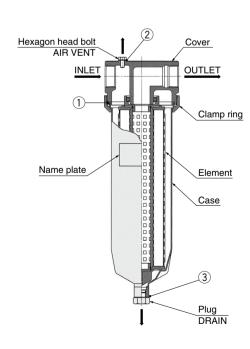


Replacement Parts and Seal List



Specifications

Specifications						
Model	FGH100	FGH200	FGH300			
Number of built-in elements (element length) (mm)	1 (125)	1 (250)	1 (500)			



Replacement Parts

D

Membrane

regarding the elements.

Note) Refer to the **web catalog** for details about specifications, models, dimensions, etc.

No.	Description	Part number				
INO.	Description	FGH100	FGH200	FGH300		
1	Gasket	AL-58S#1				
2	Seal	AL-43S				
3	Seal	AL-53S				

* Use each one of the above parts for each filter unit.

 \ast Use a commercially available belt wrench etc. for mounting and removing clamp rings.

 Refer to page 303 for the replacement element type. Modular F.R.L. Pressure Control Equipment

Air Preparation Equipment

ment Indus

Actuators Repla Proc

Modular F.R.L.
Pressure Control Equipment

Industrial Filters

^{*} The numbers correspond with those in the "Replacement Parts and Seal List" of the FGH series in the Best Pneumatics catalog.

High Precision Filter for Liquids

FGH Series 2



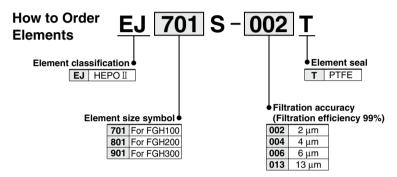
HEPO II Element for FGH Series **EJ** Series



Specifications

Model		EJ□S-002	EJ□S-004	EJ□S-006	EJ□S-013		
Filtration accuracy(F	Filtration accuracy(Filtration efficiency 99%)		2	4	6	13	
	Æ	117 mm	1890	2310	2090	2490	
Filtration area (cm ²)	Length	246 mm	4250	5200	4700	5600	
()	ت	496 mm	8500	10400	9400	11200	
Heat resistant to	Heat resistant temperature (°C)		80				
	Filter	media	Polyester				
Material	Reinforcement material		Polypropylene				
	Othe	rs	Polyprop		Polypropylene		
Pressure resistance			0.5 MPa at 20°C, 0.125 MPa at 80°C			ı°C	

Note) See "How to Order" below for items represented by \Box .

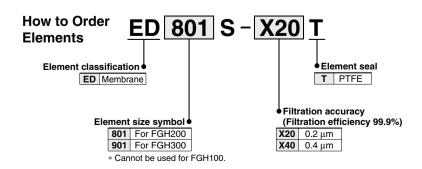


Membrane Element for FGH Series **ED** Series

Specifications

Model			ED□S-X20	ED□S-X40	
Filtration accuracy(Filtration efficiency 99.9%) Note 1)		iency 99.9%) Note 1)	0.2	0.4	
Filtration area	Length	247 mm	4,000	6,200	
(cm ²)	Ē	495 mm	8,000	12,400	
Heat resistant temperature (°C)			80		
	Filter media		Polyether sulfone	Cellulose acetate & polyester	
Material	Reinforcement material Others		Polypropylene	Polyester	
			Polypropylene	Polypropylene	
Pressure resis	tance	!	0.5 MPa at 20°C, 0.125 MPa at 80°C		
Resistivity recovery Note 2)		Note 2)	60 min at 10 L/m	_	
Others			100 L/4000 cm ² Pure water cleaning —		

Note 1) Filtration accuracy: tested with ultrapure water, flow rate at $\Delta P=0.01$ MPa. Note 2) Resistivity recovery: time taken to recover to 18 $M\Omega\cdot\text{cm}$ with ultrapure water. Note 3) See "How to Order" below for items represented by \Box .







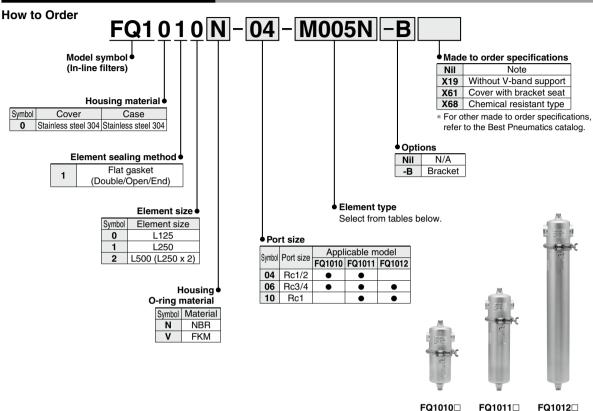
FQ1 Series 1







Replacement Parts and Seal List



Specifications

Model	FQ1010	FQ1011	FQ1012
No.of built-in elements (L: Element length in mm)	1 (L 125)	1 (L 250)	2 (L 250 x 2)

Element

1. Fiber element (P.P.)

Dimensions	Element symbol	Nominal filtration accuracy (µm)	Part number
	TX50	0.5	EHM10A
	T001	1	EHM39R10AY
~05	T005	5	EHM23R10AY
ø65 x	T010	10	EHM19R10AY
L250	T020	20	EHM15R10A
LESO	T050	50	EHM11R10A
	T075	75	EHM10R10A
	T100	100	EHM8R10A

2. Fiber element (Cotton)

Dimensions	Element symbol	Nominal filtration accuracy (µm)	Part number
	HX50	0.5	EH10G
	H001	1	EH39R10GV
ø65	H005	5	EH23R10GV
y x	H010	10	EH19R10GV
L250	H020	20	EH15R10G
L230	H050	50	EH11R10G
	H075	75	EH10R10G
	H100	100	EH8R10G

3. Micromesh element (Stainless steel 304) Bonding material: Epoxy resin

Dimensions	Element symbol	Nominal filtration accuracy (µm)	Part number				
	M005□	5	EM100-005				
05	M010□	10	EM100-010				
ø65 x	M020□	20	EM100-020				
L250	M040□	40	EM100-040				
L230	M074□	74	EM100-074				
	M105□	105	EM100-105				
	M005□	5	EM200-005□X4				
ø65	M010□	10	EM200-010□X4				
Z Z	M020□	20	EM200-020□X4				
L125	M040□	40	EM200-040□X4				
L125	M074□	74	EM200-074□X4				
	M105□	105	EM200-105□X4				
Note)	Note) Specify seal material in place of						

"□" (N for NBR or V for FKM).

4. Micromesh element (Stainless steel 316)

Dimensions	Element symbol	Nominal filtration accuracy (µm)	Part number		
	L005□	5	EM500-005□		
ø65	L010□	10	EM500-010□		
x	L020□	20	EM500-020□		
L250	L040□	40	EM500-040□		
	L074□	74	EM500-074□		
	L105□	105	EM500-105□		
	L005□	5	EM600-005□X4		
ø65	L010□	10	EM600-010□X4		
x	L020□	20	EM600-020□X4		
L125	L040□	40	EM600-040□X4		
	L074□	74	EM600-074□X4		
	L105□	105	EM600-105□X4		
Note) Cassify and material in place of					

Note) Specify seal material in place of "□" (N for NBR or V for FKM).

Pressure Control Equipment

r Preparation Equipment Air

Actuators

FQ1 Series 2

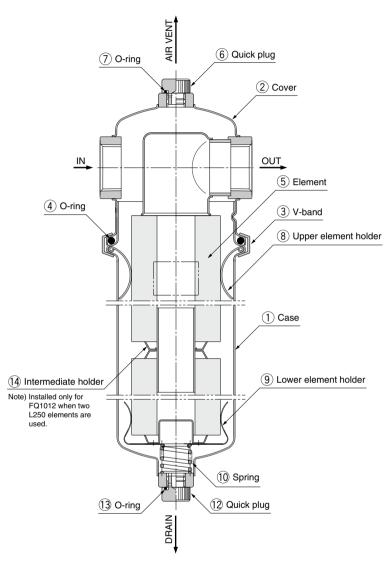




it is no longer compliant with RoHS.



Replacement Parts and Seal List



Replacement Parts

Description	Part number	Material	Applicable model	Part no. (Set contents)	Note
	FQ1-CA001N		FQ1010N	(22222	
	FQ1-CA001V	Stainless steel 304 Note) O-ring	FQ1010V		Element size: L125
	FQ1-CA002N		FQ1011N	①, ⑧, ⑨, ⑫, ⑬: 1 pc. each	EL
Case assembly	FQ1-CA002V	material N: NBR	FQ1011V	Note) Only the FQ1-CA003□ includes ¹ 4 intermediate holder in the set.	Element size: L250
	FQ1-CA003N	V: FKM	FQ1012N	intermediate noider in the set.	Element size: L500
	FQ1-CA003V	""	FQ1012V		(L250 x 2)
V-band for replacement	FQ-BA001	Stainless steel 304	FQ1 series	3	
O sing leit	FQ-KT005N	NBR	FQ101□N		④: OR NBR-70-1 P85 ⑦, ⑬: OR NBR-70-1 P11
O-ring kit	FQ-KT005V	FKM	FQ101□V	4, ⑦, ⑬: 1 pc. each	4: OR FKM-70 P85 ⑦, ③: OR FKM-70 P11
Quick plug	AG-9S	Stainless steel 303	FQ1 series	6, 12	
Upper element holder	L-131S	Stainless steel 304	FQ1 series	8	
Lower element holder	L-135S	Stainless steel 304	FQ1 series	9	
Intermediate holder	FQ-OP001	Stainless steel 304	FQ1 series	(4)	
	BP-15S		FQ101□□-04		For port size Rc 1/2
Bracket	BP-14S	Stainless steel 304	FQ101□□-06		For port size Rc 3/4
	BP-13S		FQ101□□-10		For port size Rc 1

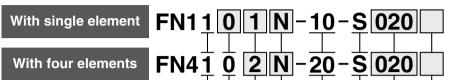
FN1/FN4 Series 1





Replacement Parts and Seal List





Housing material

Symbol Housing material Stainless steel 304

Element type Note)

Symbol	Element type	Applicable model
0	Cylindrical type (5 μ m, 20 μ m)	FN1, FN4
1	Step type (5 μm)	FN1

Note) Refer to the Best Pneumatics catalog for detailed element type.

Element length

Symbol	Element length	Applicable model
1	L250 mm	FN1
2	L500 mm	FN1, FN4

Seal material Symbol Seal material **NBR** FKM

Pressure gauge

S	Symbol	Pressure gauge		
	Nil	None (With plug)		
(3 Note 1)	With pressure gauge Note 2) (Wetted part: Brass)		

Note 1) Contact SMC for the pressure gauge specification for stainless steel wetted parts.

Note 2) The FN4 series is equipped with two pressure gauges.

Nominal filtration rating

• Element material			Symbol	INC
Symbol Element material			005	5 μι
S	Stainless steel 304		020	20

	Symbol	Nominal filtration rating
1	005	5 μm (Cylindrical type, Step type
	020	20 μm (Cylindrical type)
_		

Port size

Symbol	Port size	Applicable mode
10	Rc1	FN1
20	Rc2	FN4

Specifications

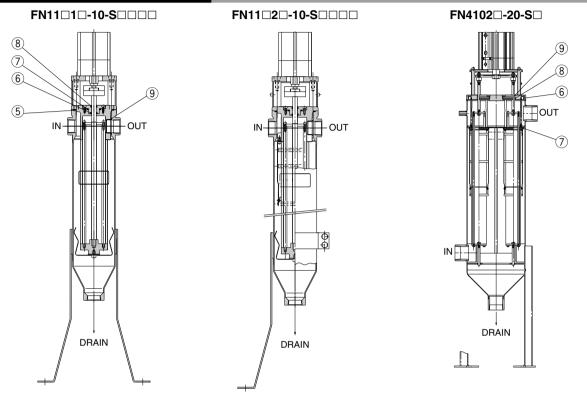
Model		FN1101	FN1111	FN1102	FN1112	FN4102
Element dimension		ø65 x	250L	ø65 x 500L		
=	Material	Stainless steel 304				
le l	Construction	Cylindrical type	Step type	Cylindrical type	Step type	Cylindrical type
<u>e</u>	Nominal filtration rating	5 μm, 20 μm	5 μm	5 μm, 20 μm	5 μm	5 μm, 20 μm
Differential pressure proof			0.6 MPa			

FN1/FN4 Series 2





Replacement Parts and Seal List



* The numbers correspond with those in the "Replacement Parts and Seal List" of the FN1/FN4 series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Qty.	Material
(5)	O-ring	1	
6	Penta seal	1	NBR
7	O-ring	1	or
8	Scraper	1	FPM
(9)	O-ring	1	

Replacement Parts: Seal Kit

Model	Part no.	Material	Note
FN11□□N	KT-FN11N	NBR	Items 5 through 9 from
FN11□□V	KT-FN11V	FPM	the above chart, 1 pc. each

Replacement Element

Model	Part no. Qty		Note
	END100-005	1	5 μm, Cylindrical type
FN11□1□	END100-020	1	20 μm, Cylindrical type
	END110-005	1	5 μm, Step type
	END200-005	1	5 μm, Cylindrical type
FN11□2□	END200-020	1	20 μm, Cylindrical type
	END210-005	1	5 μm, Step type

Replacement Parts

No.	Description	Qty.	Material
6	O-ring	1	
7	O-ring	1	NBR
8	Penta seal	1	or FPM
9	Scraper	1	

Replacement Parts: Seal Kit

Model	Part no.	Material	Note
FN4102N	KT-FN41N	NBR	Items 6 through 9 from
FN4102V	KT-FN41V	FPM	the above chart, 1 pc. each

Replacement Element

Model	Part no.	Qty.	Note
EN14400	END400-005	1	5 μm, Cylindrical type
FN4102□	END400-020	1	20 μm, Cylindrical type





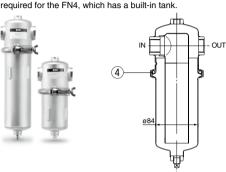
FN1/FN4 Series 3

Options (Sold separately)

Reservoir tank: FNR series

This tank is used to store a sufficient amount of fluid for back-flushing (For the FN1 series).

* It is not required for the FN4, which has a built-in tank



How to Order FNR10 N - 10							
			Size	•		• Port s	ize
	Symbol	Capacity	Applicable model			Symbol	Port size
	0	1.1 L	FN11□1			10	Rc1
	1	1.8 L	FN11□2				

Seal material

Symbol	Material
N	NBR
٧	FKM

Replacement Parts

No.	Description	Material	Qty.	Note
	O-ring	NBR	1	OR NBR-70-1 P85*
4		FKM	1	OR FKM-70 P85*

* When ordering an O-ring, order the standard product shown in the note.

Specifications

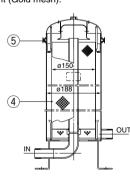
	Model	FNR100N-10	FNR100V-10	FNR101N-10	FNR101V-10
Tank capacity		1.1 L		1.8 L	
Port size		Rc1			
Material	Bowl & Cover	Stainless steel 304			
Material	O-ring	NBR	FKM	NBR	FKM
Weight		1.5 kg		1.9 kg	
Applicable filter		FN11□1□ (Element L 250) FN		FN11□2□ (Element L 500)	

Dust recovery filter (Produced upon receipt of order)

This filter is for recovering dust from fluid after element back-flushing.

It enables the re-use of the element (Gold mesh).





How to Order

FND100 N-10-M149 X0

Seal material Symbol Material NBR N FKM

> Port size Symbol Port size 10 R1

		Nominal filtration rating				
	149	149 μm				
• Flement type						

Symbol Type

Replacement Parts

	riopiacoment i arto				
ĺ	No. Description		Part no.	Material	Qty.
	4	Element	EZH710AS-149	Stainless steel 304	1
	5	O-ring	FGE-KT001	NBR	1
	3	O-ring	FGF-KT002	FKM	1

Specifications

O P O O					
Model		FND100N-10-M149X0	FND100V-10-M149X0		
Port size		R1			
	Bowl & Cover	Stainless steel 304			
Material	O-ring	NBR	FKM		
	Element	Stainless steel 304			
Element nominal filtration rating		149 μm			
Weight		7.5 kg			

Note) Produced upon receipt of order.

ir Preparation