

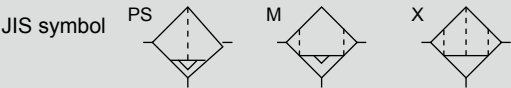


Medium main line stainless steel filter

AF4000P/S/M/X Series

Ideal for pre-filter, oil removal and deodorizing applications.

● Processing air flow rate: 3.7 to 18.8 m³/min (ANR) (at 0.7 MPa)



Specifications

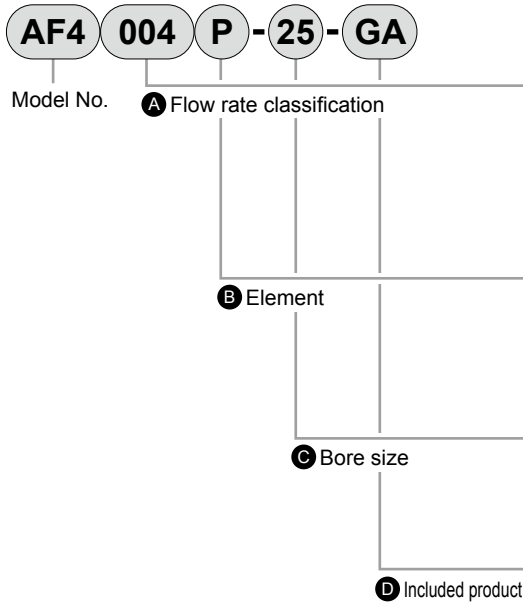
Item	AF4004□-25	AF4007□-40	AF4010□-40	AF4013□-50	AF4020□-50
Processing air flow rate m ³ /min(ANR)	3.7	6.2	10	13	18.8
Working fluid	Compressed air				
Working pressure MPa	0.1 (≈15 psi, 1 bar) to 1.0 (≈150 psi, 10 bar)				
Ambient temperature °C	5 (41°F) to 60 (140°F)				
Proof pressure MPa	1.5 (≈220 psi, 15 bar)				
Port size Rc	1	1 1/2		2	
Weight kg	3	3.3	3.7	4.3	6
Element life indicator	Standard only for M type				
Drain discharger	DT3000-15-W (Excluding X type)				
Drain outlet bore size	Directly connecting bore size ø5.7 to ø6 nylon tube (Excluding X type)				

□ indicates series name. 1 MPa = 10 bar, °F = 9/5 °C + 32

Item	P type		S type		M type	X type
Performance	Processing air Conditions	Inlet air pressure MPa	0.7 (≈100 psi, 7 bar)			
		Inlet air temperature °C	32 (89.6°F)			
		Inlet air dew point °C	-	-	No water infiltration/droplet forming	Pressure dew point 10°C
		Inlet oil content mg/m ³	-	-	3	0.01
	Filtration rating μm		5	1	0.01	Suction by activated carbon fibers
	Secondary side oil concentration mg/m ³		-	-	0.01	0.003
	Water separation efficiency %		99	-	-	-
	Pressure drop	Initial MPa	0.005 (≈0.73 psi)	0.005 (≈0.73 psi)	0.01 (≈1.5 psi)	0.009 (≈1.3 psi)
		Element MPa	0.02 (≈3 psi)	0.07 (≈10 psi)	0.07 (≈10 psi)	-
	renew time	Duration of use	8000 hours or 1 year			

- *1: Processing air flow rate is the atmospheric pressure conversion value where the inlet pressure is 0.7 MPa.
 *2: ANR indicates conditions of 20°C atmospheric pressure and relative humidity 65%.
 *3: The secondary side oil concentration is the value when the inlet air temperature is 20°C.
 *4: The drain discharger is an NO. Air is purged with initial drainage until pressure reaches 0.1 MPa.
 *5: The P/S/M type elements must be replaced when the pressure drops or the service life is reached, whichever comes first.
 *6: Replace the X type element when the service life is reached or when the deodorizing effect is lost.
 *7: P type is not available in AF4020.

How to order



Code	Description
Ⓐ Flow rate classification	
004	3.7 m ³ /min(ANR)
007	6.2 m ³ /min(ANR)
010	10 m ³ /min(ANR)
013	13 m ³ /min(ANR)
020	18.8 m ³ /min (ANR) (S, M, or X only)
Ⓑ Element	
P	P type (solid/water removing filter)
S	S type (solid removing filter)
M	M type (oil mist removing filter)
X	X type (deodorizing filter)
Ⓒ Bore size	
25	Rc1
40	Rc1 1/2
50	Rc2
Ⓓ Included product	
GA	Differential pressure gauge (GA400-8-P02) enclosed
EL	Element life indicator attached

(An element life indicator is mounted on the M type as standard.)

Note on model No. selection

The required performance may not be attained if using at a level less than the selected pressure. Always select the model No. with the working pressure.

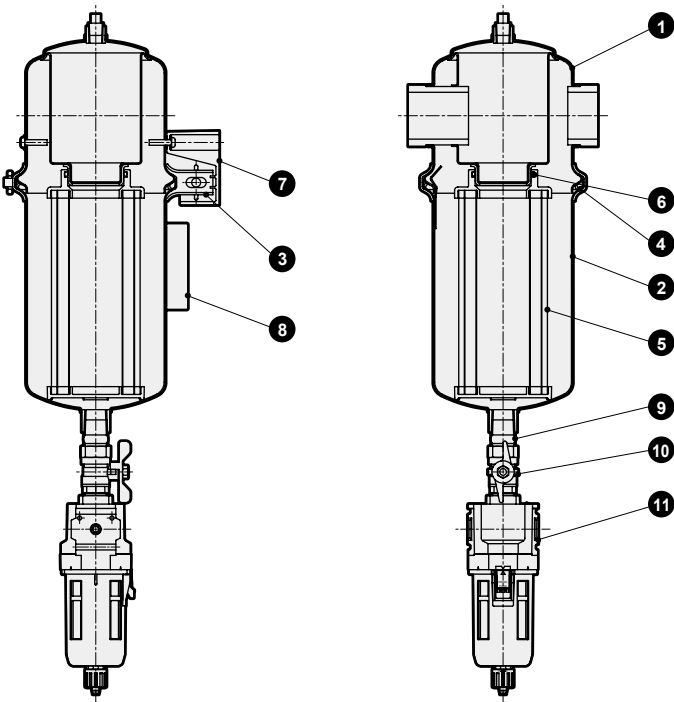
Flow rate compensation coefficient

Pressure (MPa)	Auxiliary coefficient
0.2	0.36
0.3	0.5
0.4	0.62
0.5	0.75
0.6	0.88
0.7	1.0
0.8	1.13
0.9	1.25
1.0	1.38

If the inlet pressure is not 0.7 MPa, multiply the coefficient above with the processing air flow rate.

Internal structure and parts list

● P, S, M types

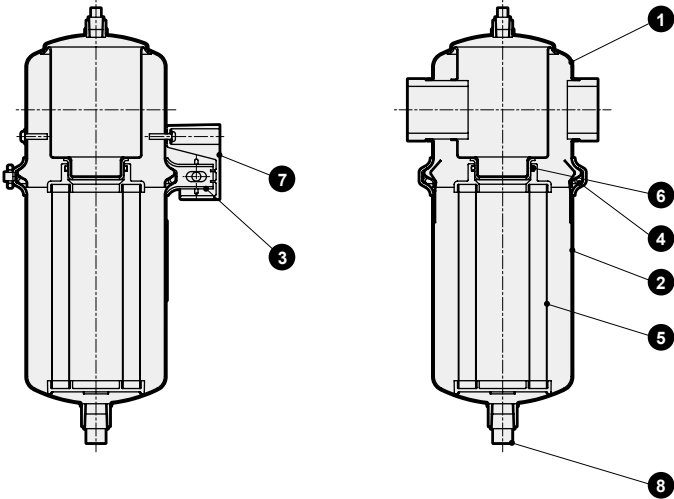


Parts list

No.	Part name	Material
1	Cover	SUS304
2	Bowl	SUS304
3	Band	SUS304
4	O-ring	NBR
5	Element	
6	O-ring	NBR
7	Band cover	Polyamide
8	Element life indicator	
9	Nipple	SUS304
10	Ball valve	C3771, PTFE, SUS, etc.
11	Drain discharger	DT3000-15-W

Drain discharger and ball valve are attached.
The element life indicator is mounted only on the M type.

● X type



Parts list

No.	Part name	Material
1	Cover	SUS304
2	Bowl	SUS304
3	Band	SUS304
4	O-ring	NBR
5	Element	
6	O-ring	NBR
7	Band cover	Polyamide
8	Plug	SUS304

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac-
remove Filt
Film
Resist FR
Oil-ProhR
Med
Press FR
No Cu/
PTFE FRL
Outdrs FRL
Adapter
Joiner
Press
Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PresCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRISens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending

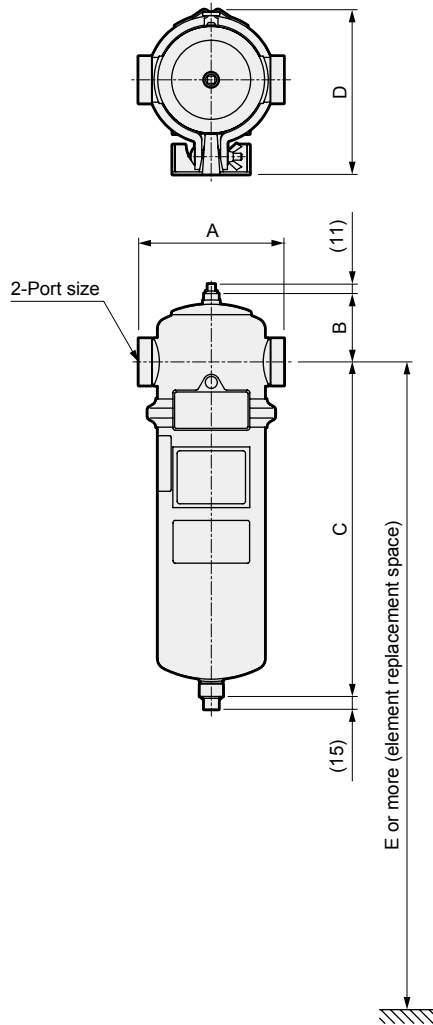
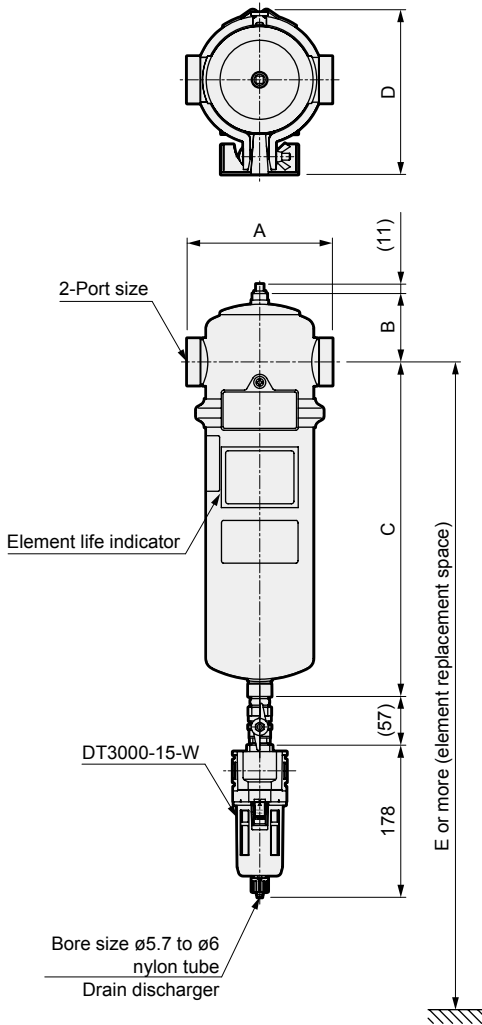
AF4000 Series



Dimensions

● AF4004P/S/M to AF4020S/M

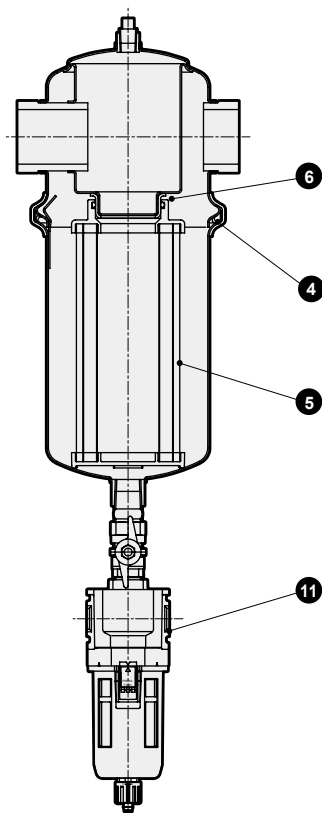
● AF4004X to AF4020X



Model No.	Port size	A	B	C	D	E
AF4004P/S/M/X-25	Rc1	160	72.5	209	192.7	570
AF4007P/S/M/X-40	Rc1 1/2	170	80	283.5	192.7	730
AF4010P/S/M/X-40	Rc1 1/2	170	80	391.5	192.7	940
AF4013P/S/M/X-50	Rc2	173	86.5	478	192.7	1100
AF4020S/M/X-50	Rc2	173	86.5	635	192.7	1420

The element life indicator is mounted only on the M type.
E dimensions indicate the maintenance space.
Drain discharger and ball valve are attached.

Repair parts list



Repair parts list

Repair parts kit No.	O-ring ④	Drain discharger ⑪
Model		
AF4004*-25	AF4004P-QFL-391648	DT3000-15-W
AF4007*-40		
AF4010*-40		
AF4013*-50		
AF4020*-50		

The P/S/M/X Series name is indicated with *.
The drain discharger cannot be mounted on the X Series.

Element

Repair parts kit No.	P type element	S type element	M type element	X type element
Model				
AF4004*-25	AF4004P-KFL-391451	AF4004S-KFL-391461	AF4004M-KFL-391471	AF4004X-KFL-391481
AF4007*-40	AF4007P-KFL-391452	AF4007S-KFL-391462	AF4007M-KFL-391472	AF4007X-KFL-391482
AF4010*-40	AF4010P-KFL-391453	AF4010S-KFL-391463	AF4010M-KFL-391473	AF4010X-KFL-391483
AF4013*-50	AF4013P-KFL-391454	AF4013S-KFL-391464	AF4013M-KFL-391474	AF4013X-KFL-391484
AF4020*-50	-	AF4020S-KFL-391465	AF4020M-KFL-391475	AF4020X-KFL-391485

The P/S/M/X Series name is indicated with *.
The element kit consists of an O-ring ⑥ and element ⑤.
The O-ring ⑥, element ⑤ and battery kit applies only for the M type element.

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRISens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending