

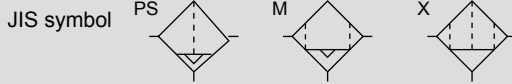


Medium main line stainless steel filter

# AF4000P/S/M/X Series

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

● Processing air flow rate: 3.7 to 18.8 m<sup>3</sup>/min (ANR) (at 0.7 MPa)



## Specifications

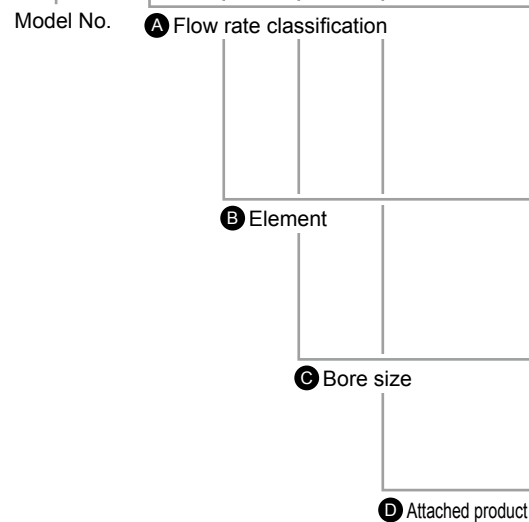
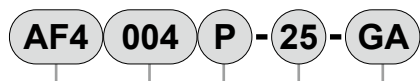
Descriptions	AF4004□-25	AF4007□-40	AF4010□-40	AF4013□-50	AF4020□-50
Processing air flow rate m <sup>3</sup> /min(ANR)	3.7	6.2	10	13	18.8
Working fluid	Compressed air				
Working pressure MPa	0.1 (≈15 psi, 1 bar) to 1.0 (≈150 psi, 10 bar)				
Ambient temperature °C	5 (41°F) to 60 (140°F)				
Proof pressure 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 φ5.7 to φ6 nylon tube (Excluding X type)				

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

Descriptions		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 <sup>3</sup>	-	-	3	0.01
	Filtration rating μm	5	1	0.01	Suction by activated carbon fibers	
	Secondary side oil concentration mg/m <sup>3</sup>	-	-	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)	-
	Element 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	Content
<b>A Flow rate classification</b>	
004	3.7 m <sup>3</sup> /min(ANR)
007	6.2 m <sup>3</sup> /min(ANR)
010	10 m <sup>3</sup> /min(ANR)
013	13 m <sup>3</sup> /min(ANR)
020	18.8 m <sup>3</sup> /min (ANR) (S, M, or X only)
<b>B Element</b>	
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)
<b>C Bore size</b>	
25	Rc1
40	Rc1 1/2
50	Rc2
<b>D Attached product</b>	
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.

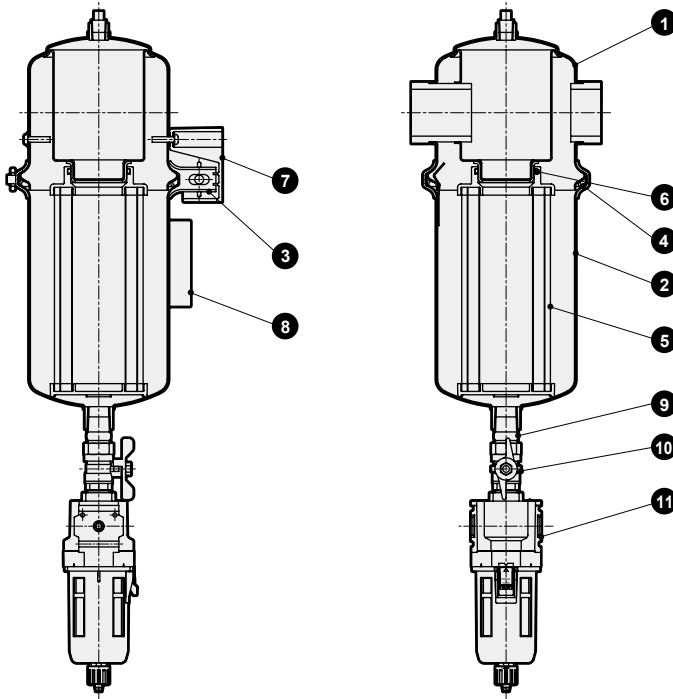
### Flow rate compensation coefficient

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

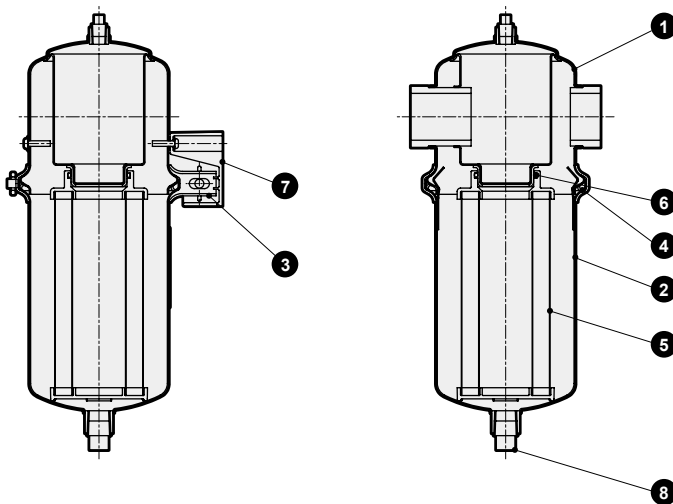


#### Parts list

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 (Filtr)  
R (Reg)  
L (Lub)  
PresSW  
Shutoff  
SlowStart  
FimResistFR  
Oil-ProhR  
MedPresFR  
No Cu/  
PTFE FRL  
Outdrs FR  
F.R.L  
(Related)  
CompFRL  
LgFRL  
PrescR  
VacF/R  
Clean FR  
ElecPneuR  
AirBoost  
SpdContr  
Silncr  
CheckV/  
other  
Jnt/tube  
AirUnt  
PresCompn  
Mech/  
ElecPresSw  
ContactSW  
AirSens  
PresSW  
Cool  
AirFloSens/  
Contr  
WaterRtSens  
TotAirSys  
(Total Air)  
TotAirSys  
(Gamma)  
RefrDry  
DesicDry  
HiPolymDry  
MainFiltr  
Dischrg  
etc  
Ending

# AF4000 Series

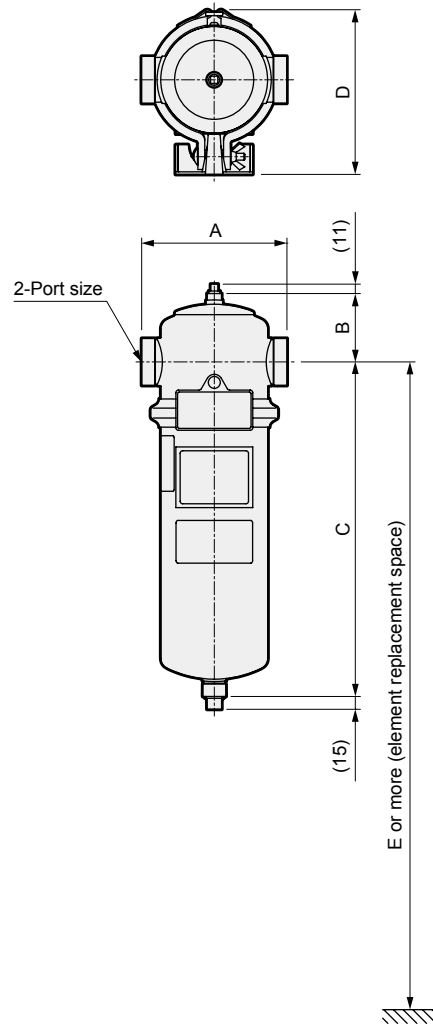
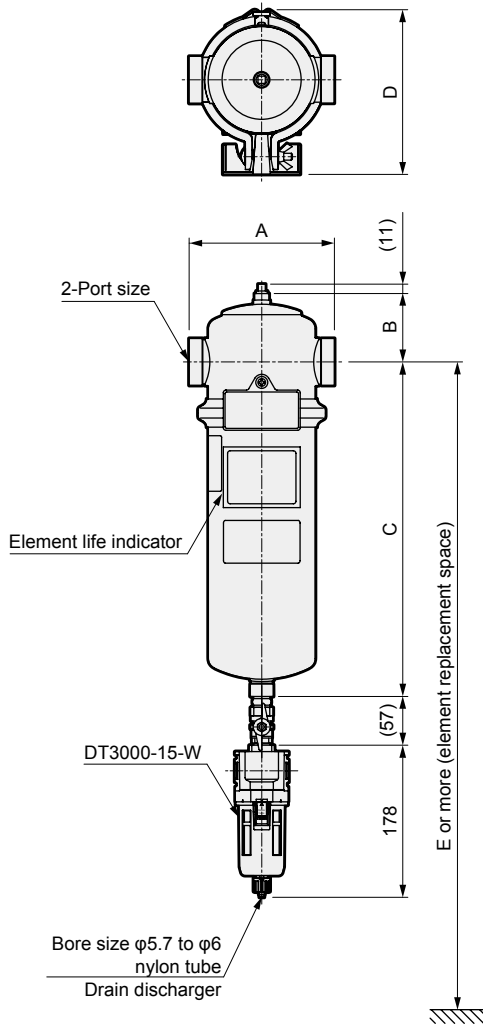
## Dimensions



- F.R.L
- F (Filtr)
- R (Reg)
- L (Lub)
- PresSW
- Shutoff
- SlowStart
- FimResistFR
- Oil-ProhR
- MedPresFR
- No Cu/  
PTFE FRL
- Outdrs FR
- F.R.L  
(Related)
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/  
other
- Jnt/tube
- AirUnt
- PrecsCompn
- Mech/  
ElecPresSw
- ContactSW
- AirSens
- PresSW  
Cool
- AirFloSens/  
Contr
- WaterRtSens
- TotAirSys  
(Total Air)
- TotAirSys  
(Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr**
- Dischrg  
etc
- Ending

● AF4004P/S/M to AF4020S/M

● AF4004X to AF4020X



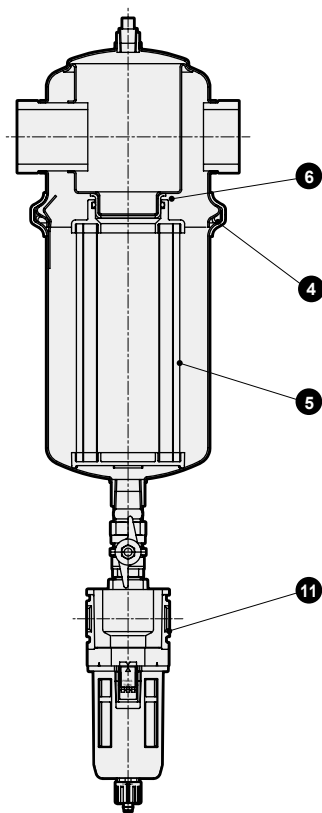
Model No.	Port size	A	B	C	D	E
AF4004P/S/M/X-25	Rc1	160	72.5	209	192.7	570
AF4007P/S/M/X-40	Rc1 1/2	170	80	283.5	192.7	730
AF4010P/S/M/X-40	Rc1 1/2	170	80	391.5	192.7	940
AF4013P/S/M/X-50	Rc2	173	86.5	478	192.7	1100
AF4020S/M/X-50	Rc2	173	86.5	635	192.7	1420

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. Model	O-ring ④	Drain discharger ⑪
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. Model	P type element	S type element	M type element	X type element
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 (Filtr)
R (Reg)
L (Lub)
PresSW
Shutoff
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FimResistFR
Oil-ProhR
MedPresFR
No Cu/ PTFE FRL
Outdrs FR
F.R.L (Related)
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
SpdContr
Silncr
CheckV/ other
Jnt/tube
AirUnt
PrecsCompn
Mech/ ElecPresSw
ContactSW
AirSens
PresSW Cool
AirFloSens/ Contr
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending