

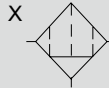
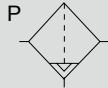


Medium main line filter

AF2 Series

Ideal for removal of solids, oil removing and deodorizing applications.
Processing air flow rate: 4.95 to 24.1 m³/min (ANR) (at 0.7 MPa)

JIS symbol



Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Item	AF2-05 □ 25A	AF2-08 □ 32A	AF2-11 □ 40A	AF2-13 □ 50A	AF2-20 □ 50A	AF2-24 □ 65A
Processing air flow rate m ³ /min (ANR)	4.95	7.93	11.3	12.8	19.8	24.1
Working fluid	Compressed air					
Working pressure MPa	0.1 (≈15 psi, 1 bar) to 1.0 (≈145 psi, 10 bar)					
Proof pressure MPa	1.5 (≈217 psi, 15 bar)					
Port size Rc	1	1 1/4	1 1/2	2		2 1/2
Weight kg	2.2	6	5.9	5.7	6.9	13
Pop-up indicator	Standard equipment (Excluding X type)					
Drain discharger	Integrated (NO: with exhaust when not pressurized. Excluding X type)					
Drain outlet bore size Rc	1/8 (Excluding X type)					

□ indicates type name.

Item	P type	M type	X type
Working ambient temperature °C	5 (41°F) to 60 (140°F)		5 (41°F) to 50 (122°F)
Filtration μm	1	0.01	Suction by activated carbon
Secondary side oil concentration mg/m ³	0.3	0.01	0.003
Initial pressure drop MPa	0.0055 (≈0 psi, 0 bar)	0.0085 (≈1 psi, 0 bar)	0.0115 (≈1 psi, 0 bar)
Regular pressure drop MPa	0.0125 (≈1 psi, 0 bar)	0.0125 (≈1 psi, 0 bar)	—

- *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 21°C.
- *4. The drain discharger is NO. Air is purged with initial drainage until pressure reaches 0.1 MPa.
- *5. The P/M elements must be replaced after one year or when the pop-up indicator turns red, whichever is faster.
- *6. Replace the X element after 1000 hours (at 21°C) or when the deodorizing effect is lost.
- *7. The X type has a ball valve (G1/4) at the discharge outlet.
- *8. The initial pressure drop is 0.008 MPa for AF2-20P50A and 0.011 MPa for AF2-20M50A.

How to order

AF2 - 05 P 25A

A Flow rate classification

B Element

C Bore size

Code	Description
A Flow rate classification	
05	4.95 m ³ /min (ANR)
08	7.93 m ³ /min (ANR)
11	11.3 m ³ /min (ANR)
13	12.8 m ³ /min (ANR)
20	19.8 m ³ /min (ANR)
24	24.1 m ³ /min (ANR)
B Element	
P	P type (solid/oil removing filter)
M	M type (high-performance solid/oil removing filter)
X	X type (odor removing filter)
C Bore size	
25A	Rc1
32A	Rc1 1/4
40A	Rc1 1/2
50A	Rc2
65A	Rc2 1/2

⚠ Note on model No. selection

The unit's full performance may not be obtained if used at less than the selected pressure. Be sure to select the model No. with your working pressure.

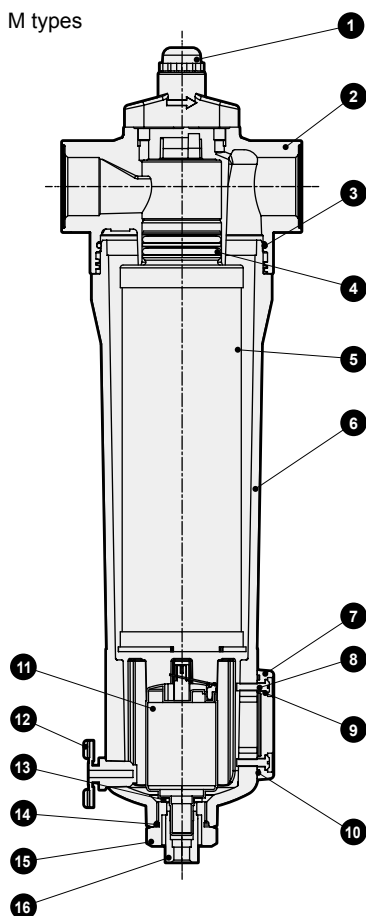
Flow rate compensation coefficient

Pressure (MPa)	Compensation coefficient
0.1	0.38
0.2	0.53
0.3	0.65
0.4	0.76
0.5	0.84
0.6	0.92
0.7	1.0
0.8	1.07
0.9	1.13
1.0	1.19

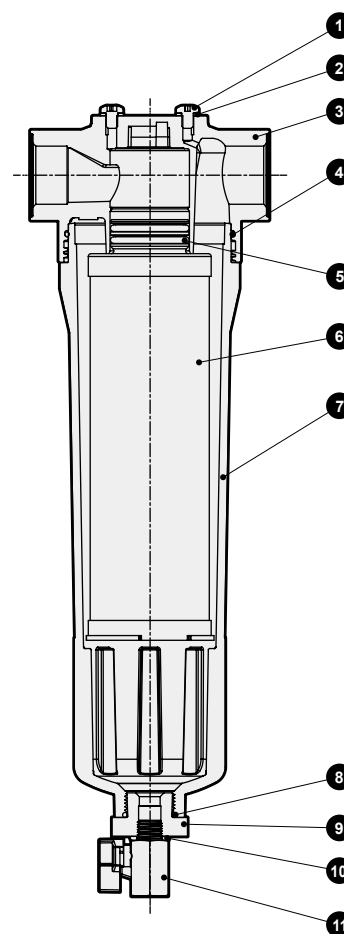
If working pressure is other than 0.7 MPa, multiply processing air flow rate by the above coefficient.

Internal structure and parts list

● P, M types



● X type



Parts list

No.	Part name	Material
1	Pop-up indicator	Polyamide resin
2	Cover	Aluminum
3	O-ring	Nitrile rubber
4	O-ring	Nitrile rubber
5	Element	
6	Bowl	Aluminum
7	Observation glass	Polyamide resin
8	Small machine screw	Steel
9	Packing	Polyamide resin
10	Packing	Nitrile rubber
11	Auto-drain	
12	Valve	Copper alloy
13	Packing	Nitrile rubber
14	O-ring	Nitrile rubber
15	Drain adapter	Aluminum
16	Adapter nut	Copper alloy

Parts list

No.	Part name	Material
1	Small machine screw	Steel
2	Seal washer	Polyamide resin, Nitrile rubber
3	Cover	Aluminum
4	O-ring	Nitrile rubber
5	O-ring	Nitrile rubber
6	Element	
7	Bowl	Aluminum
8	O-ring	Nitrile rubber
9	Drain adapter	Aluminum
10	Seal washer	Steel, nitrile rubber
11	Valve	Copper alloy

Consumable parts list

Consumable parts kits model No.	O-ring (3) (4) (14) (For X type: (4) (5) (8))	Auto-drain (11) (13) (16)
Model		
AF2-05 □ 25A	AF2-05K-FLA12532	AF2-DRN-FLA14439
AF2-08 □ 32A	AF2-08K-FLA12533	
AF2-11 □ 40A		
AF2-13 □ 50A		
AF2-20 □ 50A		
AF2-24 □ 65A	AF2-24K-FLA12534	

The P/M/X type name is indicated on the □.

The O-ring kit consists of two O-rings for elements, one for the bowl, and one for the nut.

The auto-drain kit consists of a float section, hexagon nut and packing.

The drain discharger cannot be mounted on the X type.

Element kit

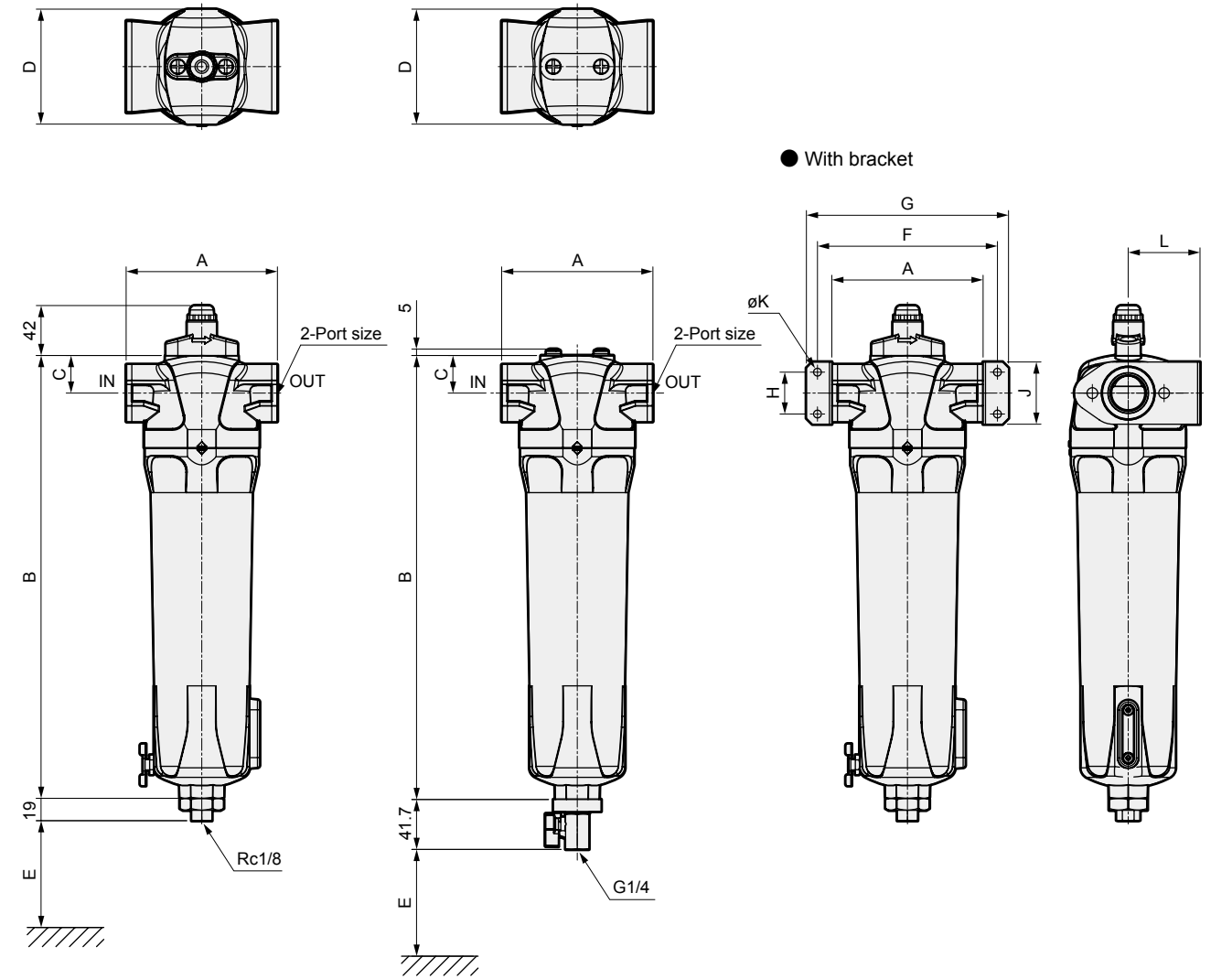
Consumable parts kit model No.	P type Element (3) (4) (5)	M type Element (3) (4) (5)	X type Element (4) (5) (6)
Model			
AF2-05 □ 25A	AF2-05P-FLA09029	AF2-05M-FLA09030	AF2-05X-FLA09031
AF2-08 □ 32A	AF2-08P-FLA09032	AF2-08M-FLA09033	AF2-08X-FLA09034
AF2-11 □ 40A	AF2-08P-FLA09032	AF2-08M-FLA09033	AF2-08X-FLA09034
AF2-13 □ 50A	AF2-08P-FLA09032	AF2-08M-FLA09033	AF2-08X-FLA09034
AF2-20 □ 50A	AF2-20P-FLA09035	AF2-20M-FLA09036	AF2-20X-FLA09037
AF2-24 □ 65A	AF2-24P-FLA09038	AF2-24M-FLA09039	AF2-24X-FLA09040

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
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

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
ElecPneR
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRtSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending

Dimensions

- AF2-05P25A to AF2-24P65A
AF2-05M25A to AF2-24M65A
- AF2-05X25A to AF2-24X65A



Model No.	Port size	A	B	C	D	E	F	G	H	J	K	L
AF2-05P25A/05M25A	Rc1	127	370	31.4	96	80	151	169	36	52	6.5	60
AF2-05X25A	Rc1	127	370	31.4	96	80	151	169	36	52	6.5	60
AF2-08P32A/08M32A	Rc1 1/4	170	508	53	133	100	206	230	65	95	9	90
AF2-08X32A	Rc1 1/4	170	508	53	133	100	206	230	65	95	9	90
AF2-11P40A/11M40A	Rc1 1/2	170	508	53	133	100	206	230	65	95	9	90
AF2-11X40A	Rc1 1/2	170	508	53	133	100	206	230	65	95	9	90
AF2-13P50A/13M50A	Rc2	170	508	53	133	100	206	230	65	95	9	90
AF2-13X50A	Rc2	170	508	53	133	100	206	230	65	95	9	90
AF2-20P50A/20M50A	Rc2	170	708	53	133	100	206	230	65	95	9	90
AF2-20X50A	Rc2	170	708	53	133	100	206	230	65	95	9	90
AF2-24P65A/24M65A	Rc2 1/2	219	735	69	185	100	257	283	95	125	11	118
AF2-24X65A	Rc2 1/2	219	735	69	185	100	257	283	95	125	11	118

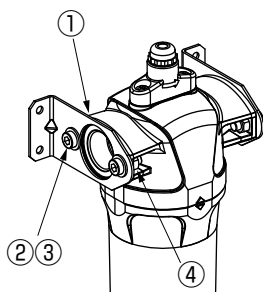
The X type does not have a pop-up indicator.

The E dimension shows the minimum dimension required to remove the element. Allow for the auto-drain piping dimensions when actually laying the pipe.

Configurations table

Bracket kit

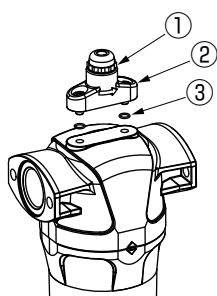
Model	Model No.
AF2-05□	AF2-05M-FLA12524
AF2-08□ to AF2-20□	AF2-08M-FLA12525
AF2-24□	AF2-24M-FLA12526



No.	Part name	Quantity
(1)	Mounting bracket	2
(2)	Hexagon socket head cap screw	4
(3)	Flat washer	4
(4)	Hexagon nut	4

Pop-up indicator

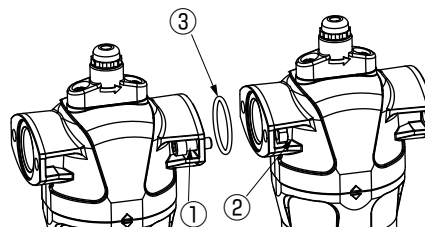
Model	Model No.
AF2-05□ to AF2-24□	AF2-DPU-FLA12527



No.	Part name	Quantity
(1)	Pop-up indicator	1
(2)	Mounting screw	2
(3)	O-ring	2

Modular kit

Model	Model No.
AF2-05□	AF2-05C-FLA12521
AF2-08□ to AF2-20□	AF2-08C-FLA12522
AF2-24□	AF2-24C-FLA12523

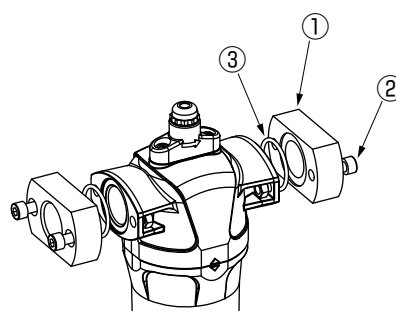


No.	Part name	Quantity
(1)	Hexagon socket head cap screw	2
(2)	Hexagon nut	2
(3)	O-ring	1
Accessory	Allen wrench (mounting tool)	1

Piping adapter

Made-to-order product

Model		Model No.
AF2-05□	For Rc1	AF2-05A-FLA15316
	For G1	AF2-05A-FLA15317
	For NPT1	AF2-05A-FLA15318
AF2-08□	For Rc1 1/4	AF2-08A-FLA15319
	For G1 1/4	AF2-08A-FLA15320
	For NPT1 1/4	AF2-08A-FLA15321
AF2-11□	For Rc1 1/2	AF2-11A-FLA15322
	For G1 1/2	AF2-11A-FLA15323
	For NPT1 1/2	AF2-11A-FLA15324
AF2-13□, AF2-20□	For Rc2	AF2-13A-FLA15325
	For G2	AF2-13A-FLA15326
	For NPT2	AF2-13A-FLA15327
AF2-24□	For Rc2 1/2	AF2-24A-FLA15328
	For G2 1/2	AF2-24A-FLA15329
	For NPT2 1/2	AF2-24A-FLA15330



No.	Part name	Quantity
(1)	Piping adapter	2
(2)	Hexagon socket head cap screw	4
(3)	O-ring	2
(4)	Hexagon nut	4

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