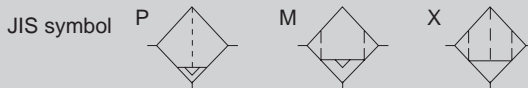




Medium main line filter

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)



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



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.

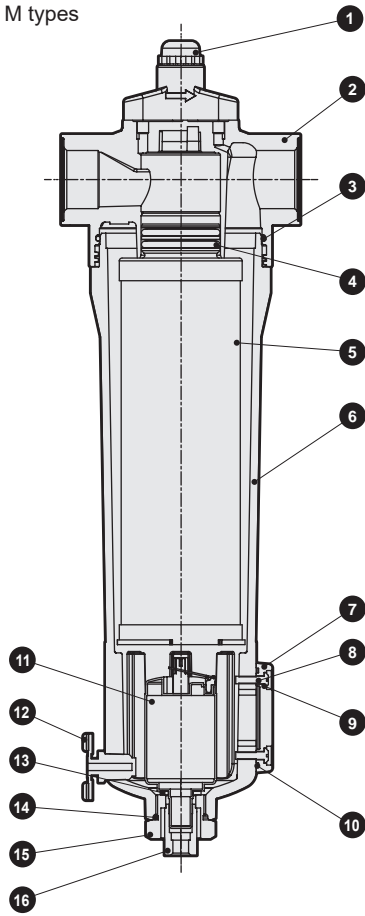
Flow rate compensation coefficient

| 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 |

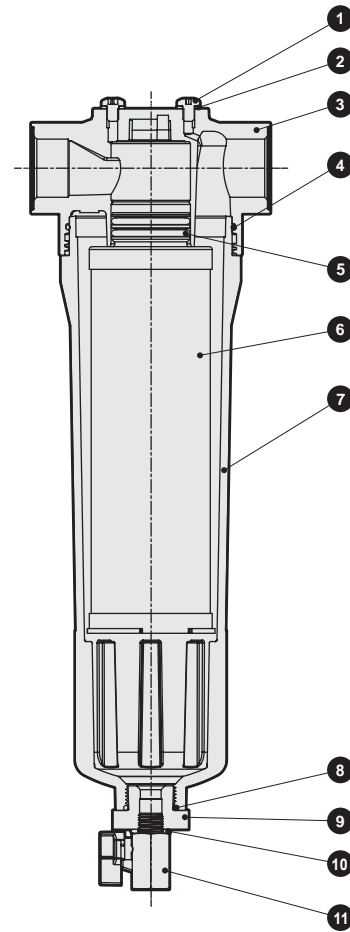
If working pressure is other than 0.7 MPa, multiply processing air flow rate by the above coefficient.

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 |

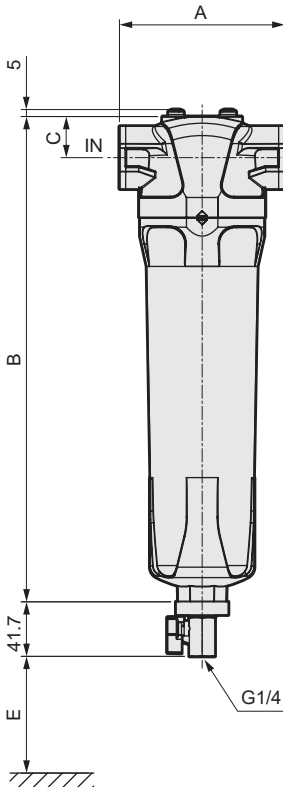
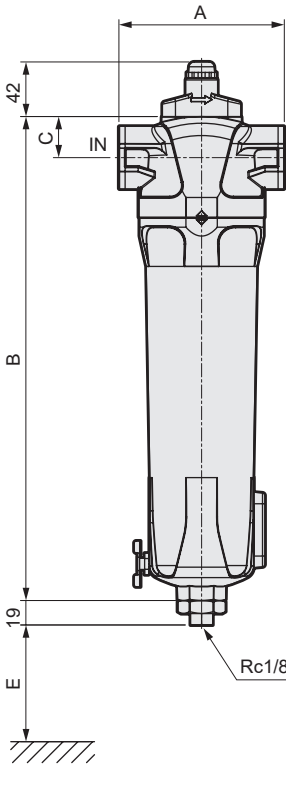
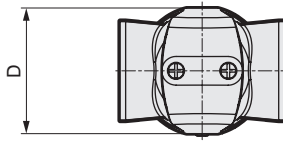
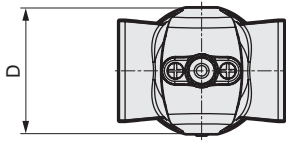
| |
|----------------------------|
| F.R.L. |
| F.R. |
| F (Filtr) |
| R (Reg) |
| L (Lub) |
| Drain Separ |
| Mech Press SW |
| Res press exh valve |
| SlowStart |
| Anti-bac/Bac-remove Filtr |
| Film Resist FR |
| Oil-ProhR |
| Med Press FR |
| No Cu/ PTFE FRL |
| Outdrs FRL |
| Adapter Joiner Press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

AF2 Series

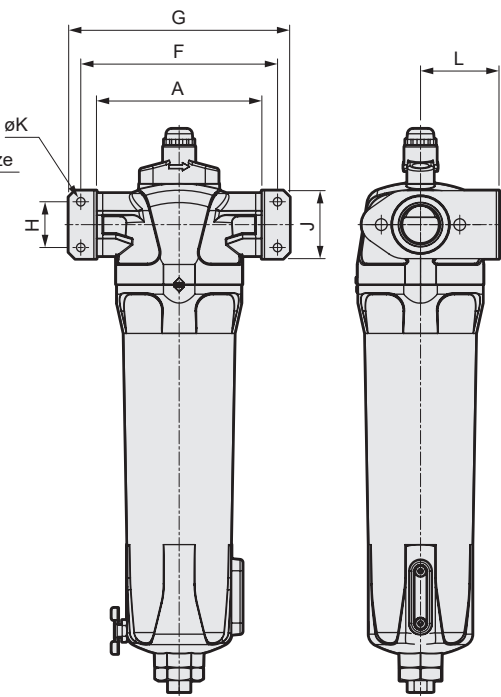
F.R.L. Dimensions

- F.R. ●AF2-05P25A to AF2-24P65A ●AF2-05X25A to AF2-24X65A
 F (Filtr) AF2-05M25A to AF2-24M65A

- 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
- DesiccDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending



●With bracket



| 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 |

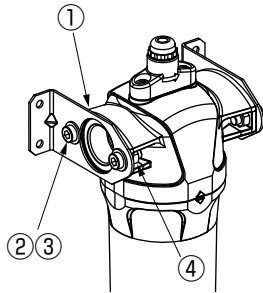
The X type does not have a pop-up indicator.

The E dimension shows the minimum dimension required to remove the element. When actually installing the auto-drain, consider the piping dimensions and maintainability of the auto-drain and set dimensions with sufficient margin.

Configurations table

Bracket kit

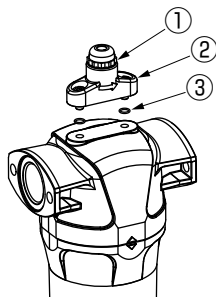
| Model | Model No. |
|--------------------|------------------|
| AF2-05□ | AF2-05M-FLA12524 |
| AF2-08□ to AF2-20□ | AF2-08M-FLA12525 |
| AF2-24□ | AF2-24M-FLA12526 |



| 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

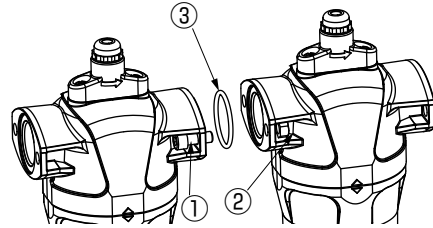
| Model | Model No. |
|--------------------|------------------|
| AF2-05□ to AF2-24□ | AF2-DPU-FLA12527 |



| 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 |

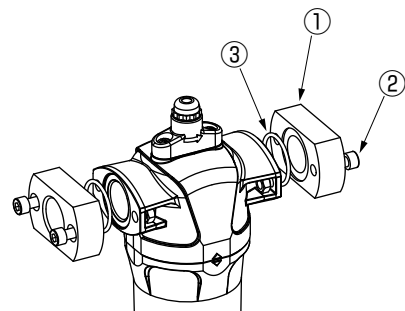


| No. | Part name | Quantity |
|-----------|-------------------------------|----------|
| (1) | Hexagon socket head cap screw | 2 |
| (2) | Hexagon nut | 2 |
| (3) | O-ring | 1 |
| Accessory | Allen wrench (mounting tool) | 1 |

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
- PrescR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrescCompn
- 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