Series AF30 to AF60 Air Filter

How to Order

AF ☐ –F 03-6-B



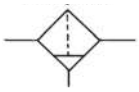
Body size

30	40	50	60

Port size

Symbol	Port size	Body size 30	40	50	60
01	1/8	—	—	—	—
02	1/4	☆	☆	—	—
03	3/8	—	☆	—	—
04	1/2	—	☆	—	—
06	3/4	—	—	☆	—
10	1	—	—	—	☆

JIS Symbol



Standard Specifications

Model	AF10-A	AF20-A	AF30-A	AF40-A	AF40-06-A	AF50-A	AF60-A
Port size	M5 x 0.8	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1	1
Fluid	Air						
Ambient and fluid temperature	23 to 140 psi (–5 to 60°C) (with no freezing)						
Proof pressure	218 psi (1.5 MPa)						
Maximum operating pressure	145 psi (1.0 MPa)						
Nominal filtration rating	5 μm						
Drain capacity (cm³)	2.5	8	25	45			
Bowl material	Polycarbonate						
Bowl guard	—	Semi-standard (Steel)	Standard (Polycarbonate)				
Weight (kg)	0.06	0.08	0.18	0.36	0.41	0.87	1.00

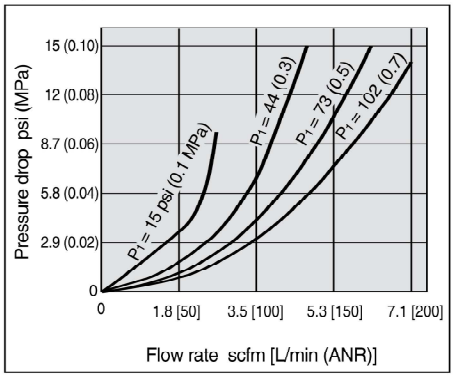
Options/Part No.

Optional specifications	Model AF10-A	AF20-A	AF30-A	AF40-A	AF40-06-A	AF50-A	AF60-A
Bracket assembly Note)	—	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF52P-050AS	

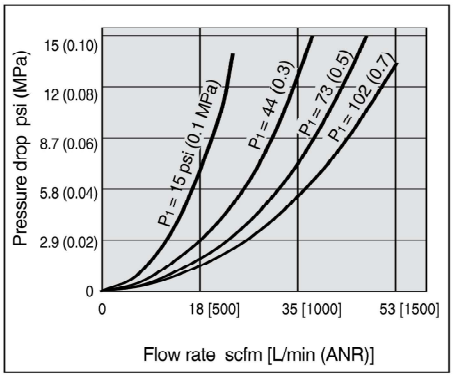
Note) Assembly of a bracket and 2 mounting screws

Flow-rate Characteristics (Representative values)

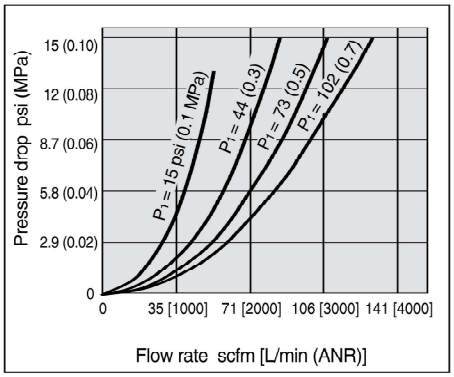
AF10-A M5



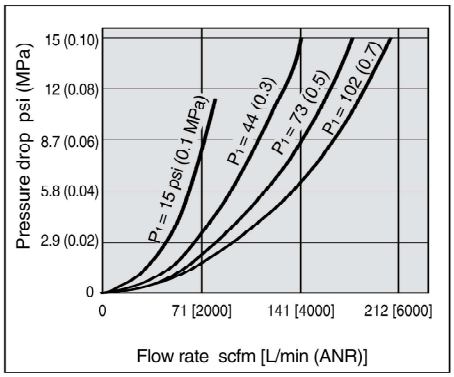
AF20-A Rc1/4



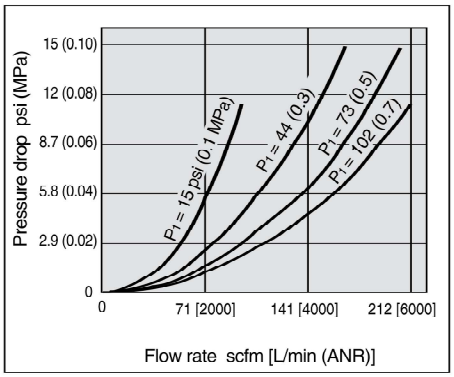
AF30-A Rc3/8



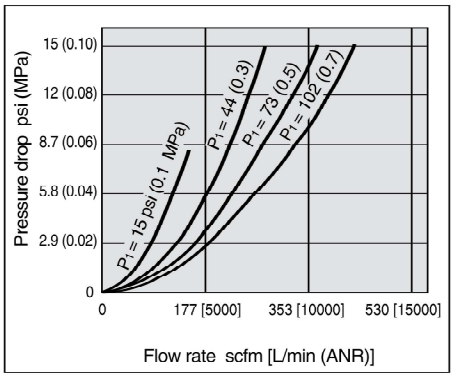
AF40-A Rc1/2



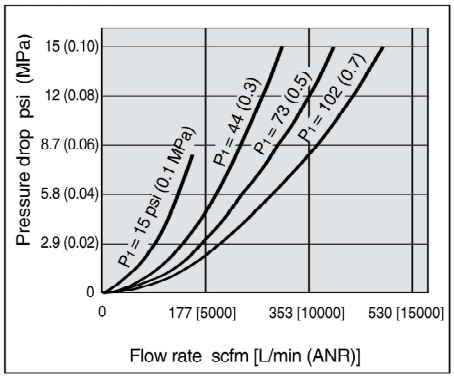
AF40-06-A Rc3/4



AF50-A Rc1



AF60-A Rc1



Series AF800/900 Large Flow Air Filter

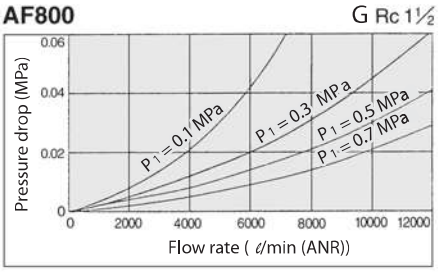


Standard Specifications

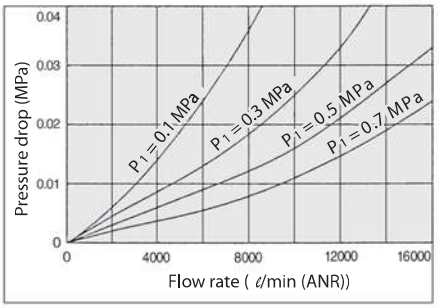
Model	AF800	AF900
Port size	1 1/4 1 1/2	2
Proof pressure	1.5 MPa	
Maximum operating pressure	1.0 MPa	
Ambient and fluid temperature	–5 to 60 °C (No freezing)	
Filtration	Standard specifications: 5 μm	
Bowl material	Polycarbonate	
Bowl capacity (cm 3)	180	
Weight (kg)	3.15	5.45
Accessory (Standard)	Bowl guard	

Flow Characteristics

AF800 G Rc 1 1/2



AF900 G Rc 2



How to Order

AF **8** **00** —N **12**

Body size	
8	1 1/2
9	2

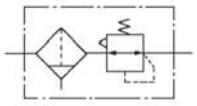
Port size	
12	1 1/4
14	1 1/2
20	2

Series AW40 Filter Regulator

Integrated filter and regulator units save space and require less piping.

Direct operated, relieving type

JIS Symbol



How to Order

AW40 –F04-6-B

Standard Specifications

Model			AW40	
Port sizes			F1/2	
Fluid	Air			
Proof pressure	1.5 MPa			
Maximum operating pressure	1.0 MPa			
Set pressure range		0.05 to 0.85 MPa		
Pressure gauge port size (1)			G 1/4	
Relief pressure	Set pressure + 0.05 MPa (3) (at relief flow rate of 0.1 ℓ/min (ANR))			
Ambient and fluid temperature	–5 to 60°C (With no freezing)			
Nominal filtration rating	5 μm			
Drain capacity (cm^3)			45	
Bowl material	Nylon			
Bowl guard			Standard	
Construction	Relieving type			
Weight (kg)			0.72	

⚠ Precautions

Selection

⚠ Warning

1. Residual pressure release (outlet pressure release) is not completed by releasing inlet pressure. To release residual pressure, use a filter regulator with a back flow mechanism.

Maintenance

⚠ Warning

1. Replace the element every 2 years or when the pressure drop becomes 0.1 MPa, whichever comes first, to prevent damage to the element.

Mounting & Adjustment

⚠ Warning

1. Set the regulator while checking the displayed values of the inlet and outlet pressure gauges. Turning the knob excessively can cause damage to the internal parts.
2. The pressure gauge indicated with regulators for 0.02 to 0.2 MPa setting is for 0.2 MPa use only. Exceeding 0.2 MPa of pressure can damage the gauge.
3. Do not use tools on the pressure regulator knob as this may cause damage. It must be operated manually.

⚠ Caution

1. Be sure to unlock the knob before adjusting the pressure and lock it after setting the pressure.
   Failure to follow this procedure can cause damage to the knob and the outlet pressure may fluctuate.
   - Pull the pressure regulator knob to unlock. (You can visually verify this with the “orange mark” that appears in the gap.)
     - Push the pressure regulator knob to lock. When the knob is not easily locked, turn it left and right a little and then push it (when the knob is locked, the “orange mark” will disappear).

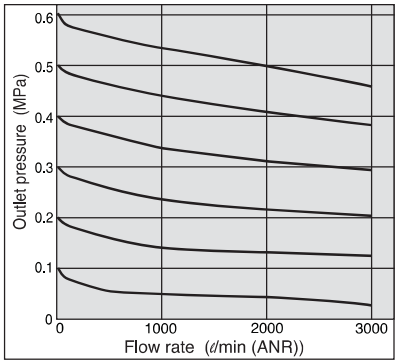


Filter Regulator Series AW40

Flow Characteristics (Representative values)

Condition: Inlet pressure 0.7 MPa

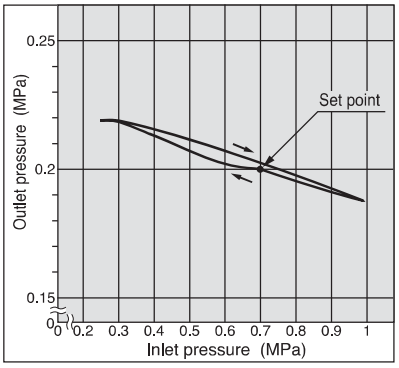
AW40 G1/2



Pressure Characteristics (Representative value)

Conditions: Inlet pressure 0.7 MPa; Outlet pressure 0.2 MPa; Flow rate 20 ℓ/min (ANR)

AW40



Series AW40K/60K Filter Regulator w/ Back Flow Mechanism

How to Order

AW 40 K – F 04 -6-B

- Filter regulator
- Body size: 40, 60
- Thread type: F (2), G
- Port size

Symbol	Port size	Body size 40
04	1/2	●
06	3/4	●

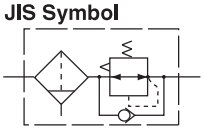
Symbol	Description	Applicable model
Nil	—	—
6	NYLON BOWL	AW20K to 40K

Standard Specifications

Model	AW40K	AW40K-06
Port sizes	G 1/4, 3/8, 1/2	G 3/4
Fluid	Air	
Proof pressure	1.5 MPa	
Maximum operating pressure	1.0 MPa	
Set pressure range (1)	0.05 to 0.85 MPa	
Pressure gauge port size (2)	G 1/4	G 1/4
Relief pressure	Set pressure + 0.05 MPa (at relief flow rate of 0.1 ℓ/min (ANR))	
Ambient and fluid temperature	–5 to 60 C (With no freezing) °	
Nominal filtration rating	5 μm	
Drain capacity (cm^3)	45	45
Bowl material	Nylon	
Bowl guard	Standard	
Construction	Relieving type	
Weight (kg)	0.72	0.75

Note 1) Set the inlet pressure 0.05 MPa or higher than the set pressure.
Note 2) Pressure gauge connection threads are not required for regulators with a square embedded type pressure gauge (AW20K to AW40K).

JIS Symbol



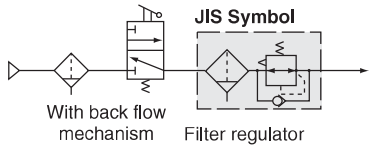
Accessory Part No.

Accessory \ Applicable model	AW40K	AW40K-06
Set nut	AR40P-260S	AR40P-260S

Note 1) Assembly includes a bracket and set nuts.

Circuit Diagram

When the air supply is cut off and releasing the inlet pressure to the atmosphere, the residual pressure release of the outlet side can be ensured for a safety purpose.

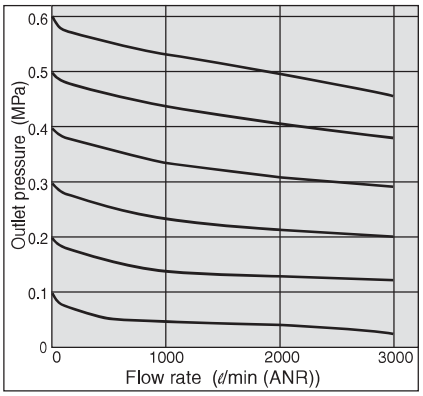


Filter Regulator with Back Flow Mechanism Series AW40K/60K

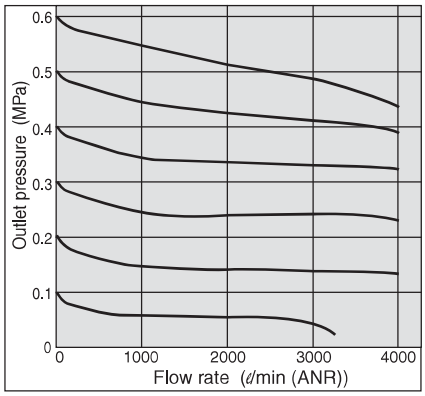
Flow Characteristics (Representative values)

Condition:
Inlet pressure 0.7 MPa

AW40K Rc 1/2



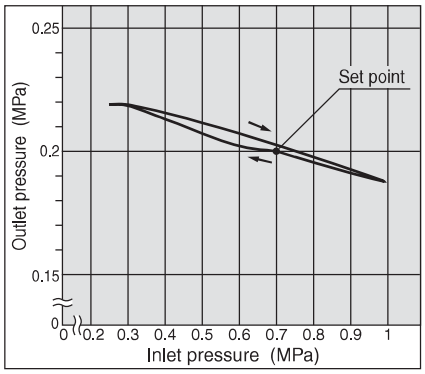
AW40K-06 Rc 3/4



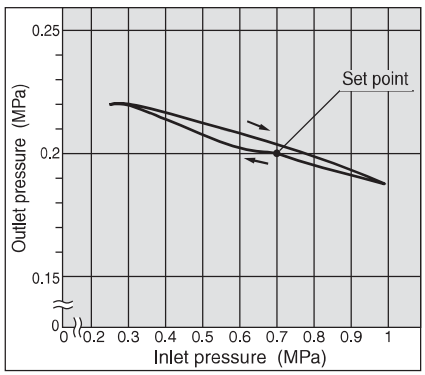
Pressure Characteristics (Representative values)

Conditions:
Inlet pressure 0.7 MPa
Outlet pressure 0.2 MPa
Flow rate 20 ℓ/min (ANR)

AW40K



AW40K-06



Mounting & Adjustment

⚠ Warning

1. Set the regulator while checking the displayed values of the inlet and outlet pressure gauges. Turning the knob excessively can cause damage to the internal parts.
2. The pressure gauge included with regulators for 0.02 to 0.2 MPa setting is for up to 0.2 MPa use. Exceeding 0.2 MPa of pressure can damage the gauge.
3. Do not use tools on the pressure regulator knob as this may cause damage. It must be operated manually.

⚠ Caution

1. Be sure to unlock the knob before adjusting the pressure and lock it after setting the pressure.

   Failure to follow this procedure can cause damage to the knob and the outlet pressure may fluctuate.

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Maintenance

⚠ Warning

1. Replace the element every 2 years or when the pressure drop becomes 0.1 MPa, whichever comes first to prevent damage to the element.