

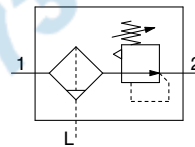
Filter Regulator

AW20-B to AW60-B

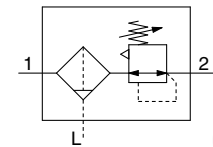
Filter Regulator with Backflow Function

AW20K-B to AW60K-B

Symbol
Filter Regulator



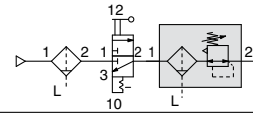
Filter Regulator with
Backflow Function



- Integrated filter and regulator units save space and require less piping.
- With the backflow function it incorporates a mechanism to exhaust the air pressure in the outlet side reliably and quickly.

Example)

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.



How to Order

Refer to page 85 for size 10.

AW **30** **K** - **03** **BE** - **1N** - **B**

1 2 3 4 5 6

- Option/Semi-standard: Select one each for a to i.
 - Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
- Example) AW30K-03BE-1N-B

		Symbol	Description	1					
				Body size					
				20	30	40	60		
2	With backflow function	Nil	Without backflow function	●	●	●	●		
		K <small>Note 1)</small>	With backflow function	●	●	●	●		
3	Pipe thread type	Nil	Rc	●	●	●	●		
		N <small>Note 2)</small>	NPT	●	●	●	●		
		F <small>Note 3)</small>	G	●	●	●	●		
		+							
4	Port size	01	1/8	●	—	—	—		
		02	1/4	●	●	●	—		
		03	3/8	—	●	●	—		
		04	1/2	—	—	●	—		
		06	3/4	—	—	●	●		
		10	1	—	—	—	●		
5	a	Mounting	Nil	Without mounting option	●	●	●	●	
			B <small>Note 5)</small>	With bracket	●	●	●	●	
			H	With set nut (for panel mount)	●	●	●	—	
	b	Float type auto drain	Nil	Without auto drain	●	●	●	●	
			C <small>Note 6)</small>	N.C. (Normally closed) Drain port is closed when pressure is not applied.	●	●	●	●	
			D <small>Note 7)</small>	N.O. (Normally open) Drain port is open when pressure is not applied.	—	●	●	●	
	c	Pressure gauge <small>Note 8)</small>	Nil	Without pressure gauge	●	●	●	●	
			E	Square embedded type pressure gauge (with limit indicator)	●	●	●	●	
			G	Round type pressure gauge (with limit indicator)	●	●	●	●	
			M	Round type pressure gauge (with color zone)	●	●	●	●	
		Digital pressure switch <small>Note 9)</small>	E1	Output: NPN output / Electrical entry: Wiring bottom entry	●	●	●	●	
			E2	Output: NPN output / Electrical entry: Wiring top entry	●	●	●	●	
			E3	Output: PNP output / Electrical entry: Wiring bottom entry	●	●	●	●	
	6	d	Set pressure <small>Note 10)</small>	Nil	7.3 to 123 psi (0.05 to 0.85 MPa) setting	●	●	●	●
				1	2.9 to 29 psi (0.02 to 0.2 MPa) setting	●	●	●	●
		e	Bowl <small>Note 11)</small>	Nil	Polycarbonate bowl	●	●	●	●
				2	Metal bowl	●	●	●	●
				6	Nylon bowl	●	●	●	●
				8	Metal bowl with level gauge	—	●	●	●
				C	With bowl guard	●	— <small>Note 12)</small>	— <small>Note 12)</small>	— <small>Note 12)</small>
				6C	Nylon bowl with bowl guard	●	— <small>Note 13)</small>	— <small>Note 13)</small>	— <small>Note 13)</small>
		f	Drain port <small>Note 14)</small>	Nil	With drain cock	●	●	●	●
				J <small>Note 15)</small>	Drain guide 1/8	●	—	—	—
					Drain guide 1/4	—	●	●	●
				W <small>Note 16)</small>	Drain cock with barb fitting	—	●	●	●

Filter Regulator Series **AW20-B to AW60-B**

Filter Regulator with Backflow Function Series **AW20K-B to AW60K-B**



AW20-B, AW20K-B AW40-B, AW40K-B

		Symbol	Description	①				
				Body size				
				20	30	40	60	
⑥	g	Exhaust mechanism	Nil	Relieving type	●	●	●	●
			N	Non-relieving type	●	●	●	●
				+				
	h	Flow direction	Nil	Flow direction: Left to right	●	●	●	●
			R	Flow direction: Right to left	●	●	●	●
			+					
	i	Pressure unit	Nil	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa	●	●	●	●
			Z <small>Note 17)</small>	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F	○ <small>Note 19)</small>	○ <small>Note 19)</small>	○ <small>Note 19)</small>	○ <small>Note 19)</small>
			ZA <small>Note 18)</small>	Digital pressure switch: With unit conversion function	△ <small>Note 20)</small>	△ <small>Note 20)</small>	△ <small>Note 20)</small>	△ <small>Note 20)</small>

- Note 1) Set the inlet pressure to at least 7.3 psi (0.05 MPa) higher than the set pressure.
- Note 2) Drain guide is NPT1/8 (applicable to the AW20(K)-B) and NPT1/4 (applicable to the AW30(K)-B to AW60(K)-B). The auto drain port comes with ø3/8" One-touch fitting (applicable to the AW30(K)-B to AW60(K)-B).
- Note 3) Drain guide is G1/8 (applicable to the AW20(K)-B) and G1/4 (applicable to the AW30(K)-B to AW60(K)-B).
- Note 4) Option B, G, H, M are not assembled and supplied loose at the time of shipment.
- Note 5) Assembly of a bracket and set nuts (applicable to the AW20(K)-B to AW40(K)-B). Including 2 mounting screws for the AW60(K)-B.
- Note 6) When pressure is not applied, condensate which does not start the auto drain mechanism will be left in the bowl. Releasing the residual condensate before ending operations for the day is recommended.

- Note 7) If the compressor is small (0.75 kW, discharge flow is less than 3.5 scfm (100 L/min(ANR))), air leakage from the drain cock may occur during start of operations. N.C. type is recommended.
- Note 8) When the pressure gauge is attached, a 145 psi (1.0 MPa) pressure gauge will be fitted for standard (123 psi [0.85 MPa]) type. 58 psi (0.4 MPa) pressure gauge for 2.9 psi (0.2 MPa) type.
- Note 9) When choosing with H (panel mount), the installation space for lead wires will not be secured. In this case, select "wiring top entry" for the electrical entry. (Select "wiring bottom entry" when the semi-standard Y is chosen simultaneously.)
- Note 10) Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- Note 11) Refer to Chemical data on page 90 for chemical resistance of the bowl.
- Note 12) A bowl guard is provided as standard equipment (polycarbonate).
- Note 13) A bowl guard is provided as standard equipment (nylon).

- Note 14) The combination of float type auto drain: C and D is not available.
- Note 15) Without a valve function
- Note 16) The combination of metal bowl: 2 and 8 is not available.
- Note 17) For pipe thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.) Cannot be used with M: Round pressure gauge (with color zone). Available by request for special. The digital pressure switch will be equipped with the unit conversion function, setting to psi initially.
- Note 18) For options: E1, E2, E3, E4. This product is for overseas use only according to the new Measurement Law. (The SI unit is provided for use in Japan.)
- Note 19) ○: For pipe thread type: NPT only
- Note 20) △: Select with options: E1, E2, E3, E4.

Standard Specifications

Model	AW20-B	AW30-B	AW40-B	AW40-06-B	AW60-B
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1
Pressure gauge port size ^{Note 1)}	1/8				
Fluid	Air				
Ambient and fluid temperature ^{Note 2)}	23 to 140°F (−5 to 60°C) (with no freezing)				
Proof pressure	218 psi (1.5 MPa)				
Maximum operating pressure	145 psi (1.0 MPa)				
Set pressure range	7.3 to 123 psi (0.05 to 0.85 MPa)				
Nominal filtration rating	5 μm				
Drain capacity (cm³)	8	25	45		
Bowl material	Polycarbonate				
Bowl guard	Semi-standard (Steel)	Standard (Polycarbonate)			
Construction	Relieving type				
Weight (kg)	0.20	0.36	0.66	0.72	2.05

- Note 1) Pressure gauge connection threads are not available for F.R.L. unit with a square embedded type pressure gauge or with a digital pressure switch.
- Note 2) 23 to 122°F (-5 to 50°C) for the products with the digital pressure switch