

# Series AW10 to 40

## Standard Specifications

Model	AW10	AW20	AW30	AW40	AW40-06
Port sizes	M5 x 0.8	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4
Fluid	Air				
Proof pressure	1.5 MPa				
Maximum operating pressure	1.0 MPa				
Set pressure range	0.05 to 0.7 MPa	0.05 to 0.85 MPa			
Pressure gauge port size <sup>(1)</sup>	Rc 1/16 <sup>(2)</sup>	Rc, NPT, G 1/8	Rc, NPT, G 1/8	Rc, NPT, G 1/4	Rc, NPT, G 1/4
Relief pressure	Set pressure + 0.05 MPa <sup>(3)</sup> (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 <sup>3</sup> )	2.5	8	25	45	45
Bowl material	Polycarbonate				
Bowl guard	—	Option	Standard		
Construction	Relieving type				
Weight (kg)	0.09	0.32	0.40	0.72	0.75

Note 1) Pressure gauge connection threads are not required for regulators with a square embedded type pressure gauge (AW20 to AW40).

Note 2) Use a bushing (part no: 131368) when connecting R 1/8 pressure gauge to R 1/16 gauge port.

Note 3) Not applicable to AW10.

## Accessory Part No.

Applicable model			AW10	AW20	AW30	AW40		AW40-06		
Accessory										
Bracket assembly <sup>(1)</sup>			AR10P-270AS	AW20P-270AS	AR30P-270AS	AR40P-270AS		AR40P-270AS		
Set nut			AR10P-260S	AR20P-260S	AR30P-260S	AR40P-260S		AR40P-260S		
<sup>(2)</sup> Pressure gauge	1.0 MPa	Round Type	G27-10-R1	G36-10-□01	G36-10-□01	G46-10-□02		G46-10-□02		
		Square embedded type <sup>(4)</sup>	—	GC3-10AS	GC3-10AS	GC3-10AS		GC3-10AS		
	0.2 MPa	Round Type	G27-10-R1 <sup>(3)</sup>	G36-2-□01	G36-2-□01	G46-2-□02		G46-2-□02		
		Square embedded type <sup>(4)</sup>	—	GC3-2AS	GC3-2AS	GC3-2AS		GC3-2AS		
<sup>(5)</sup> Float type auto-drain		N.O.	—	—	AD38	AD38N <sup>(6)</sup>	AD48	AD48N <sup>(6)</sup>	AD48	AD48N <sup>(6)</sup>
		N.C.	AD17	AD27	AD37	AD37N <sup>(6)</sup>	AD47	AD47N <sup>(6)</sup>	AD47	AD47N <sup>(6)</sup>

Note 1) Assembly includes a bracket and set nuts.

Note 2) □ in part numbers for a round pressure gauge indicates a type of connection thread. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the connection thread NPT and supply of the pressure gauge for PSI unit specifications.

Note 3) For 1 MPa.

Note 4) Includes one O-ring and 2 mounting screws.

Note 5) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD17/27) and 0.15 MPa (AD37/47). Please contact SMC regarding the specifications for PSI unit and °F.

Note 6) When "N" is specified in the end of part number of auto-drain, applicable tubing O.D should be ø3/8".

## ⚠ Precautions

**Be sure to read before handling. Refer to pages 14-21-3 to 14-21-4 for Safety Instructions and Common Precautions.**

### Selection

#### ⚠ Warning

- 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

- 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

- 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.
- 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.
- Do not use tools on the pressure regulator knob as this may cause damage. It must be operated manually.

#### ⚠ Caution

- 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).



- A knob cover is available to prevent careless operation of the knob. Refer to page 14-2-6 for details.