

Standard Specifications

Model	AR20-A	AR25-A	AR30-A	AR40-A	AR40-06-A
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8	1/4, 3/8, 1/2	3/4
Pressure gauge port size	1/8				
Fluid	Air				
Ambient and fluid temperature	- 5 to 60°C (with no freezing)				
Proof pressure	1.5 MPa				
Maximum operating pressure	1.0 MPa				
Set pressure range	0.05 to 0.7 MPa				
Construction	Relieving type				
Weight (kg)	0.17	0.19	0.34	0.58	0.60

Options/Part No.

Optional specifications		Model				
		AR20-A	AR25-A	AR30-A	AR40-A	AR40-06-A
Bracket assembly ^{Note 1)}		AR22P-270AS	AR27P-270AS	AR32P-270AS	AR42P-270AS	AR42P-270AS
Set nut		AR22P-260S	AR22P-260S	AR32P-260S	AR42P-260S	AR42P-260S
Pressure gauge	Round type ^{Note 2)}	Standard	G36-10-□01		G46-10-□01	
		0.02 to 0.2 MPa setting	G36-4-□01		G46-4-□01	
	Round type ^{Note 2)} (with color zone)	Standard	G36-10-□01-L		G46-10-□01-L	
		0.02 to 0.2 MPa setting	G36-4-□01-L		G46-4-□01-L	

Note 1) Assembly of 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 pressure gauge supply for psi unit specifications.

⚠ Specific Product Precautions

Be sure to read before handling. Refer to back cover for Safety Instructions, "Handling Precautions for SMC Products" (M-E03-3) and the Operation Manual for F.R.L. Precautions. Please download it via our website, <http://www.smcworld.com>

Selection

⚠ Warning

- Although exhaust of the residual pressure to the inlet side is possible when eliminating the inlet pressure, exhaust is not possible when the set pressure is 0.15 MPa or less. Use the regulator with backflow function.

Maintenance

⚠ Warning

- When using the regulator between a solenoid valve and an actuator, check the pressure gauge periodically. Sudden pressure fluctuations may shorten the durability of the pressure gauge. A digital pressure gauge is recommended for such situation or as deemed necessary.

Mounting and Adjustment

⚠ Warning

- Set the regulator while verifying the displayed values of the inlet and outlet pressure gauges. Turning the regulator knob excessively can cause damage to the internal parts.
- 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", i.e., the gap will disappear).
- Pulsation will be generated when the difference between the inlet and the outlet pressure is large. In this case, reduce the pressure difference between the inlet and the outlet. Consult SMC if the pulsation problem is not resolved.

AC
 AF+AR+AL
 AW+AL
 AF+AR
 AF+AFM+AR
 AW+AFM
 Attachment
 AF
 AFM / AFD
 AR
 AL
 AW

Series AW20-A to AW40-A

Options/Part No.

Optional specifications		Model			
		AW20-A	AW30-A	AW40-A	AW40-06-A
Bracket assembly ^{Note 1)}		AR22P-270AS	AR32P-270AS	AR42P-270AS	
Set nut		AR22P-260S	AR32P-260S	AR42P-260S	
Pressure gauge	Round type ^{Note 2)}	Standard	G36-10-□01		G46-10-□01
		0.02 to 0.2 MPa setting	G36-4-□01		G46-4-□01
	Round type (with color zone) ^{Note 2)}	Standard	G36-10-□01-L		G46-10-□01-L
		0.02 to 0.2 MPa setting	G36-4-□01-L		G46-4-□01-L
Float type auto drain ^{Note 3) Note 4)}		N.C.	AD27-A	AD37-A	AD47-A
		N.O.	—	AD38-A	AD48-A

Semi-standard/Bowl Assembly Part No.

Semi-standard specifications					Model				
Bowl material	^{Note 3) Note 4)} Float type auto drain		^{Note 4)} With drain guide	With barb fitting	With bowl guard	AW20-A	AW30-A	AW40-A	AW40-06-A
	N.C.	N.O.							
Polycarbonate	—	—	—	—	●	C2SF-C-A	—	—	
	●	—	—	—	●	AD27-C-A	—	—	
	—	—	●	—	—	C2SF-J-A	C3SF-J-A	C4SF-J-A	
	—	—	—	●	—	—	C3SF-W-A	C4SF-W-A	
	—	—	●	—	●	C2SF-CJ-A	—	—	

Note 1) Assembly of 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 pressure gauge supply for psi unit specifications.

Note 3) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD27-A) and 0.15 MPa (AD37-A/47-A).
Please consult with SMC separately for psi and °F unit display specifications.

Note 4) Please consult SMC for details on drain piping to fit NPT or G port sizes.
The bowl assembly includes the bowl O-ring.