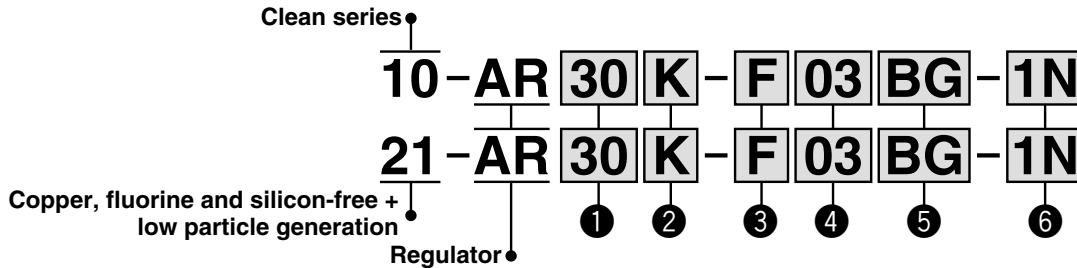


Series 10-21-AR Regulator

Series 10-21-AR□K Regulator with Backflow Function



How to Order



- Option/Semi-standard: Select one each for **a** to **g**.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

		Symbol	Description	1						
				Body size						
				20	25	30	40	50	60	
2	With backflow function	Nil	Without backflow function	●	●	●	●	●	●	
		K ^{Note 1)}	With backflow function	●	●	●	●	●	●	
+										
3	Thread type	Nil	Rc	●	●	●	●	●	●	
		N	NPT	●	●	●	●	●	●	
		F	G	●	●	●	●	●	●	
+										
4	Port size	01	1/8	●	—	—	—	—	—	
		02	1/4	●	●	●	●	—	—	
		03	3/8	—	●	●	●	—	—	
		04	1/2	—	—	—	●	—	—	
		06	3/4	—	—	—	●	●	—	
		10	1	—	—	—	—	●	●	
+										
Option 5	a	Mounting	Nil	Without mounting option	●	●	●	●	●	●
			B ^{Note 3)}	With bracket	●	●	●	●	●	●
			H	With set nut (for panel mounting)	●	●	●	●	—	—
+										
b	Pressure gauge	Nil	Without pressure gauge	●	●	●	●	●	●	
		G	Round type pressure gauge (without limit indicator)	●	●	●	●	●	●	
+										
Semi-standard 6	c	Set pressure	Nil	0.05 to 0.85 MPa setting	●	●	●	●	●	●
			1 ^{Note 4)}	0.02 to 0.2 MPa setting	●	●	●	●	●	●
	+									
	d	Exhaust mechanism	Nil	Relieving type	●	●	●	●	●	●
			N	Non-relieving type	●	●	●	●	●	●
	+									
	e	Flow direction	Nil	Flow direction: Left to right	●	●	●	●	●	●
			R	Flow direction: Right to left	●	●	●	●	●	●
	+									
	f	Knob	Nil	Downward	●	●	●	●	●	●
			Y	Upward	●	●	●	●	●	●
+										
g	Pressure unit	Nil	Name plate and pressure gauge in imperial units: MPa	●	●	●	●	●	●	
		Z ^{Note 5)}	Name plate and pressure gauge in imperial units: psi	○ ^{Note 6)}	○ ^{Note 6)}	○ ^{Note 6)}	○ ^{Note 6)}	○ ^{Note 6)}	○ ^{Note 6)}	

- Note 1) When using a non-relieving type with a backflow function, if the inlet pressure is increased slowly, the inlet pressure may continue to the outlet side.
- Note 2) Option B, G, H are not assembled and supplied loose at the time of shipment.
- Note 3) Assembly of a bracket and set nuts (10-/21-AR20(K) to AR40(K))
Including 2 mounting screws for the 10-/21-AR50(K), AR60(K)
- Note 4) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more.
When the pressure gauge is attached, a 0.2 MPa pressure gauge will be fitted.
- Note 5) For 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.)
The digital pressure switch will be equipped with the unit conversion function, setting to psi initially.
- Note 6) ○: For thread type: NPT only

Standard Specifications

Model	10-/21-AR20(K)	10-/21-AR25(K)	10-/21-AR30(K)	10-/21-AR40(K)	10-/21-AR40(K)-06	10-/21-AR50(K)	10-/21-AR60(K)
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1	1
Pressure gauge port size	1/8			1/4			
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 0.85 MPa						
Relief pressure	Set pressure + 0.05 MPa [at relief flow rate of 0.1 L/min (ANR)]						
Construction	Relieving type						
Grease	10-: Fluorine grease 21-: Lithium soap based grease						
Particle generation grade (Refer to front matter pages 13 to 22 for details.)	10-: Grade 1 21-: Grade 1						

Options/Part No.

Option		Model	10-/21-AR20(K)	10-/21-AR25(K)	10-/21-AR30(K)	10-/21-AR40(K)	10-/21-AR40(K)-06	10-/21-AR50(K)	10-/21-AR60(K)
Bracket assembly ^{Note 1)}			AR20P-270AS	AR25P-270AS	AR30P-270AS	AR40P-270AS		AR50P-270AS ^{Note 2)}	
Set nut			AR20P-260S	AR25P-260S	AR30P-260S	AR40P-260S		— ^{Note 3)}	— ^{Note 3)}
Pressure gauge ^{Note 4)}	Standard		G49-10-□01			G49-10-□02			
	0.02 to 0.2 MPa setting		G49-2-□01			G49-2-□02			

Note 1) Assembly of a bracket and set nuts

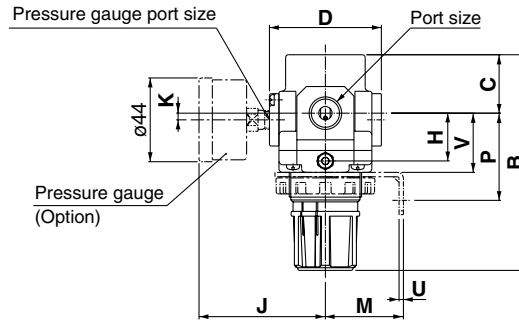
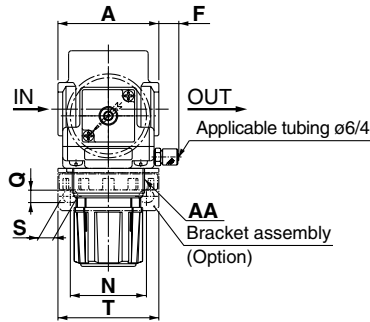
Note 2) Assembly of a bracket and 2 mounting screws

Note 3) Please consult with SMC regarding the set nuts for the 10-/21-AR50(K), AR60(K).

Note 4) □ 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.

Dimensions

10-21-AR20K to 40K-06



Panel fitting dimension

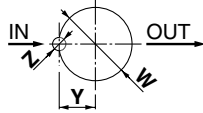
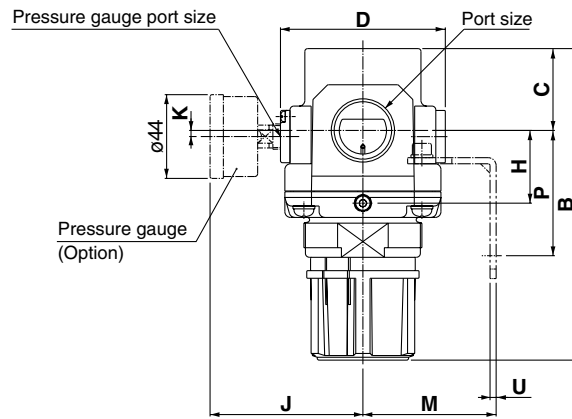
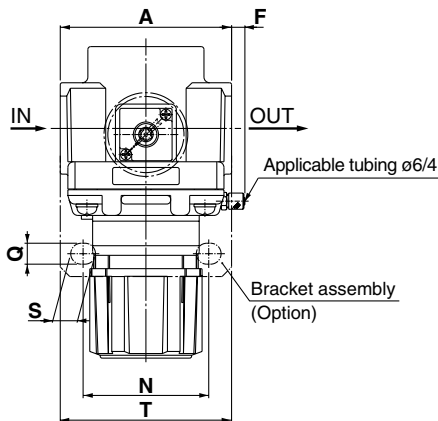


Plate thickness
10-/21-AR20K, 30K: Max. 3.5
10-/21-AR40K: Max. 5

10-21-AR50K/60K



Model	Port size	Pressure gauge connection port size	Standard specifications							Accessory specifications													
										With pressure gauge		Bracket mounting size							Panel mount				
			A	B	C	D	F	H	J	K	M	N	P	Q	S	T	U	V	W	Y	Z	AA	
10-/21-AR20K	1/8, 1/4	1/8	40	94	26.5	57	11	20	66	2 ^{Note}	30	34	44	5.4	15.4	55	2.3	25	28.5	14	6	M28 x 1	
10-/21-AR25K	1/4, 3/8	1/8	53	101	28	55	10	20.5	65	0	30	34	44	5.4	15.4	55	2.3	26	32.5	16	6	M32 x 1.5	
10-/21-AR30K	1/4, 3/8	1/8	53	116	31	59	10.5	25	67	3.5	41	40	46	6.5	8	53	2.3	31	38.5	19	7	M38 x 1.5	
10-/21-AR40K	1/4, 3/8, 1/2	1/4	70	128	36	68	10.5	29	71	3.5	50	54	54	8.5	10.5	70	2.3	35.5	42.5	21	7	M42 x 1.5	
10-/21-AR40K-06	3/4	1/4	75	129	36	68	8	30.5	71	3	50	54	56	8.5	10.5	70	2.3	37	42.5	21	7	M42 x 1.5	
10-/21-AR50K	3/4, 1	1/4	90	169	43	87	7	38	81	3.3	70	66	65.8	11	13	90	3.2	—	—	—	—	—	
10-/21-AR60K	1	1/4	95	176	46	87	4.5	42.5	81	3.3	70	66	65.8	11	13	90	3.2	—	—	—	—	—	

Note) For 10-/21-AR20K only, the position of the pressure gauge is above the center of the piping.