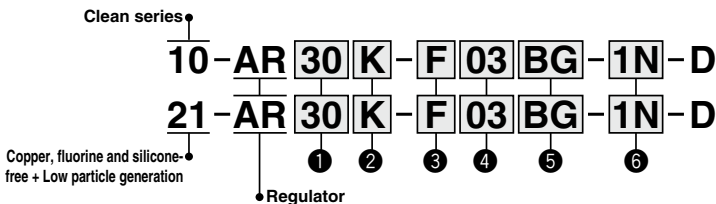


10-21-AR-D series Regulator

10-21-AR□K-D series Regulator with Backflow Function

How to Order



- Option/Semi-standard: Select one each for a to g.
- Option symbol: When more than one specification is required, indicate in alphabetical order.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
- Example) 10-AR30K-F03BG-1NR-D

	Symbol	Description	① Body size					
			20	30	40	50	60	
② With backflow function	Nil	Without backflow function	●	●	●	●	●	
	K ^(Note 1)	With backflow function	●	●	●	●	●	
③ Pipe thread type	+							
	Nil	Rc	●	●	●	●	●	
	N	NPT	●	●	●	●	●	
④ Port size	F	G	●	●	●	●	●	
	+							
	01	1/8	●	—	—	—	—	
	02	1/4	●	●	●	●	●	
	03	3/8	—	●	●	—	—	
⑤ Option ^(Note 2)	04	1/2	—	—	●	—	—	
	06	3/4	—	—	—	●	—	
	10	1	—	—	—	●	●	
	+							
	a	Mounting	Nil	Without mounting option	●	●	●	●
b	Pressure gauge ^(Note 4)	B ^(Note 3)	With bracket	●	●	●	●	
		H	With set nut (for panel mount)	●	●	—	—	
⑥ Semi-standard	c	Set pressure ^(Note 5)	Nil	0.05 to 0.85 MPa setting	●	●	●	●
			1	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	Unit on product label: MPa, Pressure gauge in SI units: MPa	○ ^(Note 7)	○ ^(Note 7)	○ ^(Note 7)	○ ^(Note 7)	
		Z ^(Note 6)	Unit on product label: psi, Pressure gauge: MPa/psi dual scale	○ ^(Note 7)	○ ^(Note 7)	○ ^(Note 7)	○ ^(Note 7)	

Note 1) Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
 Note 2) Options B, G, and H are not assembled and supplied loose at the time of shipment.
 Note 3) The assembly consists of a bracket and set nuts (applicable to the 10-/21-AR20(K)-D to 10-/21-AR40(K)-D).
 For the 10-/21-AR50(K)-D and 10-/21-AR60(K)-D, the assembly consists of 2 types of the bracket and 2 mounting screws.
 Note 4) When the pressure gauge is attached, a 1.0 MPa pressure gauge will be fitted for standard (0.85 MPa) type, 0.4 MPa pressure gauge for 0.2 MPa type.
 Note 5) Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
 Note 6) For the pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)
 Note 7) ○: For the pipe thread type: NPT only

Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Air Preparation Equipment

Modular F. R.

Pressure Control Equipment

Fittings & Tubing

Flow Control Equipment

Pressure Switches/Pressure Sensors

Regulator **10-
21-AR-D**

Regulator with Backflow Function **10-
21-AR□K-D**

Standard Specifications

Model	10-/21-AR20(K)-D	10-/21-AR30(K)-D	10-/21-AR40(K)-D	10-/21-AR40(K)-06-D	10-/21-AR50(K)-D	10-/21-AR60(K)-D
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1	1
Pressure gauge port size	1/8					
Fluid	Air					
Ambient and fluid temperatures	-5 to 60°C (No freezing)					
Proof pressure	1.5 MPa					
Max. operating pressure	1.0 MPa					
Set pressure range	0.05 to 0.85 MPa					
Construction	Relieving type					
Grease	10-: Fluorine grease 21-: Lithium soap based grease					
Cleanliness class (ISO class)	10-: Class 3 21-: Class 3					

Option/Part Nos.

Option	Specifications	Part no.					
		10-/21-AR20(K)-D	10-/21-AR30(K)-D	10-/21-AR40(K)-D	10-/21-AR40(K)-06-D	10-/21-AR50(K)-D	10-/21-AR60(K)-D
Bracket assembly ^{Note 1)}	10-	10-AR23P-270AS	10-AR33P-270AS	10-AR43P-270AS		10-AR54P-270AS	
	21-	AR23P-270AS	AR33P-270AS	AR43P-270AS		AR54P-270AS	
Set nut	10-	10-AR23P-260S	10-AR33P-260S	10-AR43P-260S		___ ^{Note 2)}	
	21-	AR23P-260S	AR33P-260S	AR43P-260S		___ ^{Note 2)}	
Pressure gauge ^{Note 3)} (Standard)	10-	G49-10-□01					
	21-	G49-10-□01MS-X3					
Pressure gauge ^{Note 3)} (0.2 MPa setting)	10-	G49-4-□01					
	21-	G49-4-□01MS-X3					

Note 1) The assembly consists of a bracket and set nuts. For the 10-/21-AR50(K)-D and 10-/21-AR60(K)-D, the assembly consists of a bracket A/B and 2 mounting screws.

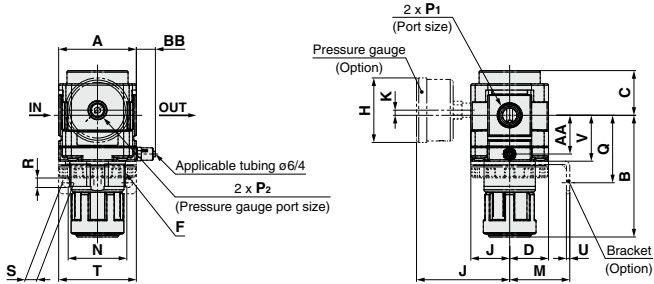
Note 2) Please contact SMC regarding the set nuts for the 10-/21-AR50(K)-D and 10-/21-AR60(K)-D.

Note 3) □ in part numbers for a pressure gauge indicates a pipe thread type. 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-AR20-D to AR40-06-D



Panel cutout dimensions

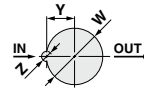
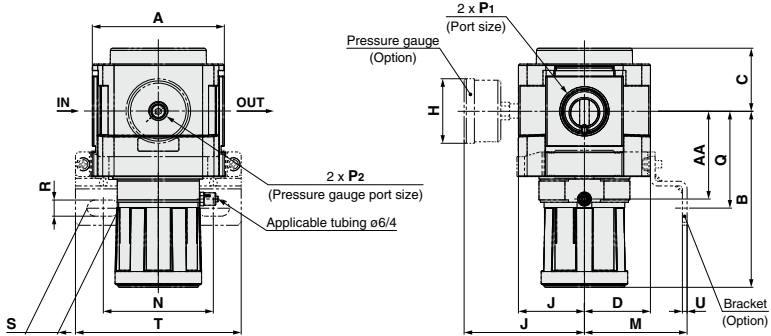


Plate thickness
 10-21-AR20-D to AR30-D: Max. 3.5
 10-21-AR40-D to AR40-06-D: Max. 5

10-21-AR50-D to AR60-D



Model	Standard specifications													Optional specifications												
	P ₁	P ₂	A	B (Note 1)		C	D	F	J	K	AA	BB	H	Round type pressure gauge				Bracket mount					Panel mount			
				10-	21-									H	J	H	J	M	N	Q	R	S	T	U	V	W
10-21-AR20-D	1/8, 1/4	1/8	40	66.8	26.5	21	M28 x 1	21	2	20.5	13	ø44	58	ø44	61	30	34	44.4	5.4	15.4	55	2.3	25.2	28.5	14	6
10-21-AR30-D	1/4, 3/8	1/8	53	86.5	30.5	26.5	M38 x 1.5	26.5	3.5	26.4	13	ø44	63.5	ø44	66.5	41	40	46	6.5	8	53	2.3	31.3	38.5	19	7
10-21-AR40-D	1/4, 3/8, 1/2	1/8	70	91.5	35.5	35.5	M42 x 1.5	35.5	—	30.5	13	ø44	72.5	ø44	75.5	50	54	8.5	10.5	70	2.3	35.5	42.5	21	7	
10-21-AR40-06-D	3/4	1/8	75	93	35.5	35.5	—	35.5	—	32	10.5	ø44	72.5	ø44	75.5	50	54	55.5	8.5	10.5	70	2.3	37	42.5	21	7
10-21-AR50-D	3/4, 1	1/8	90	125	43	45	—	45	—	59.8	—	ø44	82	ø44	85	70	75	66	11	22	113	3.2	—	—	—	—
10-21-AR60-D	1	1/8	95	155	45	45	—	45	—	89.8	—	ø44	82	ø44	85	70	75	66	11	22	113	3.2	—	—	—	—

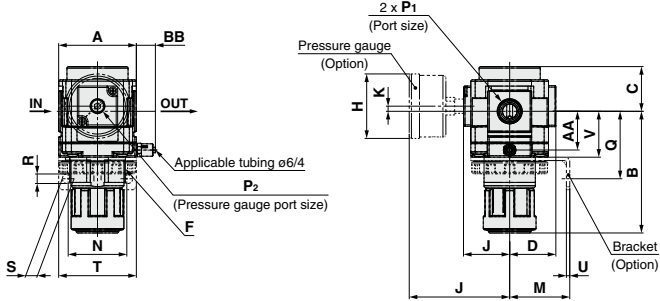
Note 1) The dimension of B is the length when the regulator knob is unlocked.

Directional Control Valves
 Air Cylinders
 Rotary Actuators
 Air Grippers
 Air Preparation Equipment
 Modular F. R.
 Pressure Control Equipment
 Fittings & Tubing
 Flow Control Equipment
 Pressure Switches/ Pressure Sensors

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

Dimensions

10-21-AR20K-D to AR40K-06-D



Panel cutout dimensions

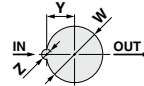
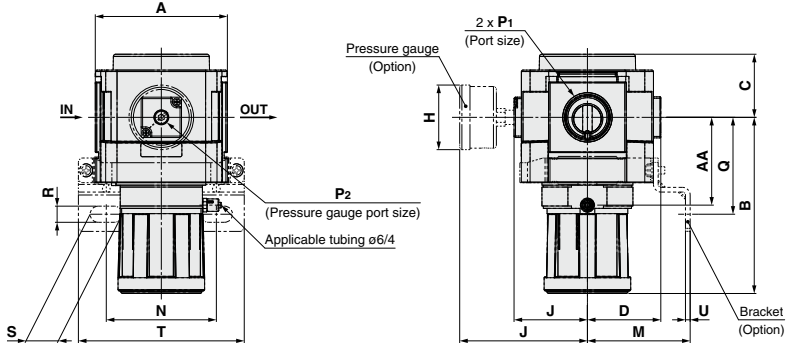


Plate thickness
 10-21-AR20K-D to AR30K-D: Max. 3.5
 10-21-AR40K-D to AR40K-06-D: Max. 5

10-21-AR50K-D to AR60K-D



Model	Standard specifications													Optional specifications												
	P ₁	P ₂	A	B ^(note 1)	C	D	F	J	K	AA	BB	Round type pressure gauge						Bracket mount						Panel mount		
												H	J	H	J	M	N	Q	R	S	T	U	V	W	Y	Z
10-21-AR20K-D	1/8, 1/4	1/8	40	66.8	26.5	26	M28 x 1	26	2	20.5	13	ø44	63	ø44	66	30	34	44.4	5.4	15.4	55	2.3	25.2	28.5	14	6
10-21-AR30K-D	1/4, 3/8	1/8	53	86.5	30.5	31.5	M38 x 1.5	31.5	3.5	26.4	13	ø44	68.5	ø44	71.5	41	40	46	6.5	8	53	2.3	31.3	38.5	19	7
10-21-AR40K-D	1/4, 3/8, 1/2	1/8	70	91.5	35.5	40.5	M42 x 1.5	40.5	—	30.5	13	ø44	77.5	ø44	80.5	50	54	54	8.5	10.5	70	2.3	35.5	42.5	21	7
10-21-AR40K-06-D	3/4	1/8	75	93	35.5	40.5	M42 x 1.5	40.5	—	32	10.5	ø44	77.5	ø44	80.5	50	54	55.5	8.5	10.5	70	2.3	37	42.5	21	7
10-21-AR50K-D	3/4, 1	1/8	90	125	43	50	—	50	—	59.8	—	ø44	87	ø44	90	70	75	66	11	22	113	3.2	—	—	—	—
10-21-AR60K-D	1	1/8	95	155	45	50	—	50	—	89.8	—	ø44	87	ø44	90	70	75	66	11	22	113	3.2	—	—	—	—

Note 1) The dimension of B is the length when the regulator knob is unlocked.