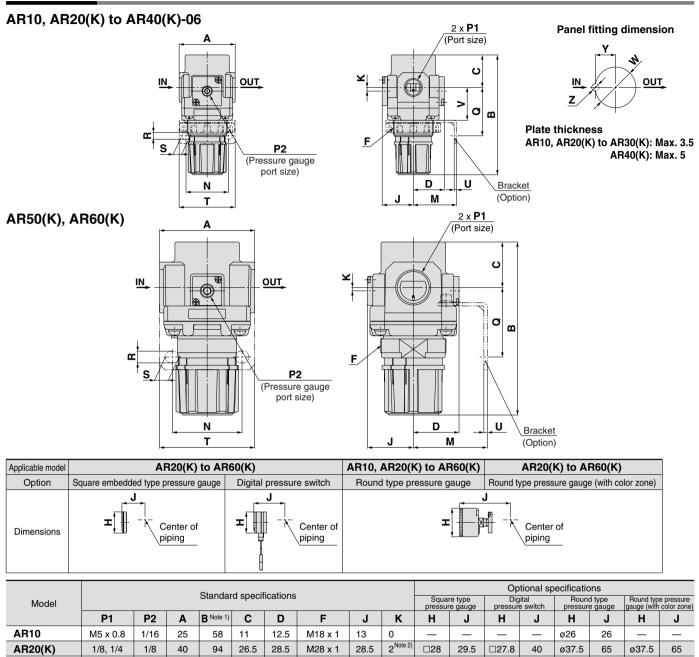
Modular Type Regulators Series AR

Regulator Series AR	Model	Port size	Options
Selies An	AR10	M5 x 0.8	
	AR20	1/8, 1/4	
	AR25	1/4, 3/8	
	AR30	1/4, 3/8	
	AR40	1/4, 3/8, 1/2	
	AR40-06	3/4	Bracket Square embedded type
	AR50	3/4, 1	pressure gauge (except the AR10)
Pages 346 through to 355	AR60	1	Round type pressure gauge
Regulator with Backflow Function Series AR⊟K	AR20K	1/8, 1/4	Digital pressure switch
	AR25K	1/4, 3/8	except the AR10)
	AR30K	1/4, 3/8	
	AR40K	1/4, 3/8, 1/2	
	AR40K-06	3/4	
	AR50K	3/4, 1	
Pages 346 through to 355	AR60K	1	

AC
AF□
AR
AL
AW□
A□G
AV
AF800 AF900
-

Regulator Series AR10 to AR60 Regulator with Backflow Function Series AR20K to AR60K

Dimensions



P1	P2	A	B Note 1)	С	D	F	J	K	н	J	н	J	н	J	н	J
M5 x 0.8	1/16	25	58	11	12.5	M18 x 1	13	0	—	—	—	_	ø26	26	—	_
1/8, 1/4	1/8	40	94	26.5	28.5	M28 x 1	28.5	2 ^{Note 2)}	□28	29.5	□27.8	40	ø37.5	65	ø37.5	65
1/4, 3/8	1/8	53	101	28	27.5	M32 x 1.5	27.5	0	□28	28.5	□27.8	39	ø37.5	64	ø37.5	64
1/4, 3/8	1/8	53	116	31	29.5	M38 x 1.5	29.5	3.5	□28	30.5	□27.8	41	ø37.5	66	ø37.5	66
1/4, 3/8, 1/2	1/4	70	128	36	34	M42 x 1.5	34	3.5	□28	35	□27.8	45	ø42.5	74	ø42.5	74
3/4	1/4	75	129	36	34	M42 x 1.5	34	3	□28	35	□27.8	45	ø42.5	74	ø42.5	74
3/4, 1	1/4	90	169	43	43.5	M62 x 1.5	43.5	3.3	□28	44.5	□27.8	55	ø42.5	84	ø42.5	84
1	1/4	95	176	46	43.5	M62 x 1.5	43.5	3.3	□28	44.5	□27.8	55	ø42.5	84	ø42.5	84
	M5 x 0.8 1/8, 1/4 1/4, 3/8 1/4, 3/8 1/4, 3/8, 1/2 3/4	M5 x 0.8 1/16 1/8, 1/4 1/8 1/4, 3/8 1/8 1/4, 3/8 1/8 1/4, 3/8, 1/2 1/4 3/4 1/4 3/4, 1 1/4	M5 x 0.8 1/16 25 1/8, 1/4 1/8 40 1/4, 3/8 1/8 53 1/4, 3/8 1/8 53 1/4, 3/8, 1/2 1/4 70 3/4 1/4 75 3/4, 1 1/4 90	M5 x 0.8 1/16 25 58 1/8, 1/4 1/8 40 94 1/4, 3/8 1/8 53 101 1/4, 3/8 1/8 53 116 1/4, 3/8, 1/2 1/4 70 128 3/4 1/4 75 129 3/4, 1 1/4 90 169	M5 x 0.8 1/16 25 58 11 1/8, 1/4 1/8 40 94 26.5 1/4, 3/8 1/8 53 101 28 1/4, 3/8 1/8 53 116 31 1/4, 3/8, 1/2 1/4 70 128 36 3/4 1/4 75 129 36 3/4, 1 1/4 90 169 43	M5 x 0.8 1/16 25 58 11 12.5 1/8, 1/4 1/8 40 94 26.5 28.5 1/4, 3/8 1/8 53 101 28 27.5 1/4, 3/8 1/8 53 116 31 29.5 1/4, 3/8, 1/2 1/4 70 128 36 34 3/4 1/4 75 129 36 34 3/4, 1 1/4 90 169 43 43.5	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 3/4 1/4 75 129 36 34 M42 x 1.5 3/4, 1 1/4 90 169 43 43.5 M62 x 1.5	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3/4 1/4 75 129 36 34 M42 x 1.5 34 3/4, 1 1/4 90 169 43 43.5 M62 x 1.5 43.5	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 2 ^{Note 2}) 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 3.5 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3.5 3/4 1/4 75 129 36 34 M42 x 1.5 34 3 3/4, 1 1/4 90 169 43 43.5 M62 x 1.5 43.5 3.3	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 — 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 2 ^{Note 2}) □28 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 □28 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 3.5 □28 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3.5 □28 3/4 1/4 75 129 36 34 M42 x 1.5 34 3 □28 3/4, 1 1/4 90 169 43 43.5 M62 x 1.5 43.5 3.3 □28	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 — — — 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 2 ^{Note 2)} □28 29.5 □27.8 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 □28 28.5 □27.8 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 □28 28.5 □27.8 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 3.5 □28 30.5 □27.8 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3.5 □28 35 □27.8 3/4 1/4 75 129 36 34 M42 x 1.5 34 3 □28 35 □27.8 3/4, 1 1/4 90	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 — — — — — — — — — … <th>M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 — — — — Ø26 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 2^{Note 2} □28 29.5 □27.8 40 ø37.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 □28 28.5 □27.8 39 ø37.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 □28 28.5 □27.8 39 ø37.5 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 3.5 □28 30.5 □27.8 41 ø37.5 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3.5 □27.8 35 042.5 3/4 1/4 75 129 36 34</th> <th>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</th> <th>M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 026 26 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 2^{Note 2}) 128 29.5 127.8 40 037.5 65 037.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 128 28.5 127.8 39 037.5 64 037.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 128 28.5 127.8 39 037.5 64 037.5 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 3.5 128 30.5 127.8 41 037.5 66 037.5 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3.5 128 35 127.8 45 042.5 74 042.5 <</th>	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 — — — — Ø26 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 2 ^{Note 2} □28 29.5 □27.8 40 ø37.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 □28 28.5 □27.8 39 ø37.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 □28 28.5 □27.8 39 ø37.5 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 3.5 □28 30.5 □27.8 41 ø37.5 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3.5 □27.8 35 042.5 3/4 1/4 75 129 36 34	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	M5 x 0.8 1/16 25 58 11 12.5 M18 x 1 13 0 026 26 1/8, 1/4 1/8 40 94 26.5 28.5 M28 x 1 28.5 2 ^{Note 2}) 128 29.5 127.8 40 037.5 65 037.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 128 28.5 127.8 39 037.5 64 037.5 1/4, 3/8 1/8 53 101 28 27.5 M32 x 1.5 27.5 0 128 28.5 127.8 39 037.5 64 037.5 1/4, 3/8 1/8 53 116 31 29.5 M38 x 1.5 29.5 3.5 128 30.5 127.8 41 037.5 66 037.5 1/4, 3/8, 1/2 1/4 70 128 36 34 M42 x 1.5 34 3.5 128 35 127.8 45 042.5 74 042.5 <

	Optional specifications												
Model			Br	Panel mount									
	М	N	Q	R	S	т	U	V	W	Y	Z		
AR10	25	28	30	4.5	6.5	40	2	18	18.5	_	_		
AR20(K)	30	34	44	5.4	15.4	55	2.3	25	28.5	14	6		
AR25(K)	30	34	44	5.4	15.4	55	2.3	26	32.5	16	6		
AR30(K)	41	40	46	6.5	8	53	2.3	31	38.5	19	7		
AR40(K)	50	54	54	8.5	10.5	70	2.3	35.5	42.5	21	7		
AR40(K)-06	50	54	56	8.5	10.5	70	2.3	37	42.5	21	7		
AR50(K)	70	66	65.8	11	13	90	3.2	_	_	_	_		
AR60(K)	70	66	65.8	11	13	90	3.2	—	-	_	_		

Note 1) The total length of B dimension is the length when the filter regulator knob is unlocked. Note 2) For the AR20 only, the position of the pressure gauge is above the center of the piping.

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AC

AR

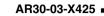
AL

AW□

A□G

AV AF800 AF900





(1) Special Temperature Environment

Special materials are used in the manufacturing of seals and resin parts to allow them to withstand various temperature conditions in cold or tropical (hot) climates.

Specifications

waue	de-to-order part noX430 -X440 ironment Low temperature High temperatu								0			
Inviro	nme	ent		Lov		High temperature						
Ambier	nt ter	nperatur	e (°C)		-30 to 60			-	-5 to 8	30		
					-5 to 60	(wit	h no f	reezii	ng)			
		Imperature (°C) -5 to 60 (with no freezing) Rubber parts Special NBR FKM Main parts Metal (Aluminum die-cast), etc.										
Materia	al⊢				Metal (Alu	minu						
laq	ica	ble M	lode	I	```							
Mod		AR2		AR30	AR40	AR	10-06	AF	750	AF	R60	
Port s	size	1/4, 3	3/8 1	/4, 3/8	1/4, 3/8, 1/2	3	3/4	3/4	4, 1		1	
4R		30 -	-	0	3 BG	-[-	X	43	80	
		0	2	8			6	_		L		
					e each for a to When more	g.				gh/l erati		
-					ed, indicate in	1	V40	_	-			
		neric ord		. oqun c			X43	-		npera		
		AR30-03		IR-X430)		X44	U Hi	gh te	mpera	atur	
	,	_	_	_					~		_	
					Deserver				U			
	/		Symbo		Description				ody si		e	
							25	30	40	50	60	
N					Rc			•		•		
2 т	hrea	d type	Ν	NPT					•		•	
			F		G			•				
	_		+		4/4	_		-	-		-	
			02		2/9	_		-				
3	Port size		03		3/8	_		_			-	
			size 04 06		3/4			_	Ť	•		
			10	1			_	—	<u> </u>	Ĭ	•	
	_		+				·I					
			A 111	L								
			Nil		ut mounting opti	on	•	۲		•	•	
Note 1)	a	Mounting	NII B Note 2) With b	racket	on	•	•	•	•	•	
	a	Mounting) With b With s	racket et nut	on	•	•	•	•	•	
	а	Mounting	B Note 2) With b With s	racket	on	•	•	•	•	•	
- 5		-	B Note 2 H +) With b With s (for pa	racket et nut nel fitting)		•	•	•	•		
	a b	Mounting Pressure gauge	B Note 2) With b With s (for pa	racket et nut	ıge	• • • • •	• • • • •	• • •	• • •	•	
		Pressure	B Note 2 H +) With b With s (for pa	racket et nut unel fitting) type pressure gau	ıge	•	•	•	•	•	
	b	Pressure gauge Set	B Note 2 H + G Note 3 + Nil) With b With s (for pa Round (witho	racket et nut unel fitting) type pressure gau ut limit indicato	ige r)	• • • • • • • • • • • • • • • • • • • •	• • • •	•	•		
		Pressure gauge	B Note 2 H + G Note 3 + Nil 1 Note 4) With b With s (for pa Round (witho	racket et nut inel fitting) type pressure gau ut limit indicato	ige r)	• • • •	• • • •	• • • •	• • •		
	b	Pressure gauge Set pressure	B Note 2 H + G Note 3 + Nill 1 Note 4 +) With b With s (for pa) Round (witho 0.05 to) 0.02 to	racket et nut inel fitting) type pressure gau ut limit indicato 0 0.85 MPa settin 0 0.2 MPa settin	ige r)		• • • •	• • • •	• • •		
	b	Pressure gauge Set pressure Exhaust	B Note 2 H G Note 3 + Nil 1 Note 4 + Nil	 With b With s (for pa Round (witho 0.05 tc 0.02 tc Reliev 	racket et nut inel fitting) type pressure gat ut limit indicato 0 0.85 MPa setti 0 0.2 MPa settin ing type	ige r)		• • • • •	• • • •	• • • •		
Option	b	Pressure gauge Set pressure	B Note 2 H + G Note 3 + Nill 1 Note 4 +	 With b With s (for pa Round (witho 0.05 tc 0.02 tc Reliev 	racket et nut inel fitting) type pressure gau ut limit indicato 0 0.85 MPa settin 0 0.2 MPa settin	ige r)			• • • • • • • •	• • • • • •		
Option	b c d	Pressure gauge Set pressure Exhaust mechanism	B Note 2 H + G Note 3 + Nill Note 4 + Nill N +	 With b With s (for pa Round (witho 0.05 tc 0.02 tc Reliev Non-re 	racket et nut inel fitting) type pressure gau ut limit indicato 0 0.85 MPa setti 0 0.2 MPa settin ing type elieving type	ing				• • • • • • • • • • • •		
Option	b	Pressure gauge Set pressure Exhaust	B Note 2 H + G Note 3 + Nil 1 Note 4 + Nil N N + Nil	 With b With s (for pa (for pa Round (witho 0.05 tc 0.02 tc Reliev Non-re Flow di 	racket et nut inel fitting) type pressure gau ut limit indicato 0 0.85 MPa settin 0 0.2 MPa settin ing type elieving type rection: Left to rig	ing ing ig				• • • • • • • • • • • • • • • • • • •		
Option	b c d	Pressure gauge Set pressure Exhaust mechanism	B Note 2 H + G Note 3 + Nill Note 4 + Nill N +	 With b With s (for pa (for pa Round (witho 0.05 tc 0.02 tc Reliev Non-re Flow di 	racket et nut inel fitting) type pressure gau ut limit indicato 0 0.85 MPa setti 0 0.2 MPa settin ing type elieving type	ing ing ig				• • • • • • • • • • • • • • • • • • •		
Option	b c d	Pressure gauge Set pressure Exhaust mechanism Flow direction	B Note 2 H G Note 3 + Nil 1 Note 4 + Nil N N N N R	 With b With s (for pa (for pa Round (witho 0.05 tc 0.02 tc Reliev Non-re Flow di 	racket et nut inel fitting) type pressure gau ut limit indicato 0 0.85 MPa setti 0 0.2 MPa settin ing type eleieving type rection: Left to rig rection: Right to l	ing ing ig				• • • • • • • • • • • • • • • • • •		
1 Option	b c d	Pressure gauge Set pressure Exhaust mechanism	B Note 2 H G Note 3 + Nill Nill Nill Nill R + Nill R + Nill R + Nill R	 With b With s (for pa Round (witho 0.05 tc 0.02 tc Reliev Non-re Flow di Flow di 	racket et nut inel fitting) type pressure gau ut limit indicato 0 0.85 MPa settin 0 0.2 MPa settin ing type elieving type rection: Left to rig rection: Right to I ward	ing ing ig				• •		
Option	b c d	Pressure gauge Set pressure Exhaust mechanism Flow direction	B Note 2 H + G Note 3 + Nil 1 Note 4 + Nil Nil R + Nil R	 With b With s (for particular sector of the sec	racket et nut inel fitting) type pressure gau ut limit indicato 0.85 MPa settin 0.2 MPa settin ing type elieving type rection: Left to rig rection: Right to l ward	ing ing ig				 • •<		
Option	b c d	Pressure gauge Set pressure Exhaust mechanism Flow direction Knob	B Note 2 H G Note 3 + Nill Nill Nill Nill R + Nill R + Nill R + Nill R	 With b With s (for paid of the second se	racket et nut inel fitting) type pressure gal ut limit indicato 0 0.85 MPa settin 0 0.2 MPa settin ing type eleving type rection: Left to rig rection: Right to l ward rd	ige r) g				• • • • • • • • • • • • • • • • • • •		
Option	b c d	Pressure gauge Set pressure Exhaust mechanism Flow direction	B Note 2 H + G Note 3 + Nill 1 Note 4 + Nill N H Nill R + Nill R + Nill R +	 With b With s (for paid of the second se	racket et nut inel fitting) type pressure gau ut limit indicato 0.85 MPa settin 0.2 MPa settin ing type elieving type rection: Left to rig rection: Right to l ward	uge r) ing g g ht eft Pa						

Note 1) Option B, G, H are not assembled and supplied loose at the time of shipment. Note 2) Assembly of a bracket and set nuts (AR25 to AR40) Including 2 mounting screws for the AR50 and AR60 Note 3) Mounting thread for pressure gauge: 1/8 for the AR25 to AR30; 1/4 for the

AR40 to AR60. Pressure gauge type: G43 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.) Note 6) O: For thread type: NPT only

2 High Pressure

Strong materials are used in the manufacturing of air filters intended for high pressure operation. Also, construction modification allows a wider regulating pressure range.

Specifications

Made-to-order part no.	-X425
Proof pressure (MPa)	3.0
Maximum operating pressure (MPa)	2.0
Set pressure range (MPa)	0.1 to 1.6
Ambient and fluid temperature (°C)	-5 to 60 (with no freezing)

Applicable Model

AR60 Model AR20 AR25 AR30 AR40 AR40-06 AR50 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

AR 30 -		03	BG	-	- <u>X4</u>	25
0	2	3	4	6		
			Foi	r high p	ressure	•

• Option/Semi-standard: Select one each for a to f.

Option/Semi-standard symbol: When more than one specification is

required, indicate in alphabetic order. Example) AR30-03BG-NR-X425

	~										
	<u> </u>			Symbol	Description						
				Cymbol	Description				Body size		
						20	25	30	40	50	60
				Nil	Rc			•		•	
2	Т	hrea	ad type	N	NPT						
_				F	G						
				+							
				01	1/8		—	—	—	_	
				02	1/4					—	—
3		Por	t size	03	3/8	—				—	—
•		1 01	1 3126	04	1/2	_		—		_	
				06	3/4	_	—	—			—
				10	1	_	—		—		
				+							
		а	Mounting	Nil	Without mounting option						
	Note 1)			B Note 2)	With bracket						\bullet
	5		linounung	н	With set nut						
4	Option				(for panel fitting)						
	0	_		+							
		b	Pressure	G Note 3)	Round type pressure switch						
		~	gauge	-	(with limit indicator)						
	_	_		+			-	-	-	-	-
		с	Exhaust	Nil	Relieving type	•	•	•	•	•	•
		•	mechanism	N	Non-relieving type						
		_		+			-	-	-	-	-
	_	d	Flow	Nil	Flow direction: Left to right	•	•	•	•	•	•
	arc	-	direction	R	Flow direction: Right to left						
	bug	_		+	-		-	-	-	-	-
6	-st	е	Knob	Nil	Downward	•	•	•	•	•	•
	Semi-standard	-		Y	Upward						\bullet
	Š			+							
		f	Pressure	Nil	Name plate and pressure gauge in imperial units: MPa	•	•	•	•	•	•
		1	unit	Z Note 4)	Name plate and caution plate for bowl in imperial units: psi	Note 5)	Note 5)	Note 5)	Note 5)	Note 5)	Note 5)
						-					

Note 1) Option B, G, H are not assembled and supplied loose at the time of shipment. Note 2) Assembly of a bracket and set nuts (AR20 to AR40) Including 2 mounting screws for the AR50 and AR60 Note 3) Mounting thread for pressure gauge: 1/8 for AR20 to AR30, 1/4 for AR40 to

AR60. Pressure gauge type: G46-20-Note 4) 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.)

Note 5) O: For thread type: NPT only

