Regulator with Built-in Pressure Gauge
Series *ARG20/30/40*

ARG20

ARG40

How to Order

| ARG | 20 | | 01 | | G1 | | |

Body size

Symbol	Port size
20	1/8
30	3/8
40	1/2

Thread type

Symbol	Type
Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Body size		
		20	30	40
01	1/8	●	—	—
02	1/4	●	●	●
03	3/8	—	●	●
04	1/2	—	—	●

Option

Symbol	Description
Nil	—
1 [2]	0.02 to 0.2 MPa setting
N	Non-relieving type
Z [3]	Name plate and pressure gauge in imperial units (PSI)

* When more than one specification is required, indicate in ascending alphanumeric order.

Note 2) Adjusting spring and pressure gauge (full-span 0.3 MPa) are different from those for the standard specification.
Outlet pressure may increase by 0.2 MPa or more.

Note 3) 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.)
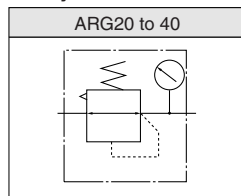
Accessory (2)

Symbol	Description
Nil	—
H	With set nut

Accessory (1)

Symbol	Description
Nil	—
B	With bracket (With nuts)

JIS Symbol

ARG20 to 40

Mounting Angle of Pressure Gauge

Symbol	**G1**	**G2**	**G3**	**G4**
Mounting angle	0°	90°	180°	270°
Mounting angle view	IN ... OUT	IN ... OUT	IN ... OUT	IN ... OUT

* Mounting angles other than 45°, 135°, 225° and 315° are available through the Made to Order (page 29).
* Possible to change to the optional mounting angles.
For details, refer to the back of page 6, "Procedure for replacing or changing the mounting angle of a pressure gauge"

◎: Combination available

▯ : Combination not available

△: Available only with NPT thread

Accessory/Optional Combinations

Accessory/Optional specifications	Combination Symbol	Accessory		Option			Applicable regulator
		B	**H**	**1**	**N**	**Z**	**ARG20 to 40**
Accessory With bracket	**B**			◎	◎	△	◎
Accessory With set nut	**H**			◎	◎	△	◎
Option 0.02 to 0.2 MPa setting	**-1**	◎	◎		◎	△	◎
Option Non-relieving type	**-N**	◎	◎	◎		△	◎
Option Name plate and pressure gauge in imperial units (PSI)	**-Z**	△	△	△	△		△

SMC

Standard Specifications

Model	ARG20	ARG30	ARG40
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2
Fluid	Air		
Proof pressure	1.5 MPa		
Maximum operating pressure	1.0 MPa		
Regulating 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))		
Ambient and fluid temperature	−5° to 60°C (With no freezing)		
Construction	Relieving type		
Weight (kg)	0.31	0.40	0.57

Accessory Part No.

Accessory \ Applicable model			ARG20	ARG30	ARG40
Bracket assembly [1]			ARG20P-270AS	ARG30P-270AS	ARG40P-270AS
Set nut			ARG20P-260S	ARG30P-260S	ARG40P-260S
Pressure gauge	**Pressure gauge display range**	**Standard** 0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
		Optional 0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
		0 to 150 PSI	GB2-P10AS	GB3-P10AS	GB4-P10AS
		0 to 45 PSI	GB2-P3AS	GB3-P3AS	GB4-P3AS

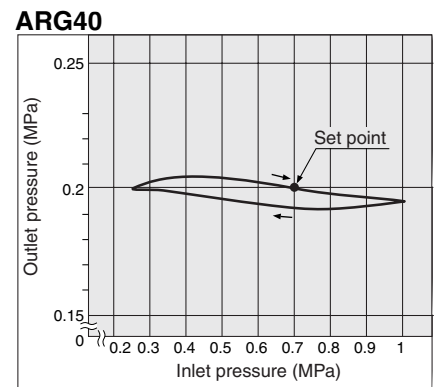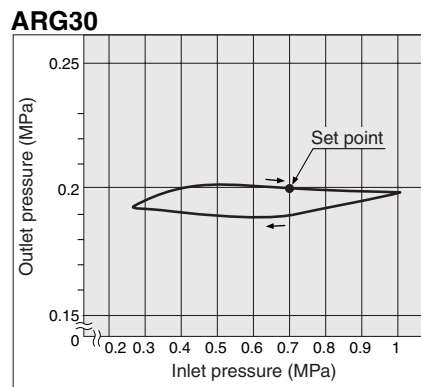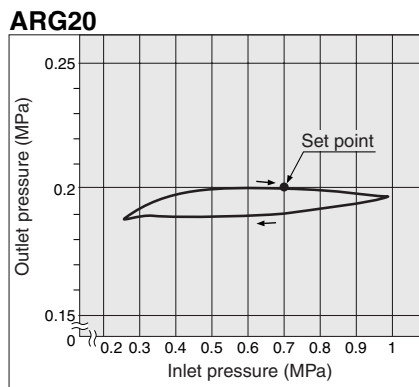Note 1) Assembly includes a bracket and set nuts.

Flow Characteristics (Representative values)

Condition: Inlet pressure 0.7 MPa

ARG20 — Rc1/4

ARG30 — Rc3/8

ARG40 — Rc1/2
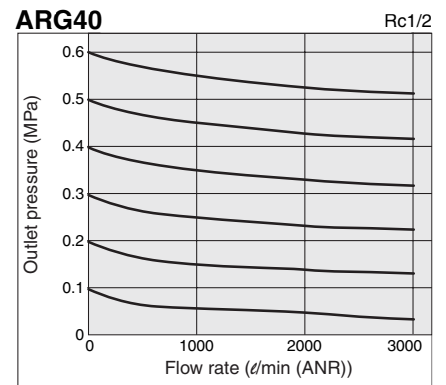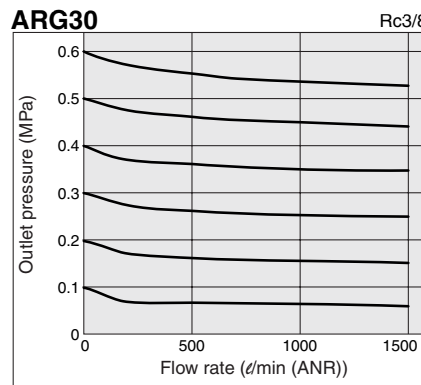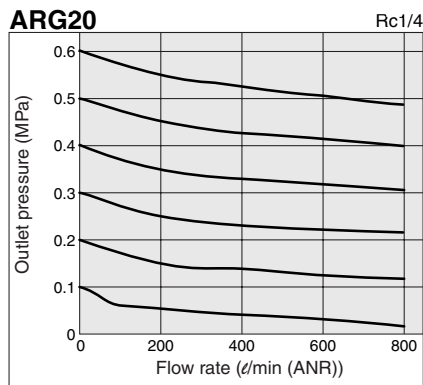
Pressure Characteristics (Representative values)

Conditions: Inlet pressure 0.7 MPa, Outlet pressure 0.2 MPa, Flow rate 20 ℓ/min (ANR)

ARG20

ARG30
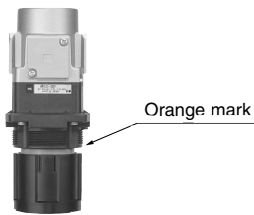
ARG40

Series *ARG20/30/40*

Mounting and Adjustment

⚠ Warning

1 Set the regulator while verifying the displayed values of the inlet and outlet pressure gauges. Turning the regulator handle excessively can cause damage to the internal parts.

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

⚠ Caution

1 Be sure to unlock the handle before adjusting the pressure and lock it after setting the pressure.

  Failure to follow this procedure can cause damage to the handle and the outlet pressure may fluctuate.

• Pull the pressure regulator handle to unlock. (You can visually verify this with the "orange mark" that appears in the gap.)

• Push the pressure regulator handle to lock. When the handle is not easily locked, turn it left and right a little and then push it (when the handle is locked, the "orange mark" i.e., the gap will disappear).

Orange mark

2. When using the regulator between a solenoid valve and an actuator, check the pressure gauge periodically.

Construction

A-A

B-B

IN → OUT
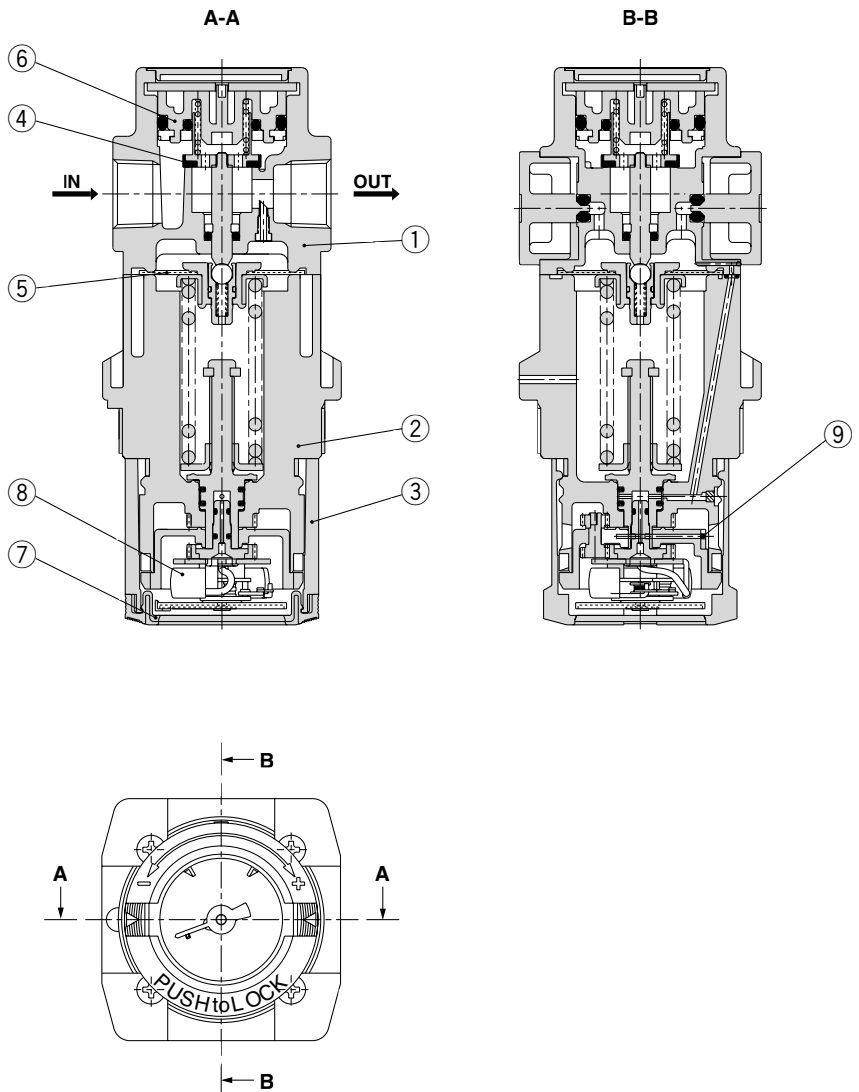
Component Parts

No.	Description	Material			Note
		ARG20	**ARG30**	**ARG40**	
1	**Body**	ZDC	ADC		Platinum silver
2	**Bonnet**	PBT			Black
3	**Handle**	POM			Black

Replacement Parts

No.	Description	Material	Part no.		
			ARG20	**ARG30**	**ARG40**
4	**Valve**	Brass, HNBR	AR20P-410S	AR30P-410S	AR40P-410S
5	**Diaphragm assembly**	Weatherability NBR	AR20P-150AS	AR30P-150AS	AR40P-150AS
6	**Valve guide assembly**	POM, NBR	AR20P-050AS	AR30P-050AS	AR40P-050AS
7	**Pressure gauge cover**	PC	ARG20P-400S	ARG30P-400S	ARG40P-400S
8	**Pressure gauge**	—	GB2-10AS	GB3-10AS	GB4-10AS
9	**Clip**	Stainless steel	ARG20P-420S	ARG30P-420S	ARG40P-420S

Note) Only the standard part numbers are listed in the pressure gauges. For the optional part numbers, refer to page 21

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