



Pneumatic, Vacuum and Auxiliary Components
Catalog No. CB-024SA

Regulator

R1000/R 2000/R 3000 R 4000/R 6000/R8000-W Series

Compact, pressure gauge embedded.

● Port size: 1/8 to 1

JIS symbol 

RoHS



Specifications

Item	R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
Working fluid	Compressed air					
Max. working pressure MPa	1.0					
Proof pressure MPa	1.5					
Ambient/fluid temperatures °C	5 to 60					
Set pressure MPa	0.05 to 0.85					
Pressure relief	With relief mechanism (R1000, R8000 are non-relief only)					
Port size Rc	1/8, 1/4 (3/8 uses an adaptor)	1/4, 3/8 (1/2 uses an adaptor)	1/4, 3/8 (1/2 uses an adaptor)	1/4, 3/8, 1/2 (3/4 uses an adaptor)	3/4, 1 (1 1/4 uses an adaptor)	3/4, 1 (1 1/4 uses an adaptor)
Weight kg	0.16	0.29	0.51	0.75	1.1	1.6
Standard accessories	Panel mounting nut					

Compatibility table by variation

	R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
Port size	Rc1/8, 1/4	Rc1/4, 3/8	Rc1/4, 3/8	Rc1/4, 3/8, 1/2	Rc3/4, 1	Rc3/4, 1
P4	●	●	●	●	●	●
P40		▲	▲	▲	▲	

- : Applicable models
- : Semi-applicable models
- ▲: Contact CKD for details.
- : Not applicable

*1: Pressure gauge/pressure sensor must be ordered separately. (Pressure gauge option is "T", "T8", "T6" only)

*2: R1 option is not available.

*3: R6000 Dimensions is different from the standard.

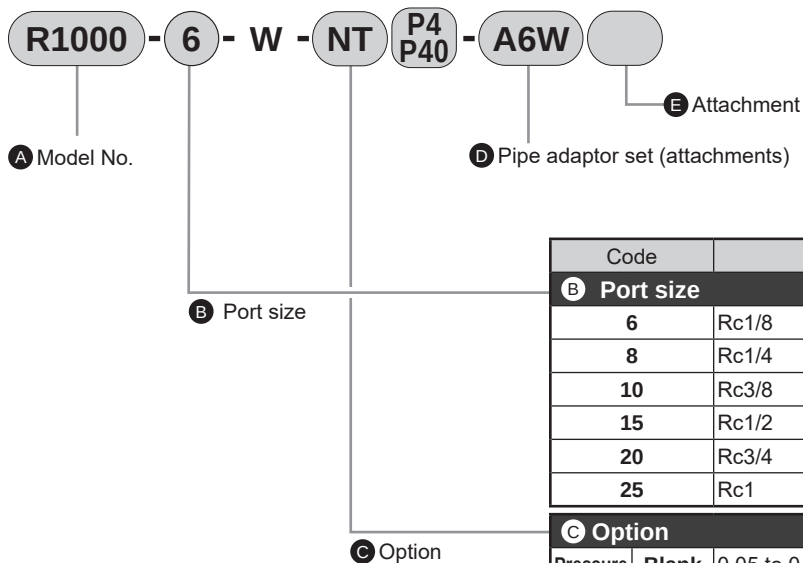
*4: For pressure adjustment springs without gas contact and pressure adjustment screw units in P40, zinc plating is used.

*5: R2 option is not available.

*6: For R1000 and R8000, only non-relief (option code: N) is available.

*7: Zinc die-casting is used in the diaphragm part of R3000 to R8000.

How to order



* Refer to "Pneumatic, Vacuum and Auxiliary Components" (catalog No. CB-024SA) for options.

		A Model No.					
		R1000	R2000	R3000	R4000	R6000	R8000
B Port size							
6	Rc1/8	●					
8	Rc1/4	●	●	●	●		
10	Rc3/8		●	●	●		
15	Rc1/2				●		
20	Rc3/4					●	●
25	Rc1					●	●
C Option		*1					
Pressure range	Blank	0.05 to 0.85 MPa	●	●	●	●	●
	L	0.05 to 0.35 MPa	●	●	●	●	●
Pressure relief	Blank	With relief mechanism		●	●	●	
	N	Non-relief	●	●	●	●	●
Pressure gauge	T	Pressure gauge port (1/4) is assembled sealed	●	●	●	●	●
	T8	Pressure gauge port (1/4) is left open	●	●	●	●	●
	T6	Pressure gauge port (1/8) is left open	●	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●
D Pipe adaptor set (attachments)		*2, *3					
Blank	Not included	●	●	●	●	●	●
A6*W	1/8 pipe adaptor set	●					
A8*W	1/4 pipe adaptor set	●	●	●	●		
A10*W	3/8 pipe adaptor set	●	●	●	●		
A15*W	1/2 pipe adaptor set		●	●	●		
A20*W	3/4 pipe adaptor set				●	●	●
A25*W	1 pipe adaptor set					●	●
A32*W	1 1/4 pipe adaptor set					●	●
E Attachment		Page 491					
Blank	Not included	●	●	●	●	●	●
BW	C-bracket	●	●	●	●	●	●
B3W	L-bracket	*4	●	●	●	●	
B4W	B-bracket	*5		●			

⚠ Precautions for model No. selection

*1: When selecting options for several items, list options in order from the top.

*2: The pipe adaptor set and C-bracket cannot be used together.

*3: The joiner set is included with the pipe adapter set.

*4: For details on mounting the L-bracket, refer to [2. Regulator](#) of "⚠ Cautions and Installation & Adjustment" described in the "Pneumatic, Vacuum and Auxiliary Components" (catalog No. CB-024SA).

*5: Refer to "Pneumatic, Vacuum and Auxiliary Components" (catalog No. CB-024SA) for B-bracket.

P4 Series

Pneumatic actuator
Pneumatic cylinders
Hand/Chuck
Related products
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components
Speed controller

Pneumatic auxiliary components
Fitting
Auxiliary valve

Silencer
Tube

Gas generator

Fluid control components

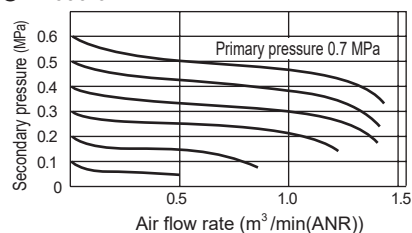
Electric actuator
Motor
Motorless specifications

Regulator Series

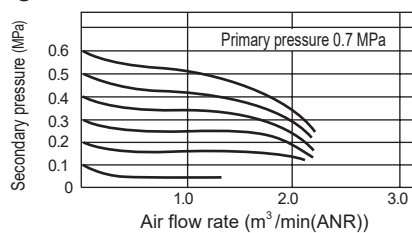
P4
Series

Flow characteristics

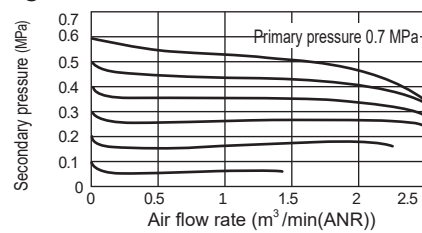
● R1000-6-W



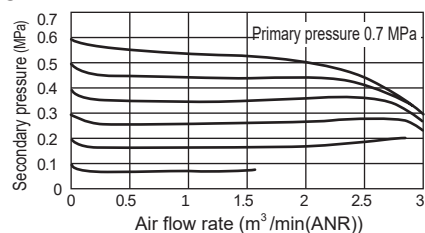
● R1000-8-W



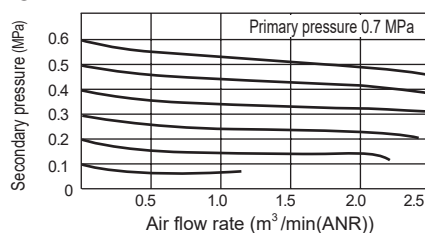
● R2000-8-W



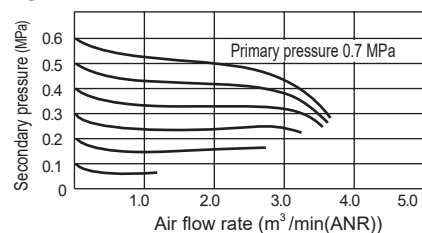
● R2000-10-W



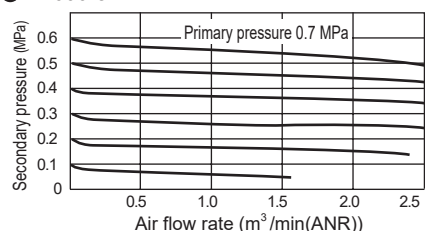
● R3000-8-W



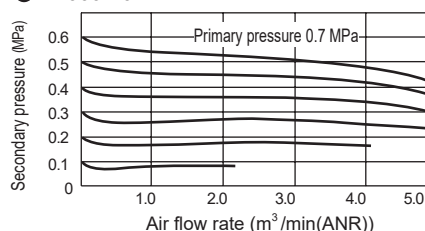
● R3000-10-W



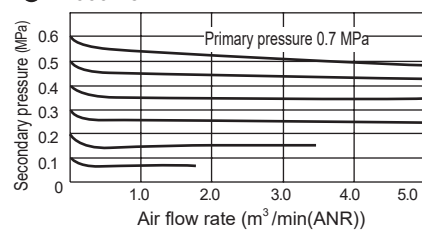
● R4000-8-W



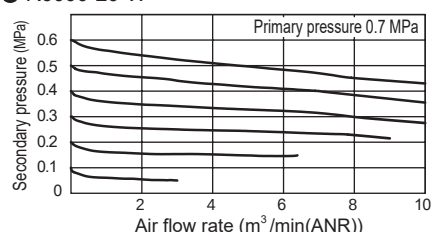
● R4000-10-W



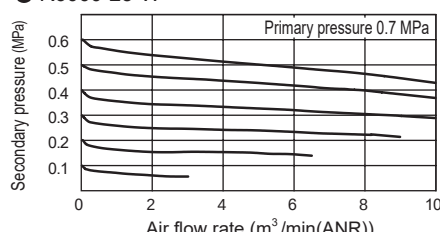
● R4000-15-W



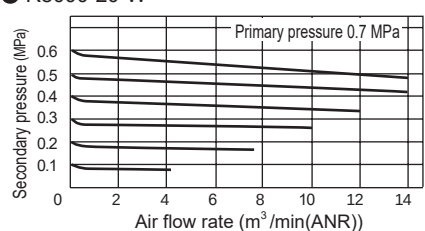
● R6000-20-W



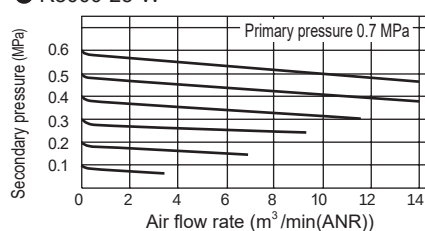
● R6000-25-W



● R8000-20-W

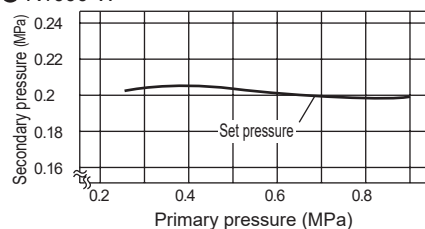


● R8000-25-W

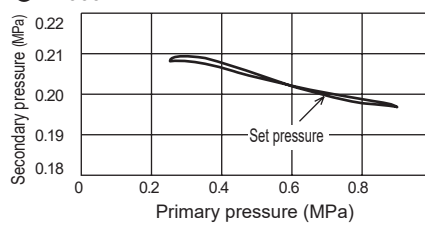


Pressure characteristics

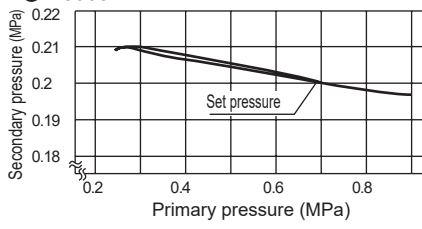
● R1000-W



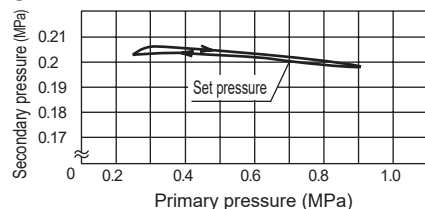
● R2000-W



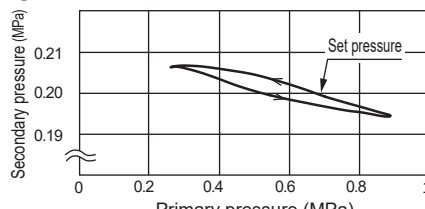
● R3000-W



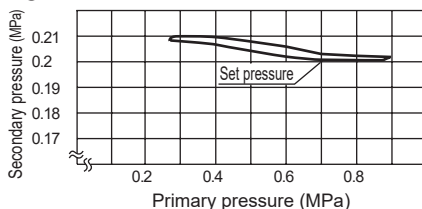
● R4000-W



● R6000-W



● R8000-W

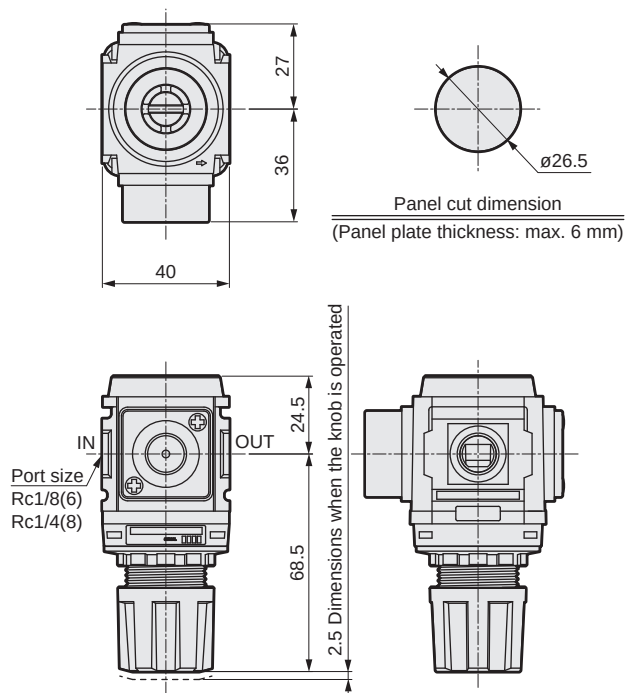


Dimensions

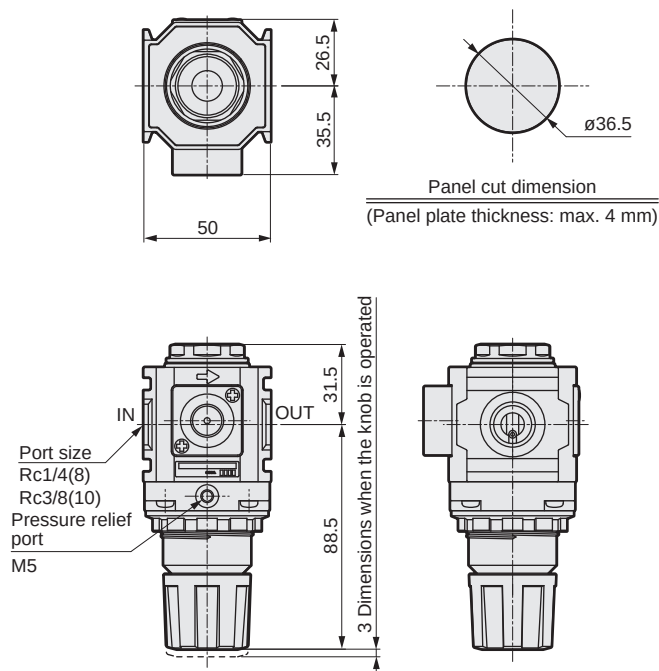


P4
Series

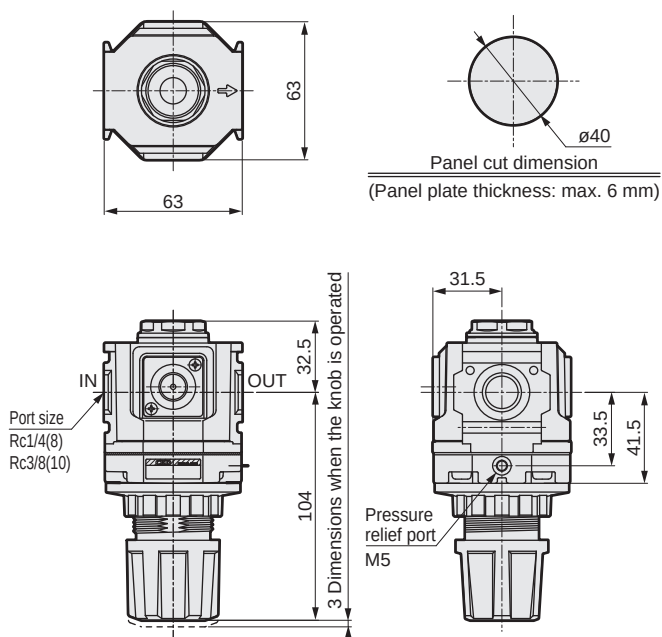
● R1000-*-W-*P4*



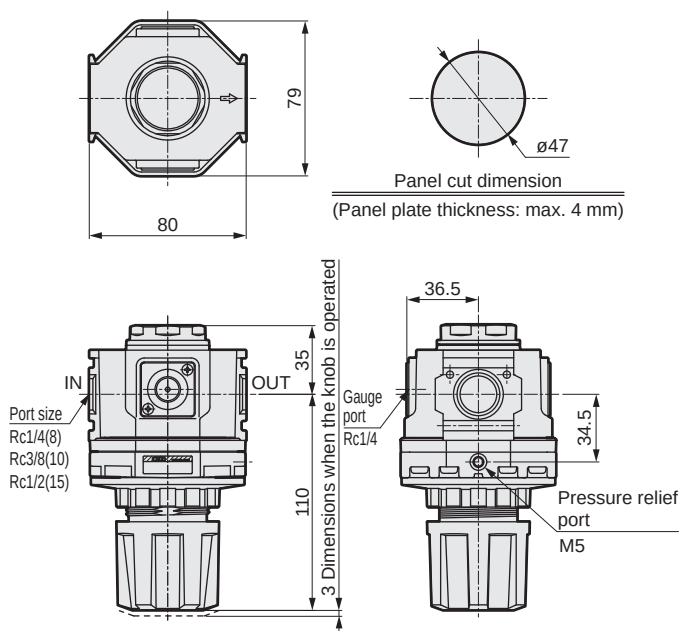
● R2000-*-W-*P4*



● R3000-*-W-*P4*



● R4000-*-W-*P4*



Pneumatic actuator
Pneumatic cylinders
Hand/Chuck
Related products
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components

Pneumatic auxiliary components
Speed controller
Fitting
Auxiliary valve
Silencer
Tube

Gas generator

Fluid control components

Electric actuator
Motor specification
Motorless specifications

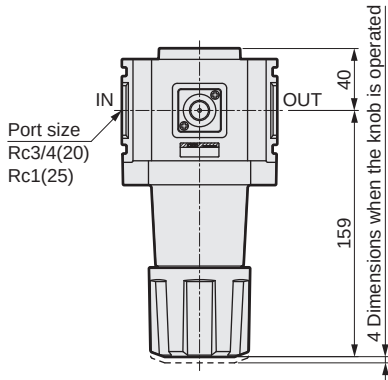
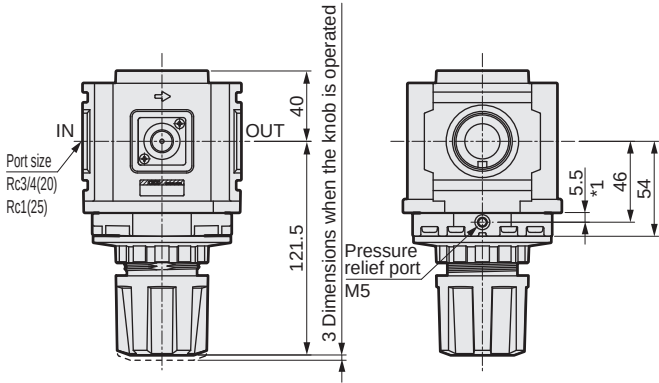
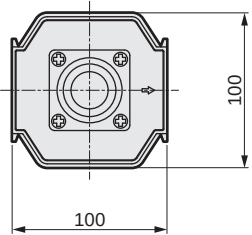
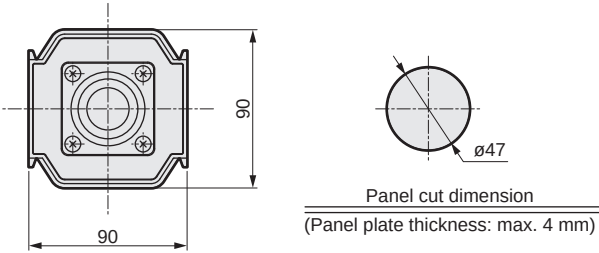
Regulator Series

P4
Series

Dimensions 

● R6000-*-W-*P4-*

● R8000-*-W-*P4-*



Pneumatic actuator

Pneumatic cylinders
Hand/Chuck
Related products
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components

Clean air components
Speed controller
Fitting
Auxiliary valve
Silencer
Tube

Gas generator

Fluid control components

Electric actuator

Motor specifications



Reverse regulator

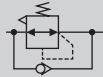
R1100/R2100/R3100

R4100/R6100/R8100-W Series

From secondary pressure to primary side with reverse flow function built in.

● Port size: 1/8 to 1

JIS symbol



RoHS

P4
Series

Specifications

Item	R1100-W	R2100-W	R3100-W	R4100-W	R6100-W	R8100-W
Working fluid	Compressed air					
Max. working pressure MPa	1.0					
Proof pressure MPa	1.5					
Ambient/fluid temperatures °C	5 to 60					
Set pressure (*1) MPa	0.05 to 0.85					
Pressure relief	With relief mechanism (R1100, R8100 are non-relief only)					
Port size Rc	1/8, 1/4 (3/8 uses an adaptor)	1/4, 3/8 (1/2 uses an adaptor)	1/4, 3/8 (1/2 uses an adaptor)	1/4, 3/8, 1/2 (3/4 uses an adaptor)	3/4, 1 (1 1/4 uses an adaptor)	3/4, 1 (1 1/4 uses an adaptor)
Weight kg	0.16	0.29	0.51	0.75	1.1	1.6
Standard accessories	Panel mounting nut					

*1: Refer to the set pressure range for the back pressure given on page 475 when selecting the model.

*2: Check that the primary pressure is at least 0.05 MPa more than the secondary pressure.

Regulator Series

P4
Series

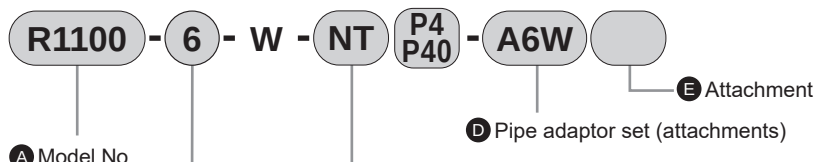
Compatibility table by variation

	R1100-W	R2100-W	R3100-W	R4100-W	R6100-W	R8100-W
Port size	Rc1/8, 1/4	Rc1/4, 3/8	Rc1/4, 3/8	Rc1/4, 3/8, 1/2	Rc3/4, 1	Rc3/4, 1
P4	●	●	●	●	●	●
P40		▲	▲	▲	▲	

- : Applicable models
- : Semi-applicable models
- ▲: Contact CKD for details.
- : Not applicable

- *1: Pressure gauge/pressure sensor must be ordered separately. (Pressure gauge option is "T", "T8", "T6" only)
 *2: R1 option is not available.
 *3: For pressure adjustment springs without gas contact and pressure adjustment screw units in P40, zinc plating is used.
 *4: R2 option is not available.
 *5: For R1100 and R8100, only non-relief (option code: N) is available.
 *6: Zinc die-casting is used in the diaphragm part of R3100 to R8100.

How to order



* Refer to "Pneumatic, Vacuum and Auxiliary Components" (catalog No. CB-024SA) for options.

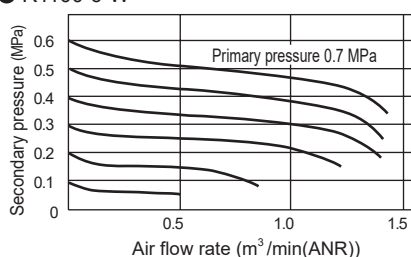
		A Model No.					
		R1100	R2100	R3100	R4100	R6100	R8100
Code	Description						
B Port size							
6	Rc1/8	●					
8	Rc1/4	●	●	●	●		
10	Rc3/8		●	●	●		
15	Rc1/2				●		
20	Rc3/4					●	●
25	Rc1					●	●
C Option		*1, *2					
Pressure range	Blank	0.05 to 0.85 MPa					
	L	0.05 to 0.35 MPa *3					
Pressure relief	Blank	With relief mechanism					
	N	Non-relief					
Pressure gauge	T	Pressure gauge port (1/4) is assembled sealed					
	T8	Pressure gauge port (1/4) is left open					
	T6	Pressure gauge port (1/8) is left open					
Flow direction	Blank	Standard flow (left → right)					
	X1	Reverse flow (right → left)					
D Pipe adaptor set (attachments)		*3, *4					
Blank	Not included	●	●	●	●	●	●
A6*W	1/8 pipe adaptor set	●					
A8*W	1/4 pipe adaptor set	●	●	●	●		
A10*W	3/8 pipe adaptor set	●	●	●	●		
A15*W	1/2 pipe adaptor set		●	●	●		
A20*W	3/4 pipe adaptor set				●	●	●
A25*W	1 pipe adaptor set					●	●
A32*W	1 1/4 pipe adaptor set					●	●
E Attachment		Page 491					
Blank	Not included	●	●	●	●	●	●
BW	C-bracket	●	●	●	●	●	●
B3W	L-bracket	*5	●	●	●	●	
B4W	B-bracket	*6	●				

⚠ Precautions for model No. selection

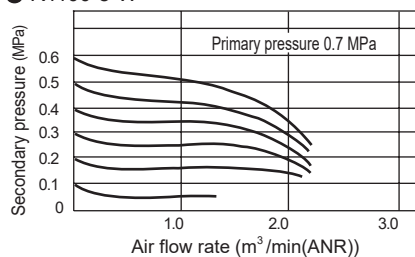
- *1: When selecting options for several items, list options in order from the top.
 *2: Positions of check valve and pressure gauge mounting port cannot be changed. If the IN and OUT directions must be reversed, indicate "X1" at the end of the option field.
 *3: The pipe adaptor set and C-bracket cannot be used together.
 *4: The joiner set is included with the pipe adapter set.
 *5: For details on mounting the L-bracket, refer to (2. Regulator) of "⚠ Cautions and Installation & Adjustment" described in the "Pneumatic, Vacuum and Auxiliary components" (catalog No. CB-024SA).
 *6: For the B-bracket, refer to "Pneumatic, Vacuum and Auxiliary Components" (Catalog No. CB-024SA).

Flow characteristics

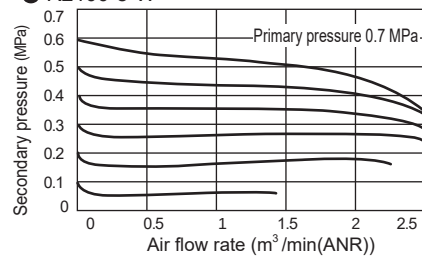
● R1100-6-W



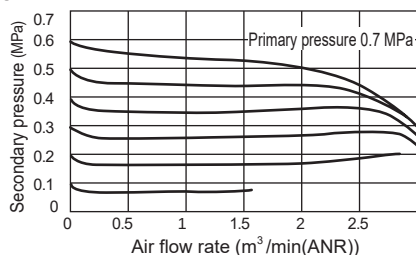
● R1100-8-W



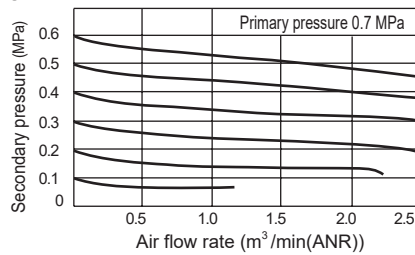
● R2100-8-W



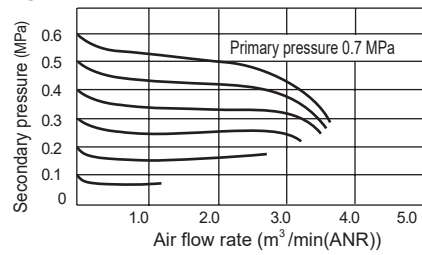
● R2100-10-W



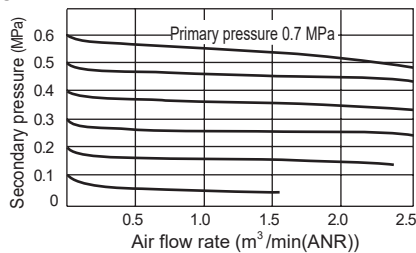
● R3100-8-W



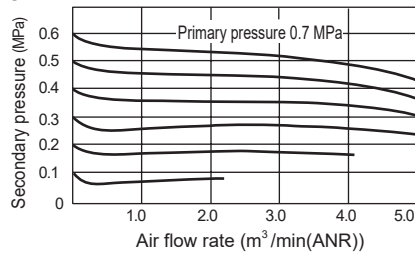
● R3100-10-W



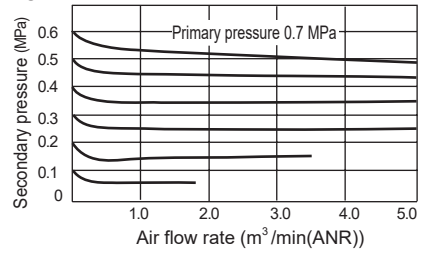
● R4100-8-W



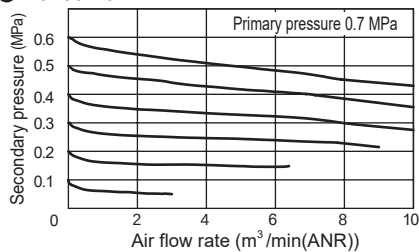
● R4100-10-W



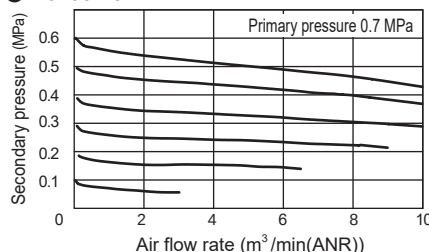
● R4100-15-W



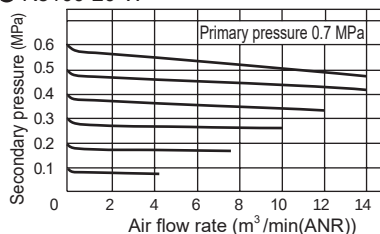
● R6100-20-W



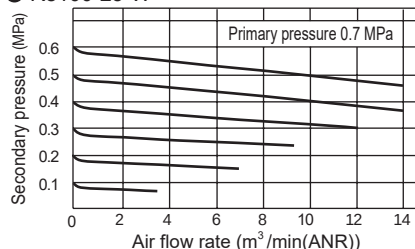
● R6100-25-W



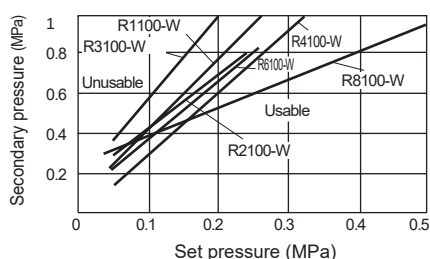
● R8100-20-W



● R8100-25-W



● Set pressure range to back pressure



Note: The area above the graph line shows the unusable range and that below the graph line shows the usable range.

Example: If R4100-W is set to the set pressure 0.2 MPa and the secondary back pressure is 0.6 MPa and over, the secondary pressure will not be released to the primary side.

P4
Series

Pneumatic actuator
Pneumatic cylinders
Hand/Chuck
Related products

Vacuum components

Pneumatic valves

Clean air components
Speed controller

Pneumatic auxiliary components
Fitting
Auxiliary valve

Silencer
Tube

Gas generator

Fluid control components

Electric actuator
Motor specification
Motorless specifications

Regulator Series

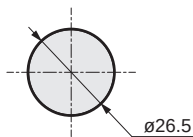
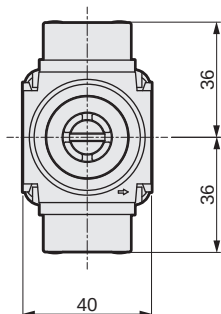
P4
Series

Dimensions

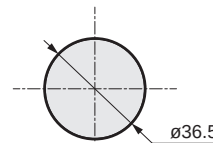
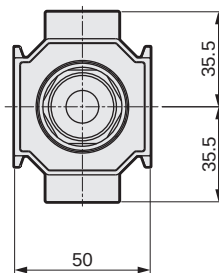


●R1100-*-W-*P4-*

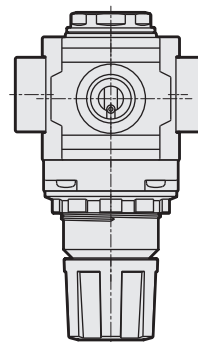
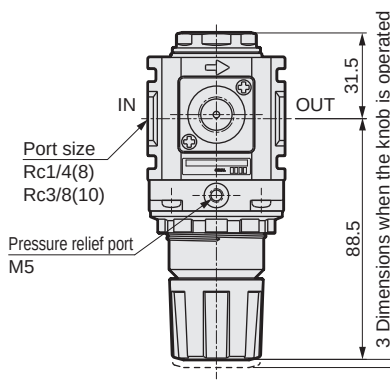
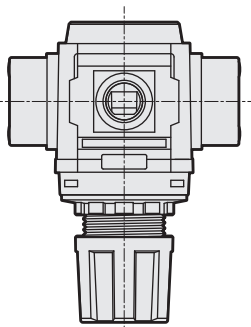
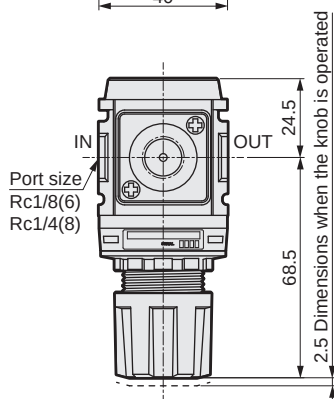
●R2100-*-W-*P4-*



Panel cut dimension
(Panel plate thickness: max. 6 mm)

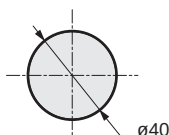
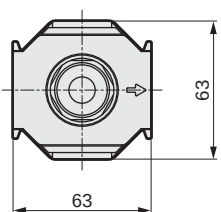


Panel cut dimension
(Panel plate thickness: max. 4 mm)

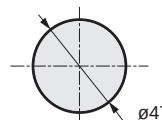
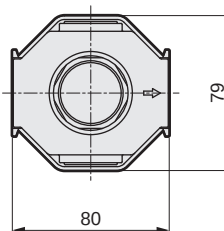


● R3100-*-W-*P4-*

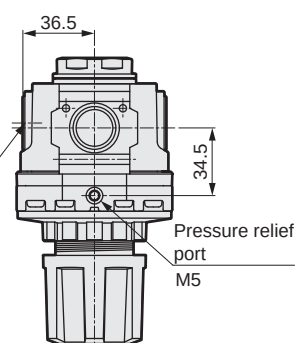
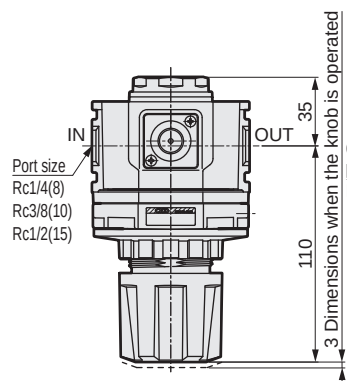
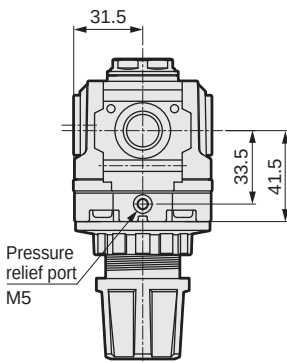
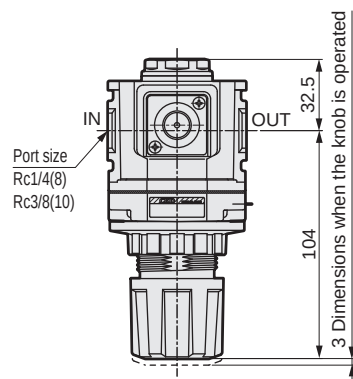
● R4100-*-W-*P4-*



Panel cut dimension
(Panel plate thickness: max. 6 mm)



Panel cut dimension
(Panel plate thickness: max. 4 mm)



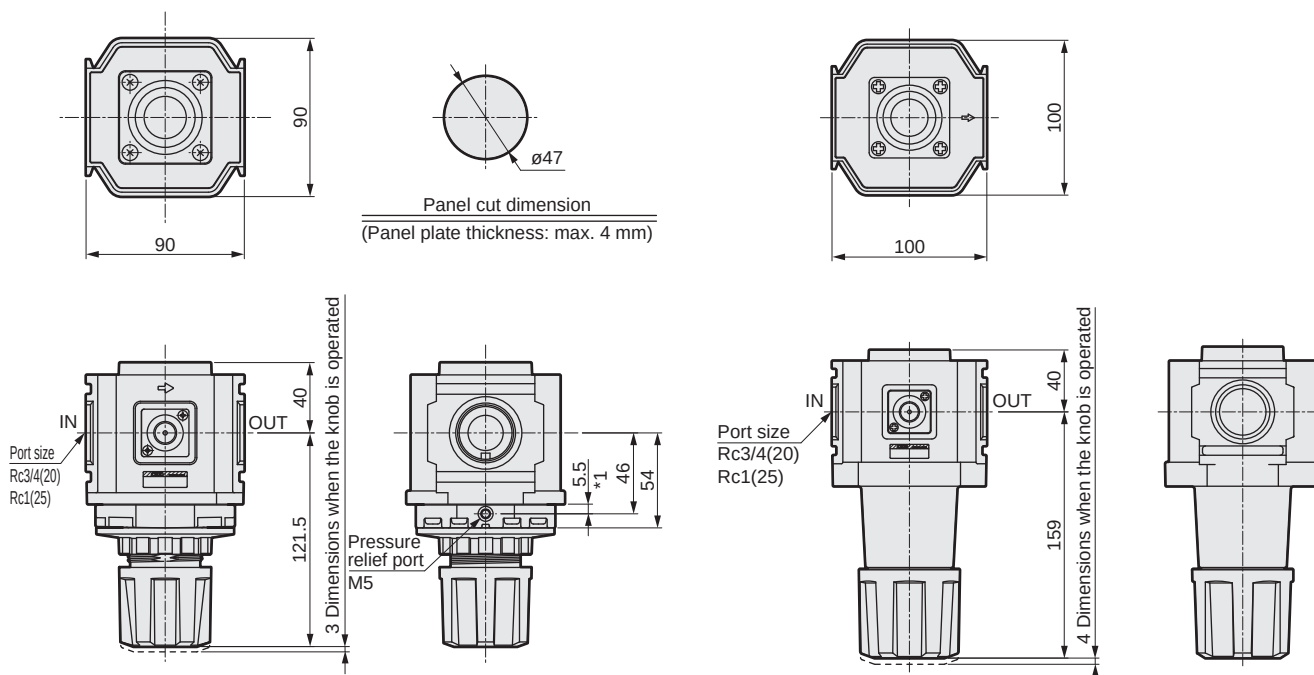
Dimensions



●R6100-*-W-*P4-*

●R8100-*-W-*P4-*

P4
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