

Modular type compact regulator R2000/R2100 White Series



Specifications

Model no.	R2000-W	R2100-W
Working fluid	Compressed air	
Max. working pressure MPa	1.0	
Withstanding pressure MPa	1	.5
Working temperature °C	5 to 60	
Setting pressure range (Note 2) MPa	0.05 to 0.85	
Reverse mechanism	No Yes	
Port size Rc, G and NPT	1/4, 3/8 (1/2 is for an adaptor.)	
Product weight kg	0.31	
Standard accessories	Pressure gauge and nut for panel mount	

R2100 (reverse regulator) cautions

Note 1: Set the primary pressure so as to be 0.05MPa higher than the secondary pressure. Note 2: For the selection guide, surely check the setting pressure on the back pressure.

Overview

R2000/2100 White Series are general purpose regulators with integrated pressure gauge. These are compatible with 3000/4000

Features

- The body matches to any white equipment.
- Compact and large flow rate Max. flow rate in class 2.5 m³/min. (ANR)
- Pressure gauge integrated Front dead space reduced
- Filter and oil mist filter are available depending on usage flow rate Filter F3000/F4000 Series

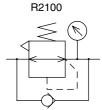
Oil mist filter M3000/M4000 Series

Various bracket available

Rear side installation: L type bracket, C type bracket Bottom side installation: B type bracket

JIS symbol





How to order



A Model no.		
R2000	Regulator	
R2100	Reverse regulator	

B Port size		
8	Rc1/4	
10	Rc3/8	
8G	G1/4	
10G	G3/8	
8N	1/4NPT	
10N	3/8NPT	

0	Optio	n Note	1
sure	Blank	0.05 to 0.85MPa	
Pressure range	L	0.05 to 0.35MPa	
Relief	Blank	Relief type	
æ	N	Nonrelief type	
agn	Blank	With standard pressure gauge (G401) Note	2
Pressure gauge	Т	Without pressure gauge (a gauge port is assembled with sealed.) Note	3
ssur	T8	Round pressure gauge attached (a gauge pois assembled by open.)	ort
Pre	R1	Pressure switch PPD with display Note assembled	4
	X1	IN / OUT reverse flow direction (right ⇒le	ft)

l		splay unit
		MPa display and Rc thread
	J1	MPa display NPT and G thread
1		

		tachment Note 5		
		1/4 piping adapter se		
		3/8 piping adapter se		
Α	15*W	1/2 piping adapter se		
		otor thread type		
Е	Blank	Rc thread		
	N	NPT thread		
	G	G thread		

BW	C type bracket	
B3W	L type brac	ket
B4W	B type bracket	
G49P	G49D-8-P10	Note 2
G59P	G59D-8-P10	Note 2
G40P	G40D-8-P10	Note 2
G50P	G50D-8-P10	Note 2
G41P	G41D-8-P10	Note 2

Note 1: When selecting options, indicate symbols from the top.

Note 2: If selected "L" in pressure range section, the pressure gauge for low pressure is provided (0 to 0.4MPa).

Note 3: If selected "T" in pressure gauge section, gauge plug is assembled instead of pressure gauge.

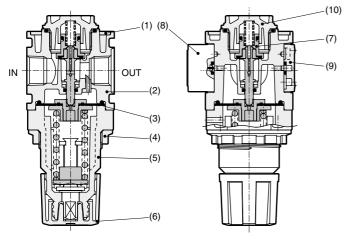
Note 4: Working temperature becomes 5 to 50°C. PPD is black.

Note 5: Piping adapter set and C type bracket cannot be used together.

R2000 • R2100 Series

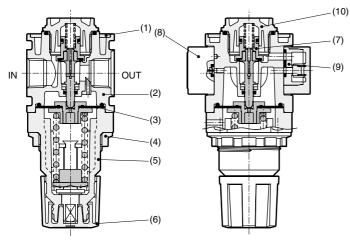
Internal structure and parts list

● R2000-W



No.	Parts name	Material
(1)	Plate cover	ABS resin
(2)	Body	Aluminum alloy die-casting
(3)	Diaphragm assembly	Polyacetal resin and nitrile rubber
(4)	Mounting nut	Polyacetal resin
(5)	Guard	PBT resin
(6)	Knob	Polyacetal resin
(7)	Valve assembly	Brass, hydrogen nitrile rubber, polyacetal resin
(8)	Pressure gauge assembly	PBT resin, nitrile rubber, polyacetal
	Fressure gauge assembly	resin, polycarbonate resin, brass, steel
(9)	Blanking plug assembly	PBT resin, nitrile rubber, steel
(10)	Bottom plug	Polyacetal resin

●R2100-W

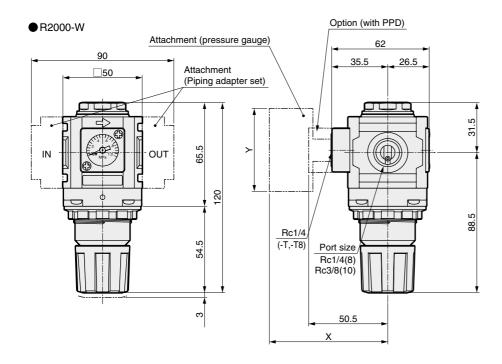


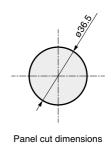
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(1)	Plate cover	ABS resin
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(5)	Guard	PBT resin
(6)	Knob	Polyacetal resin
(7)	Valve assembly	Brass, hydrogen nitrile rubber, polyacetal resin
(8) Pressure gauge asse	Drocoure gouge cocombly	PBT resin, nitrile rubber, polyacetal
	Fressure gauge assembly	resin, polycarbonate resin, brass, copper
(9)	Check valve total assemblies	PBT resin, nitrile rubber, stainless steel wire, steel
(10)	Bottom plug	Polyacetal resin

Repair parts list

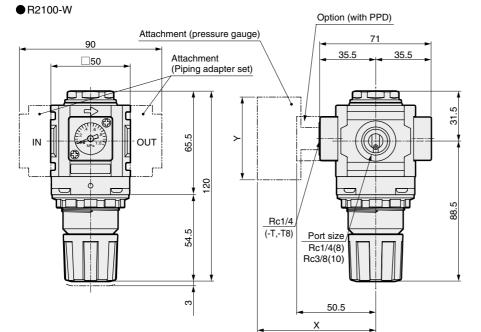
Repair parts		Model no.	R2000-W	R2100-W
Valve assembly (Valve assembly + bottom spring + bottom O ring)		R2000-W-VALVE-ASSY	0	0
Relief type		R2000-DIAPHRAGM-ASSY	0	0
Diaphragm assembly	Nonrelief type	R2000-DIAPHRAGM-ASSY-N	0	0
Adjusting spring	Standard (0.05 to 0.85MPa)	R2000-W-SPRING	0	0
Adjusting spring	For low pressure (0.05 to 0.35MPa)	R2000-W-SPRING-L	0	0
Check valve assembly for reverse regulator		R3100-W-CHECK-VALVE-ASSY	_	0
Repair kits (diaphragm assembly + valve	Relief type	R2000-W-KIT	0	0
assembly + bottom spring + bottom O ring)	Nonrelief type	R2000-W-KIT-N	0	0

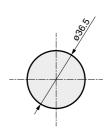
Dimensions





(Panel plate thickness: MAX. 4mm)



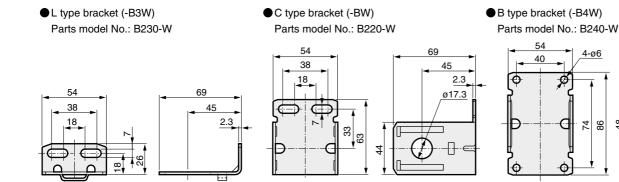


Panel cut dimensions

(Panel plate thickness: MAX. 4mm)

Pressure gauge optional dimensions table

Attached pressure gauge	Х	Y	
G49P	(72.5)	ø43.5	
G59P	(77.5)	ø52	
G40P	(74)	ø42.5	
G50P	(75)	ø52.5	
G41P	(73.5)	ø42	



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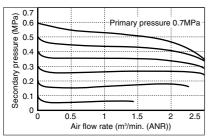
2.3

ø17.3

R2000 · R2100 Series

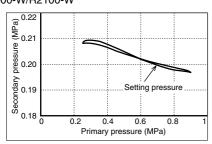
Flow characteristics

R2000-8-W/R2100-8-W

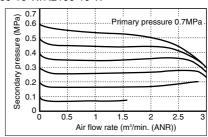


Pressure characteristics

R2000-W/R2100-W

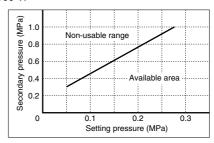


R2000-10-W/R2100-10-W



Set pressure range against back pressure

R2100-W



Safety precautions



- Use the product in accordance with specifications.
- This product must keep away from the direct sun rays.
- Do not use this product in the atmosphere or place that corrosive gas, chemicals or sea water could contact with or makes adhesion.
- Avoid installation to a location where vibration and shock could occur.
- When installing, do not apply piping load or torque on the body. (Max. torque 15N·m)



Cautions

- When installing pressure gauge integrated type etc., tighten screw with the torque 0.6N m or less.
- When installing pressure gauge screw-in type, tighten screw with the torque 15N·m or less.
- When piping, execute air flushing just before connecting to the component.
- When screwing pipe or joint etc. in, swarf of piping screw or seal material must not get into.
- Check the flow direction by arrow, then connect the pipe.
- Install air filter on the primary side.
- If pressurizing with the pressure over the range, pressure gauge could be broken.
- When connecting pipes, make tightening torque for joint 30N·m or less.



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