

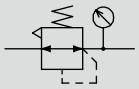
Regulator for water

WR1/WR2 Series

Easy-to-use compact regulator for water

- Port size: Rc1/8 to Rc1/2

JIS symbol



RoHS

Features

- Specially designed knob shape for easy pressure adjustment
- A single push can lock the pressure adjustment knob.
- Mesh filter is supplied as standard.
- RoHS compliant

Main applications

- Control pressure : An arbitrary pressure can be obtained even if the flow rate is unstable.
- Flow rate control : The desired flow rate can be attained when used together with a metering valve.
- Protecting equipment : Equipment can be protected from primary side pressure fluctuations.

Equipment examples: Laser processing machine, welding machine, dental instrument, etc.

Specifications

1 MPa = 10 bar

Item	WR1	WR2
Working fluid	General industrial pure water, compressed air	
Max. working pressure MPa	1.0 (≈150 psi, 10 bar)	
Proof pressure MPa	1.75 (≈250 psi, 17.5 bar)	
Ambient / fluid temperatures °C	5 (41°F) to 60 (140°F)	
Set pressure MPa	Standard: 0.05 (≈7.3 psi) to 0.70 (≈100 psi) Low pressure: 0.02 (≈2.9 psi) to 0.35 (≈51 psi)	
Pressure relief	Non-relief	
Port size (IN/OUT)	Rc1/8, Rc1/4	Rc3/8, Rc1/2
Pressure gauge port size	Rc1/8	
Weight kg	0.22	0.41(Rc3/8), 0.44(Rc1/2)
Standard specifications	With mesh filter	

Option weight

* Add to the weight of the standard accessories. Unit: kg

	Panel mount	Pressure gauge	Bracket
Code	P	G	B
WR1/WR2	0.025	0.086	0.03

How to order

WR1 - 8 - N L - G

Ⓐ Model No.
Ⓑ Port size
Ⓒ Option
Ⓓ Attachment

Code		Description	Ⓐ Model No. WR1	Ⓐ Model No. WR2
Ⓑ Port size				
6		Rc1/8	●	
8		Rc1/4	●	
10		Rc3/8		●
15		Rc1/2		●
Ⓒ Option				
Panel mount *1	**Blank**	Without nut	●	●
	P	With nut	●	●
Pressure range	**Blank**	0.05 to 0.7 MPa	●	●
	L	0.02 to 0.35 MPa	●	●
Ⓓ Attachment				
Blank		Not attached	●	●
B	***1**	Bracket	●	●
G	***2**	Pressure gauge (G49D-6-P10)	●	●

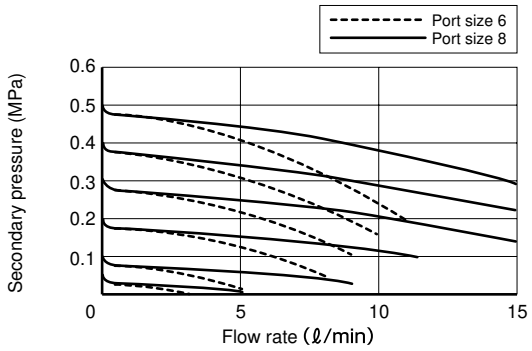
*1 : "B" bracket attached is available only for option code P (panel mount). A panel mounting nut cannot be retrofitted in a product without panel mounting nut.

*2 : If the pressure range "L" is selected, the pressure gauge G49D-6-P04 for 0.4 MPa will be attached.

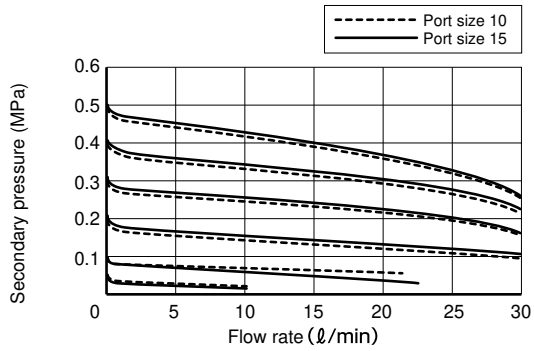
*3 : One plug (R1/8) is included with the product.

Flow characteristics (water) Primary pressure 0.7 MPa

●WR1-6-N, WR1-8-N

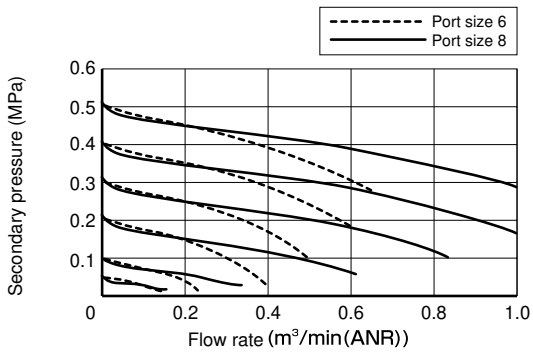


●WR2-10-N, WR2-15-N

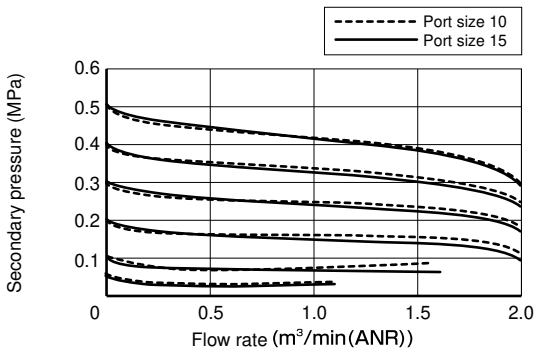


Flow characteristics (air) Primary pressure 0.7 MPa

●WR1-6-N, WR1-8-N

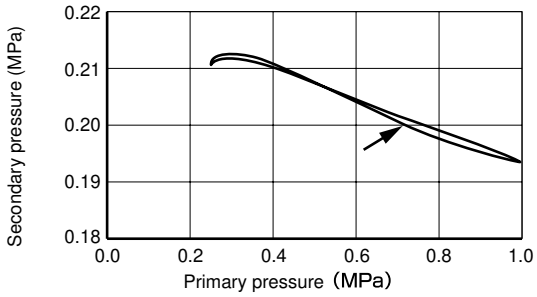


●WR2-10-N, WR2-15-N

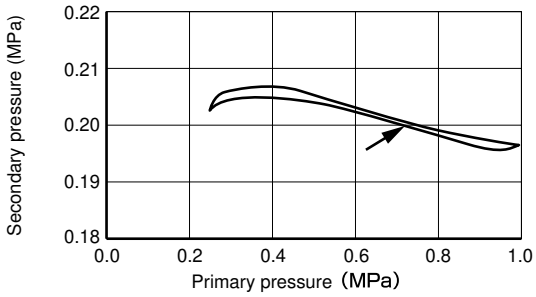


Pressure characteristics (water/air) set point ↗

●WR1

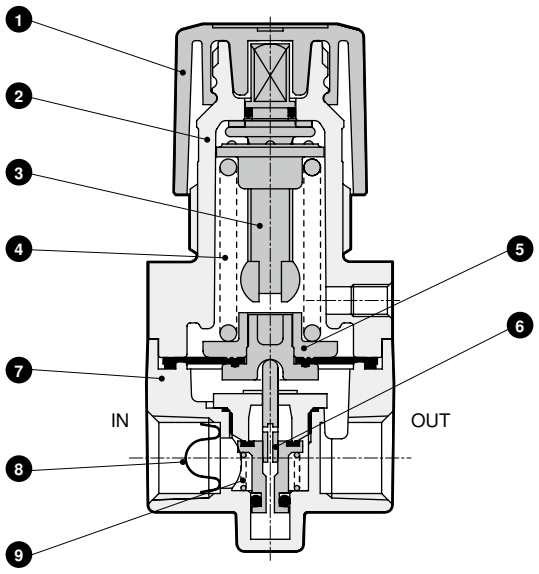


●WR2

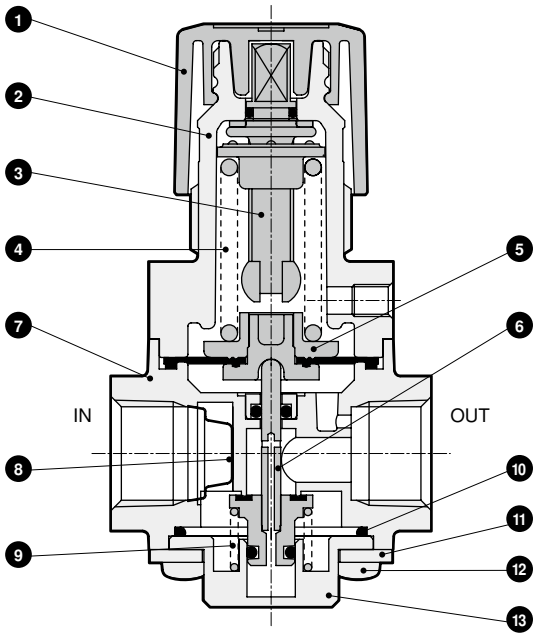


Internal structure and parts list

●WR1



●WR2

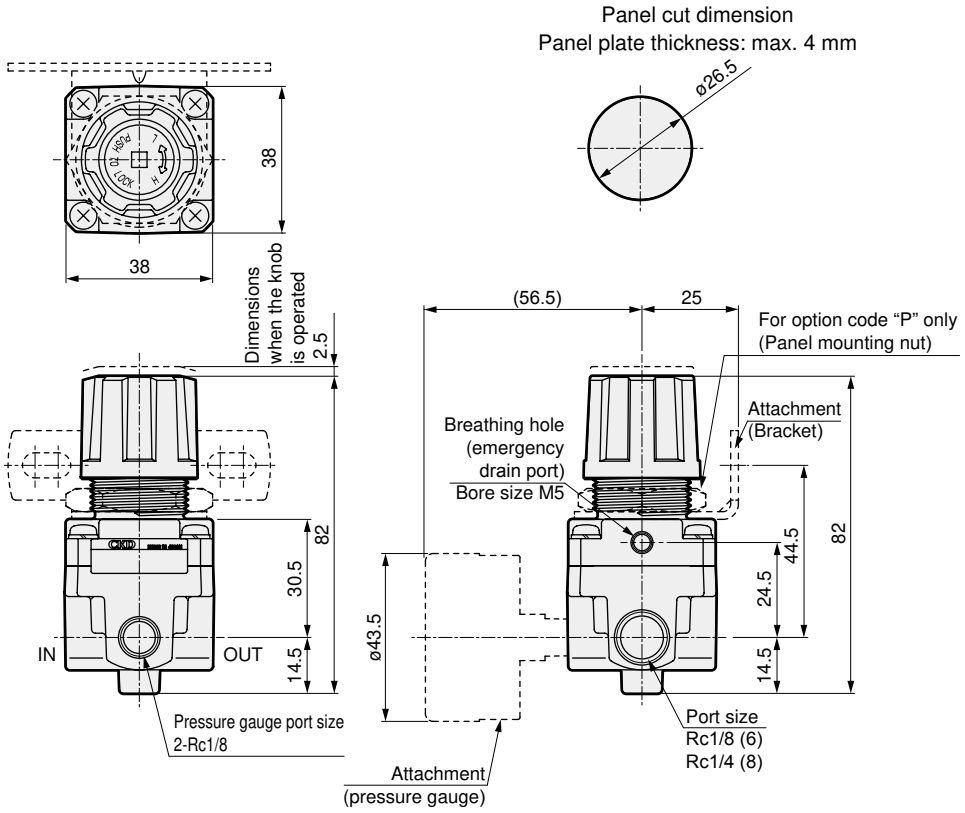


No.	Part name	Material	No.	Part name	Material
1	Knob	Polyacetal resin	8	Mesh filter	Stainless steel
2	Cover	PBT resin	9	Bottom spring	Stainless steel
3	Pressure adjusting screw assembly	Steel, polyacetal resin, nitrile rubber	10	O-ring	Nitrile rubber
4	Spring	Steel	11	Plate	Stainless steel
5	Diaphragm assembly	Nitrile rubber, polyacetal resin	12	Thread	Steel (nickel plating)
6	Valve assembly	Copper alloy, stainless steel, nitrile rubber	13	Bottom cap	Copper alloy
7	Body assembly	Copper alloy, nitrile rubber, polyacetal resin*			

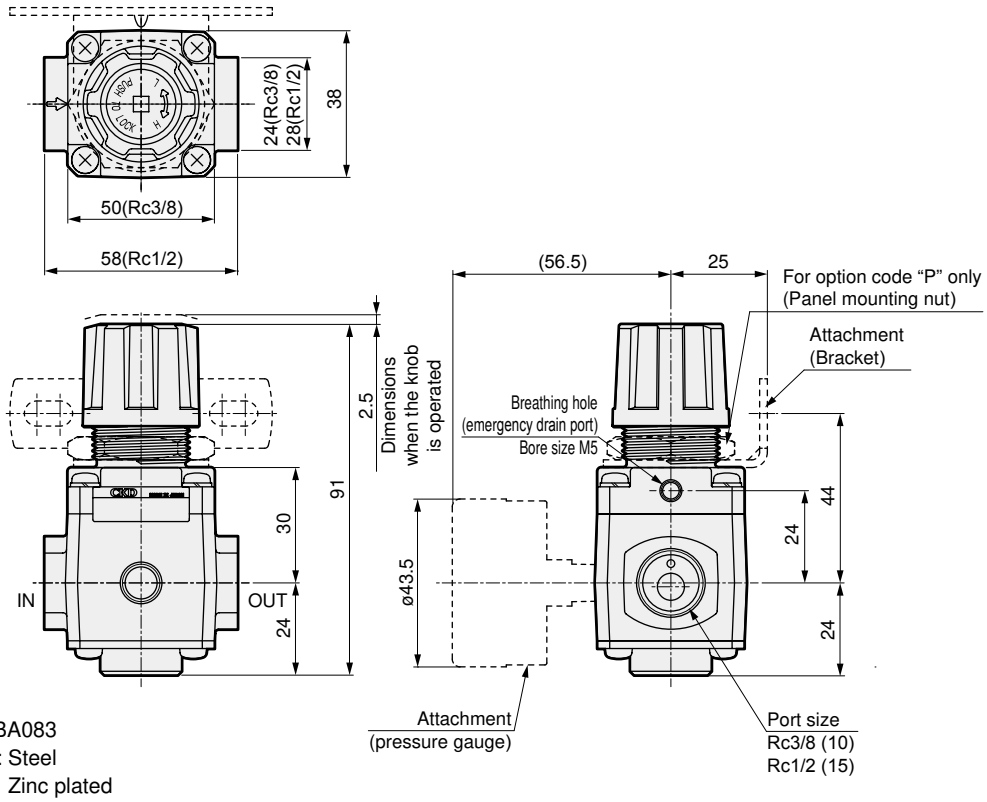
* WR1 only

Dimensions

●WR1



●WR2



● Bracket: RA800-BA083
· Material: Steel
Zinc plated

