

EXA  
FWD  
HNB/G  
USB/G  
FAB/G  
FGB/G  
FVB  
FWB/G  
FHB  
FLB  
AB  
AG  
AP/  
AD  
APK/  
ADK  
DryAir  
EX-  
XPLNprf  
XPLNprf  
HVB/  
HVL  
S ◇ B/  
NAB  
LAD/  
NAD  
Water-  
Rela  
NP/NAP/  
NVP  
SNP  
CHB/G  
MXB/G  
Other valves  
SWD/  
MWD  
DustColl  
CVE/  
CVSE  
CCH/  
CPE/D  
LifeSci  
Gas-  
Combus  
Auto-  
Water  
Outdoor  
SpecFld  
Custom  
Ending



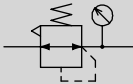
Regulator for water

# WR1/WR2 Series

Easy-to-use compact regulator for water

● Port size: Rc1/8 to Rc1/2

JIS symbol



## 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



A Model No.

B Port size

C Option

D Attachment

A Model No.

WR1 WR2

Code	Description		
B Port size			
6	Rc1/8	●	
8	Rc1/4	●	
10	Rc3/8		●
15	Rc1/2		●
C Option			
Panel mount	Blank	Without nut	● ●
	*1 P	With nut	● ●
Pressure range	Blank	0.05 to 0.7 MPa	● ●
	L	0.02 to 0.35 MPa	● ●
D Attachment			
Blank		Not attached	● ●
B *1		Bracket	● ●
G *2		Pressure gauge (G49D-6-P10)	● ●

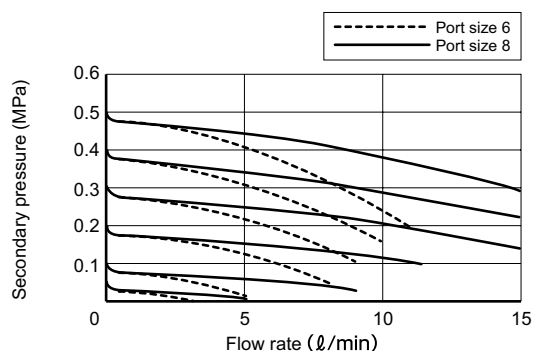
\*1 : "B" bracket attached is available only for option code P (panel mount). A panel mounting nut cannot be retrofitted in a product without panel mounting nut.

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

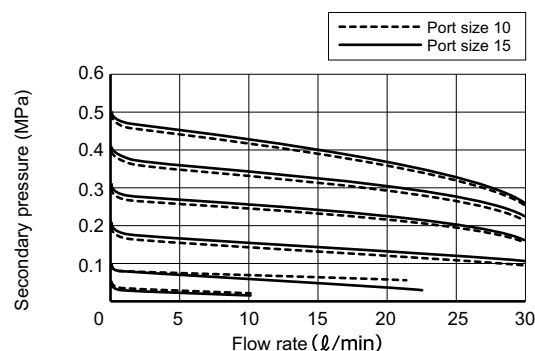
\*3 : One plug (R1/8) is included with the product.

### Flow characteristics (water) Primary pressure 0.7 MPa

●WR1-6-N, WR1-8-N

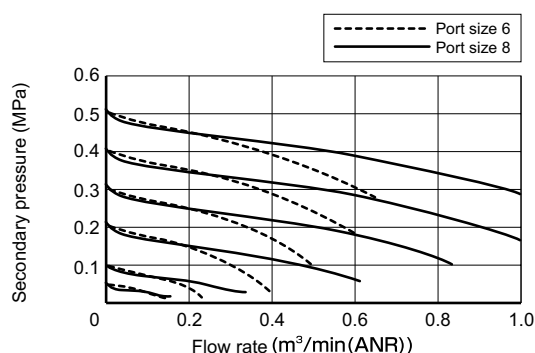


●WR2-10-N, WR2-15-N

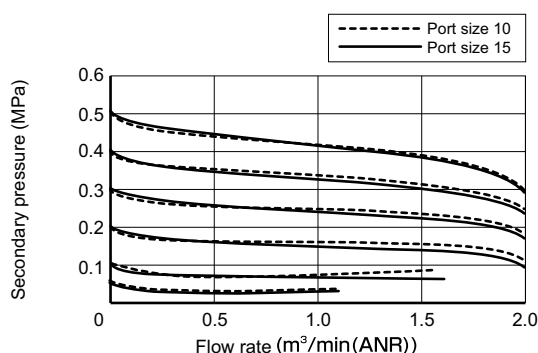


### Flow characteristics (air) Primary pressure 0.7 MPa

●WR1-6-N, WR1-8-N

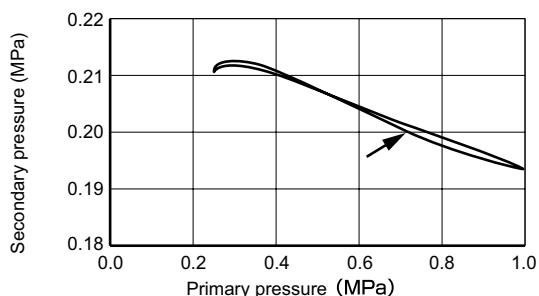


●WR2-10-N, WR2-15-N

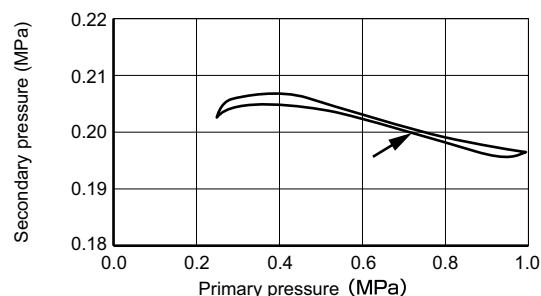


### Pressure characteristics (water/air) set point ↗

●WR1



●WR2



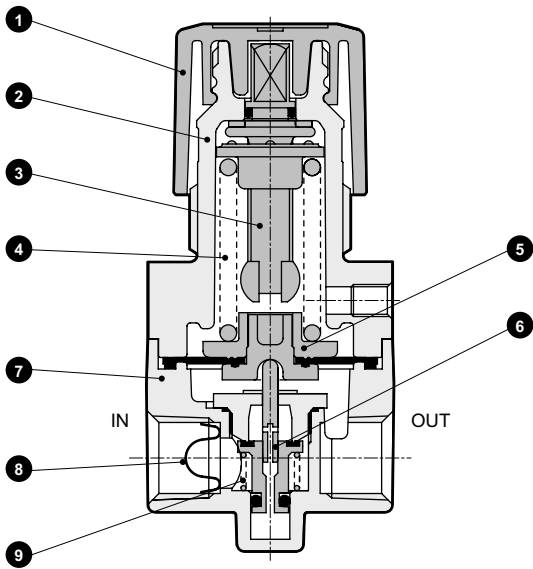
EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S <sup>◇</sup> B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending

# WR1/WR2 Series

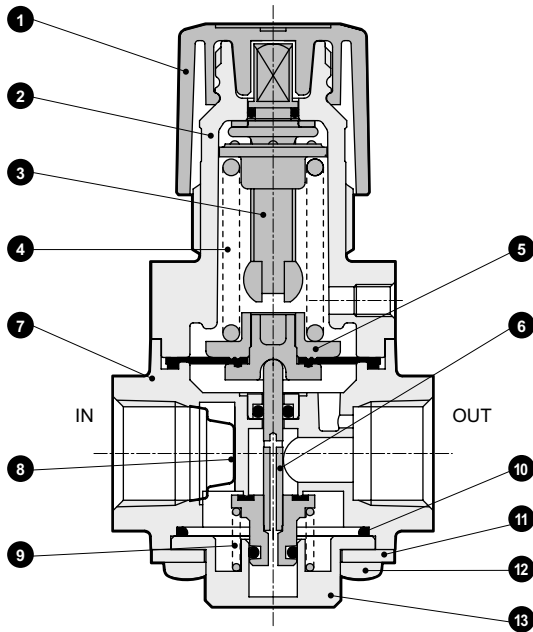
EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S ◇ B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending

## Internal structure and parts list

●WR1



●WR2

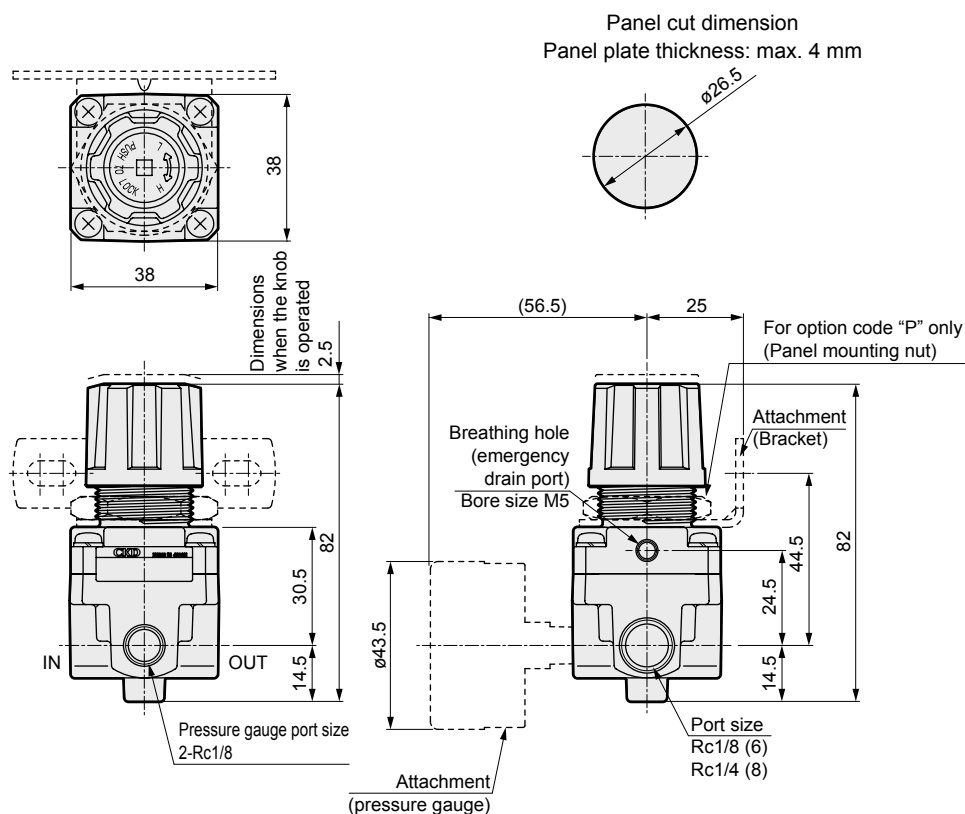


No.	Part name	Material	No.	Part name	Material
1	Knob	Polyacetal resin	8	Mesh filter	Stainless steel
2	Cover	PBT resin	9	Bottom spring	Stainless steel
3	Pressure adjusting screw assembly	Steel, polyacetal resin, nitrile rubber	10	O-ring	Nitrile rubber
4	Spring	Steel	11	Plate	Stainless steel
5	Diaphragm 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*			

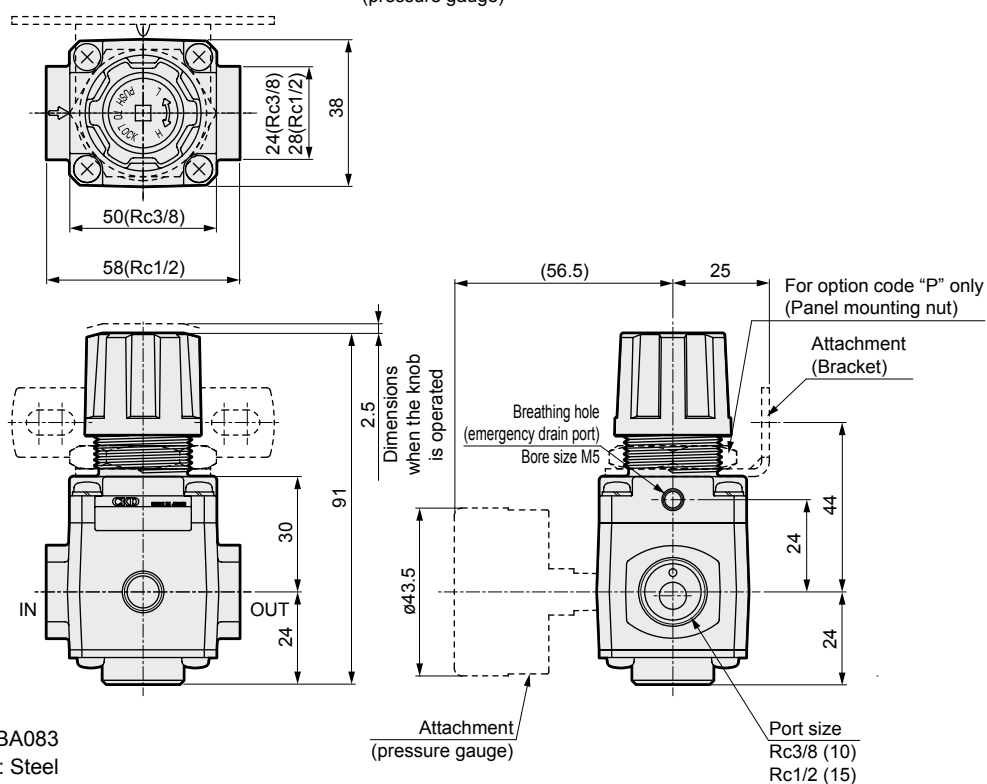
\* WR1 only

### Dimensions

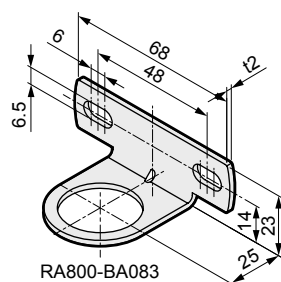
#### ● WR1



#### ● WR2



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



EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/AD
APK/ADK
DryAir
EX-XPLNprf
XPLNprf
HVB/HVL
SDB/NAB
LAD/NAD
Water-Rela
NP/NAP/NVP
SNP
CHB/G
MXB/G
Other valves
SWD/MWD
DustColl
CVE/CVSE
CCH/CPE/D
LifeSci
Gas-Combus
Auto-Water
Outdoor
SpecFld
Custom
Ending