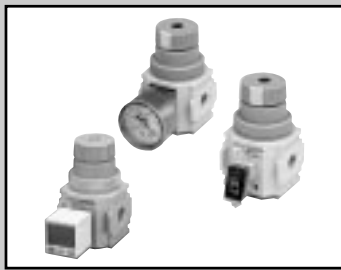
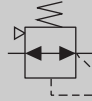


Vacuum regulator

VRA2000 Series

● Port size: Rc1/4, Rc3/8, G1/4, G3/8, 1/4NPT, 3/8NPT

JIS symbol



Specifications

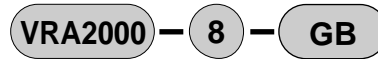
Model no.	VRA2000-8	VRA2000-10
Set pressure range kPa	-100 to -1	
Ambient temperature range °C	5 to 50	
Balance leak flow ℓ/min (ANR)	1 Note 3	
Maximum flow rate ℓ/min (ANR)	200 Note 1	
Port size	IN/OUT	1/4 3/8
	Gauge	1/8
Weight kg	0.29	

Note 1: Maximum flow rate applies where the secondary side is completely closed, and the primary pressure is adjusted to -101.3kPa while the secondary pressure to -100kPa, then secondary side is fully opened.

Note 2: Available only for port size Rc.

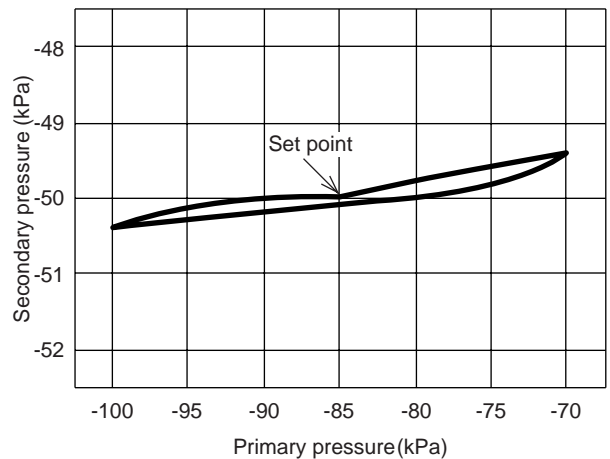
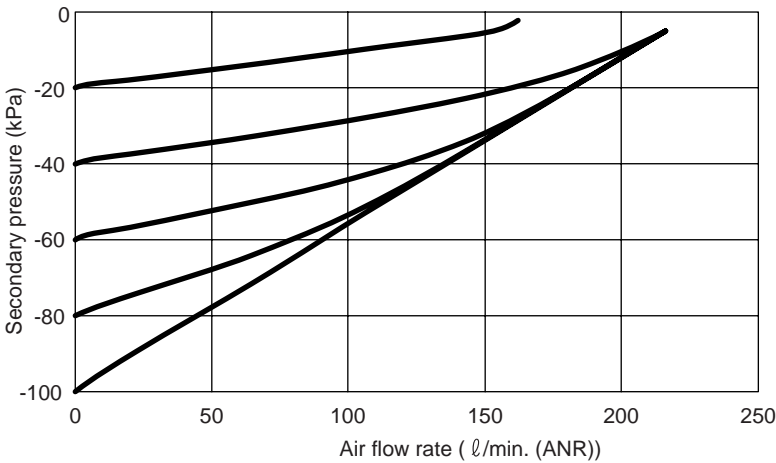
Note 3: Flow rate when primary pressure is set to -95 kPa or less and secondary pressure to -45 kPa while closed.

How to order



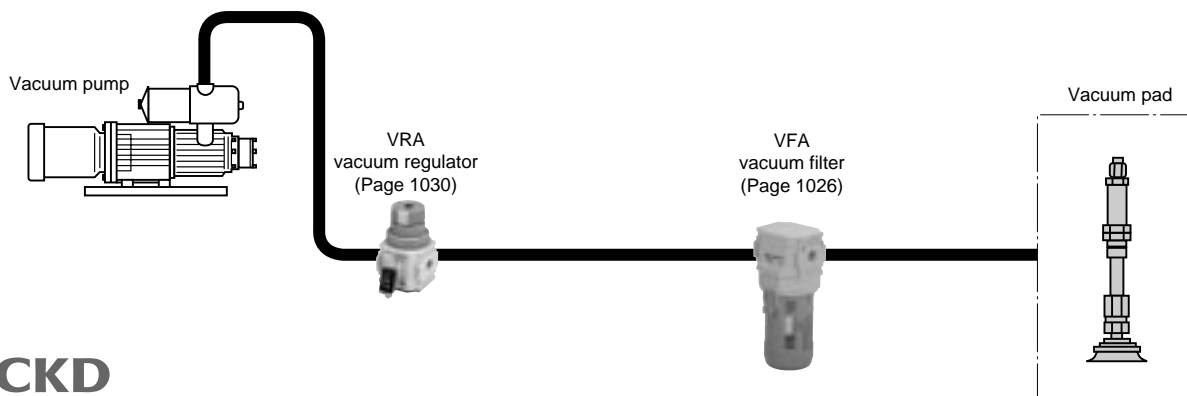
Symbol	Descriptions
A Port size	
8	Rc1/4
10	Rc3/8
8G	G 1/4
10G	G 3/8
8N	1/4NPT
10N	3/8NPT
B Option	
Blank	None
G	Pressure gauge Note 2
P	Pressure switch Note 2
B	C type bracket
B3	L type bracket
B4	B type bracket
R2	Digital pressure sensor Note 2

Characteristics curve

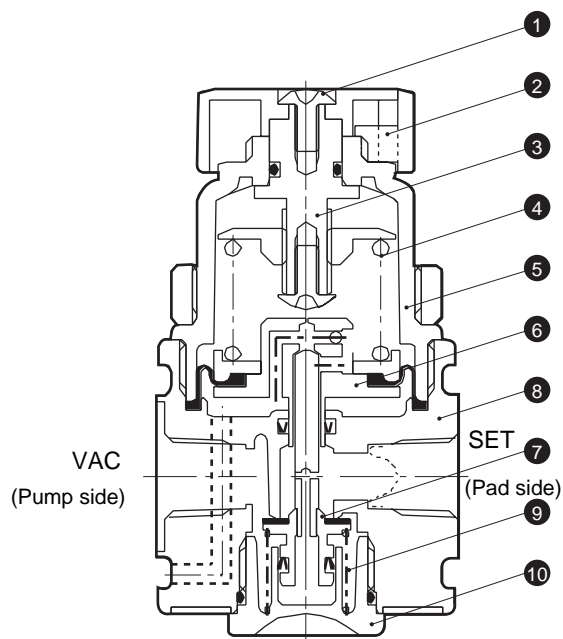


Note 1: The primary side vacuum pump is measured with using discharge rate 500 ℓ/min.

Applications



Internal structure and parts list



Parts list

No.	Parts name	Material
1	Cross headed truss machine screw	Steel
2	Knob assembly	PBT
3	Adjusting screw assembly	Copper alloy, steel, nitrile rubber
4	Adjusting spring	Stainless steel
5	Guard assembly	Aluminum alloy, PBT
6	Diaphragm assembly	Aluminum alloy, steel, nitrile rubber
7	Valve assembly	Aluminum alloy, copper alloy, hydrogen nitrile rubber
8	Body assembly	Aluminum alloy, stainless steel, nitrile rubber
9	Bottom spring	Stainless steel
10	Bottom plug assembly	PBT, nitrile rubber

Repair parts list

Part name	Model no.
Diaphragm assembly	VRA2000-D
Valve assembly	VRA2000-V

- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- Silencer
- Check valve / others
- Joint / tube
- Vacuum filter**
- Vacuum regulator**
- Suction plate**
- Magnetic spring buffer
- Mechanical pressure SW
- Electronic pressure SW
- Contact / close contact cont. SW
- Air sensor
- Pressure SW for coolant
- Small flow sensor
- Small flow controller
- Flow sensor for air
- Flow sensor for water
- Total air system
- Total air system (Gamma)

Vacuum regulator
Vacuum component

Ending

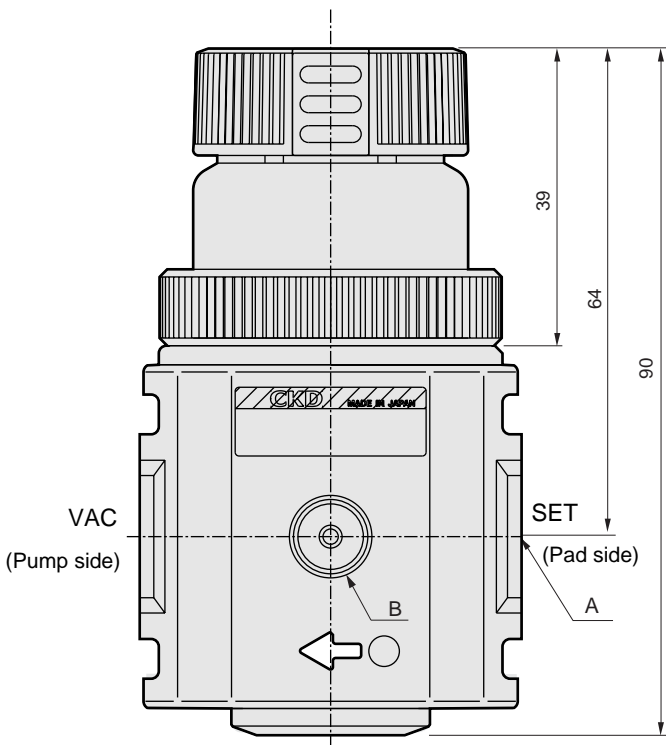
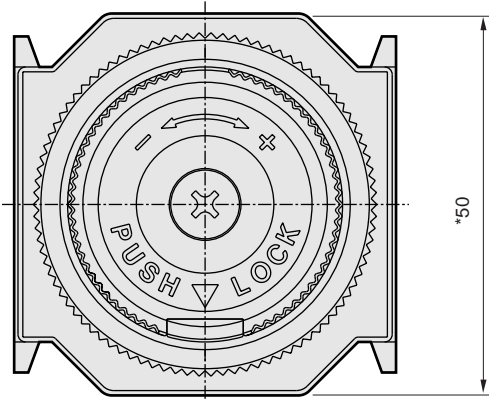
VRA2000 Series

Dimensions



- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- Silencer
- Check valve / others
- Joint / tube
- Vacuum filter**
- Vacuum regulator**
- Suction plate**
- Magnetic spring buffer
- Mechanical pressure SW
- Electronic pressure SW
- Contact / close contact conf. SW
- Air sensor
- Pressure SW for coolant
- Small flow sensor
- Small flow controller
- Flow sensor for air
- Flow sensor for water
- Total air system
- Total air system (Gamma)
- Ending

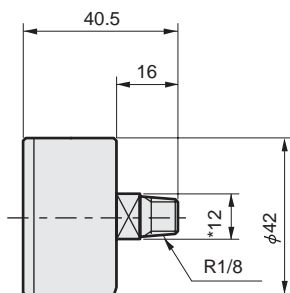
● VRA2000-8/VRA2000-10



Hole dimension for panel mount: $\phi 38.5$

Model no.	A	B
VRA2000-8	Rc1/4	Rc1/8
VRA2000-10	Rc3/8	Rc1/8

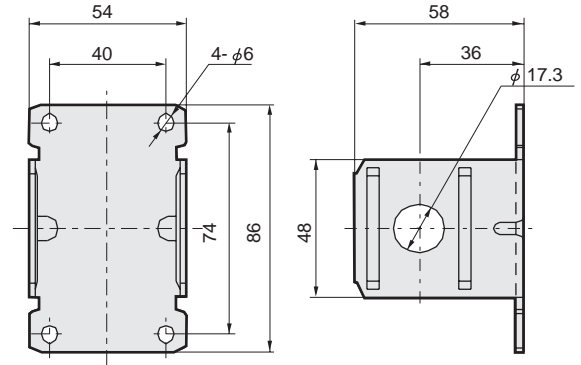
● Pressure gauge (G) VG41D-6-P01



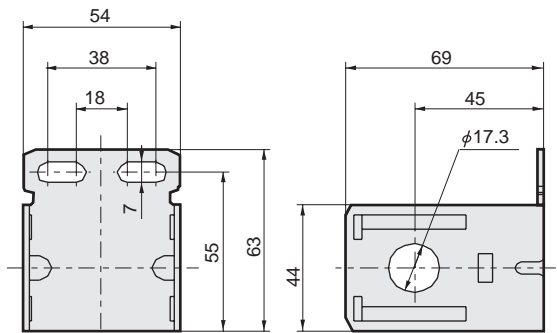
With limit mark
-100 to 0kPa



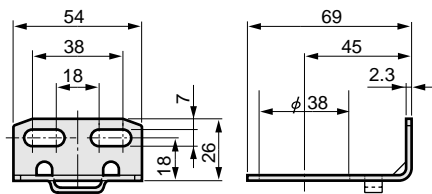
● B type bracket (B4) B240



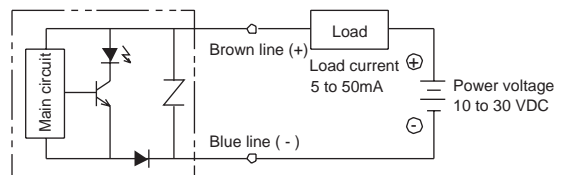
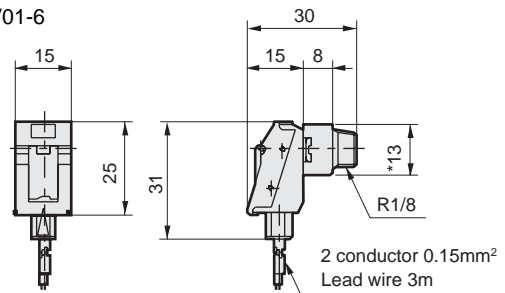
● C type bracket (B) B220



● L type bracket (B3) B230

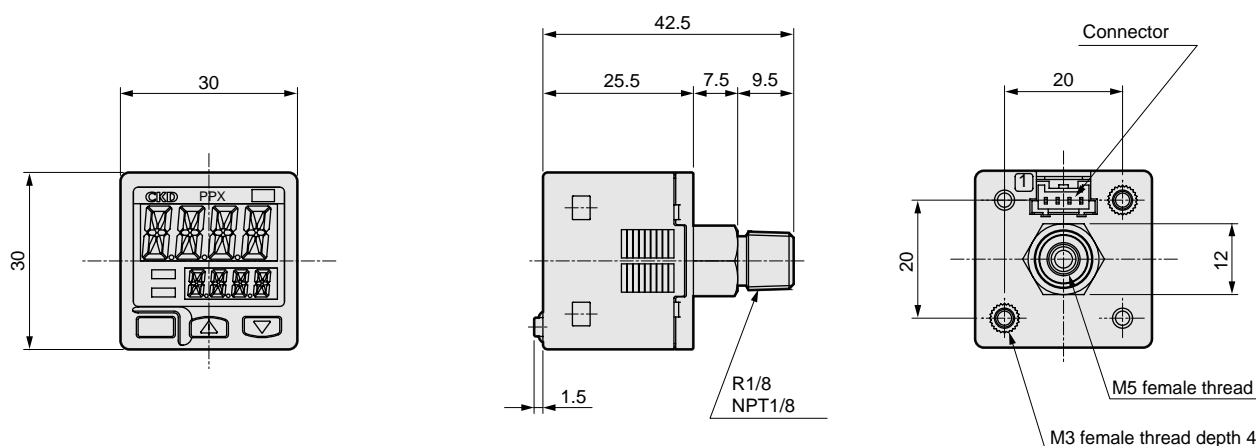


● Pressure switch (P) PPE-V01-6



Dimensions

- Digital pressure sensor
PPX-R01N-6M



Note: Refer to page 1104 for details of digital pressure gauge PPX Series.

! Safety precautions

! WARNING

- 1 Use the product within specifications.
- 2 The product is a regulator for vacuum. Do not use in a pressurized state.
- 3 Install the product avoiding direct sun lay.
- 4 Do not use this product in an atmosphere containing corrosive gas, chemicals, or sea water, or where these could come in contact with it, and do not use as a vacuum circuit for these substances.
- 5 Avoid installation where vibration or impact is applied.
- 6 Tighten pipes with the appropriate torque.
- 7 Limit bending moment arising from the weight of pipelines to 50 N·m or less when installing.

Port thread	Tightening torque N·m
Rc1/4	6 to 8
Rc3/8	13 to 15

! CAUTION

- 1 Install this product vertically with the knob facing upward or downward.
- 2 Before connecting to devices, flush piping with air to remove foreign matter.
- 3 Check that pipe thread swarf or sealant does not enter when piping or screwing in joints.
- 4 Check IN and OUT orientations of piping before connecting.
- 5 Note that this product is adjusted with constant air leakage, so vacuum pressure may not rise if the vacuum pump capacity is too small.

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
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Air booster
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Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)

Ending

Vacuum regulator
Vacuum component