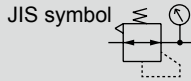


Precision regulator RPE1000 Series

● Port size: Rc1/4



Specifications

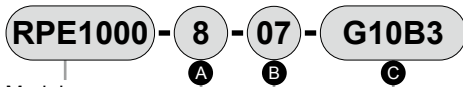
Descriptions		RPE1000-8-07
Working fluid		Compressed clean air (refer to recommended air circuit on page 440)
Max. working pressure	MPa	1.0 (≈150 psi, 10 bar)
Min. working pressure	MPa	Set pressure +0.1 (≈15 psi, 1 bar) *1
Proof pressure	MPa	1.5 (≈220 psi, 15 bar)
Ambient / fluid temperatures	°C	-5 (23°F) to 60 (140°F) (no freezing)
Set pressure	MPa	0.01 (≈1.5 psi, 0.1 bar) to 0.7 (≈100 psi, 7 bar)
Sensitivity		Within 0.2% of full scale
Repeatability		Within ±0.5% of full scale
Air consumption *2	l/min(ANR)	0.2 or less
Port size		Rc1/4
Pressure gauge port size		Rc1/8
Weight	g	250 *3

*1: Flow rate of the secondary side is to be zero.

*2: Conditions where the primary pressure is 0.7 MPa and air is consumed in the secondary side. Air is released to the atmosphere at 1 l/min or less from EXH port when there is no air consumption.

*3: For weight when ● attachment is included, add the following weight. Pressure gauge: 74 g, bracket: 30 g

How to order



Model
RPE1000:
Precision regulator

A Port size		B Set pressure range		C Other attachments	
8	Rc1/4	07	MAX.0.7 MPa	Blank	Without attachment
Specifications for rechargeable battery (Catalog No. CC-1226A)				G02	Pressure gauge (G45D-6-P02)
				G04	Pressure gauge (G45D-6-P04)
				G10	Pressure gauge (G45D-6-P10)
				B3	L type bracket (B131)

● Structure compatible with rechargeable battery manufacturing process

RPE1000 P4

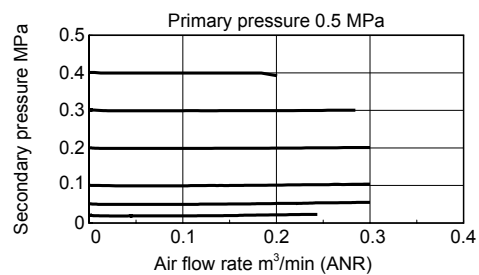
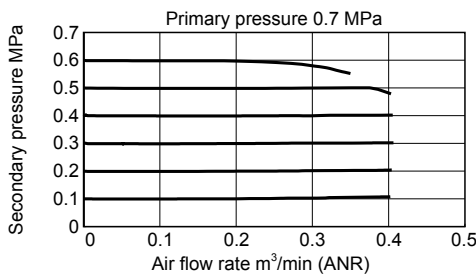
*1: A pressure gauge and a bracket are enclosed.

*2: The pressure gauge range is to be selected.

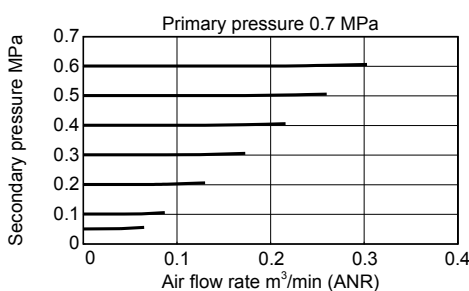
Do not apply pressure exceeding the pressure gauge's MAX range.

*3: One R1/8 plug is enclosed with the product.

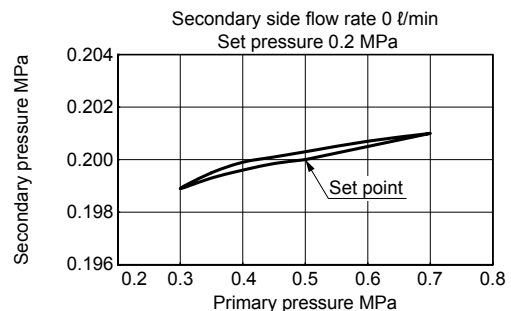
Flow characteristics



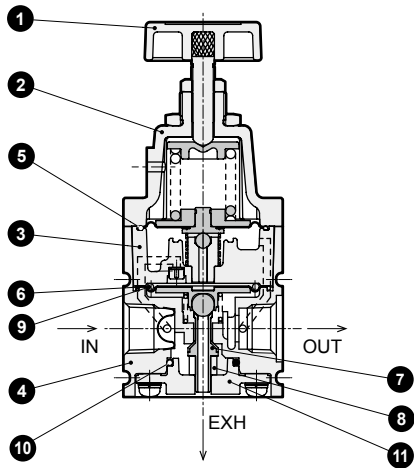
Relief flow characteristics



Pressure characteristics

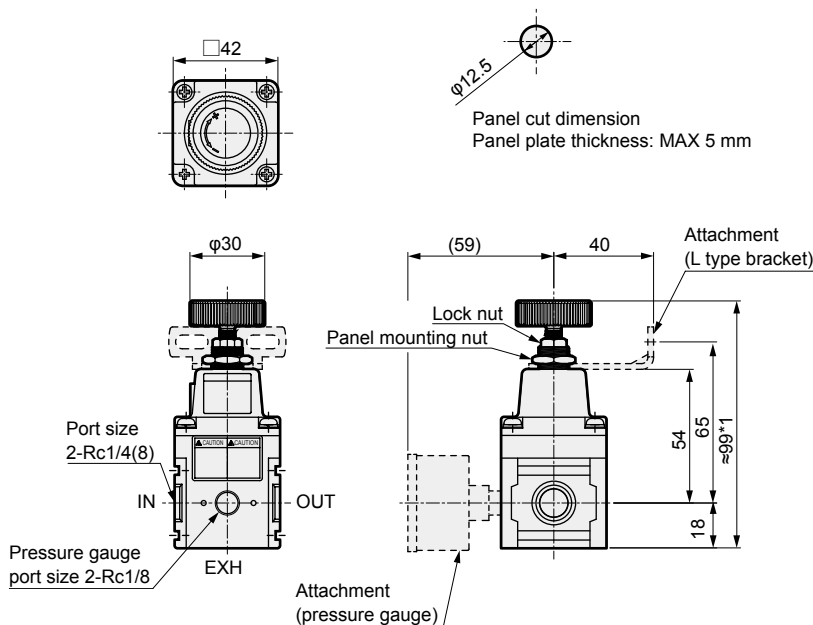


Internal structure and parts list



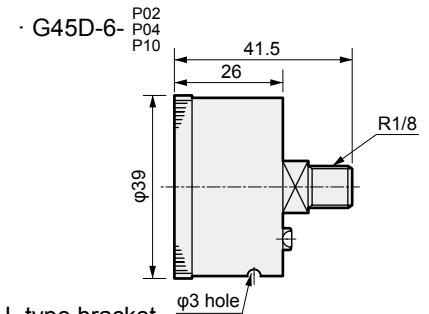
No.	Part name	Material
1	Pressure adjustment knob	Polyacetal resin, stainless steel
2	Cover	Aluminum alloy die-casting
3	Pilot body assembly	Aluminum alloy die-casting, etc.
4	Body	Aluminum alloy die-casting
5	Pilot diaphragm assembly	Hydrogenated nitrile rubber, zinc alloy die-casting
6	Main diaphragm assembly	Hydrogenated nitrile rubber, zinc alloy die-casting
7	Valve	Hydrogenated nitrile rubber, stainless steel
8	Bottom rubber	Silicone rubber
9	O-ring	Nitrile rubber
10	O-ring	Hydrogenated nitrile rubber
11	Bottom plug	Polybutylene terephthalate resin

Dimensions

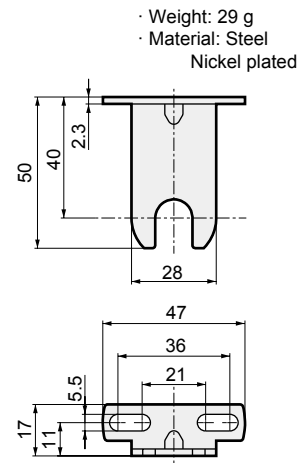


*1: Dimensions at the setting pressure of 0 MPa
 *2: Pressure gauge and bracket are optional.

Pressure gauge



L type bracket / B131



(Reference) Guideline for cylinder operation speed

Cylinder bore size (mm)	Recommended operation speed (mm/s)
φ40	500 or less
φ50	320 or less
φ63	200 or less
φ80	130 or less
φ100	80 or less

This is a guideline for operation speed obtained by calculating the air supply and exhaust flow rate of the precision regulator mounted directly to the cylinder and the required consumption flow rate at one cylinder PUSH/PULL. Using at a higher capacity than the capacity of the precision regulator may cause malfunctions.

F.R.L
 F (Filtr)
 R (Reg)
 L (Lub)
 PresSW
 Shutoff
 SlowStart
 FimResistFR
 Oil-ProhR
 MedPresFR
 No Cu/
 PTFE FRL
 Outdrs FR
 F.R.L
 (Related)
 CompFRL
 LgFRL
 PrecsR
 VacF/R
 Clean FR
 ElecPneuR
 AirBoost
 SpdContr
 Silncr
 CheckV/
 other
 Jnt/tube
 AirUnt
 PresCompn
 Mech/
 ElecPresSw
 ContactSW
 AirSens
 PresSW
 Cool
 AirFloSens/
 Contr
 WaterRISens
 TotAirSys
 (Total Air)
 TotAirSys
 (Gamma)
 RefrDry
 DesicDry
 HiPolymDry
 MainFiltr
 Dischrg
 etc
 Ending