

Precision Regulator

Series **IR1000/2000/3000**

Features

- Precise air pressure regulator for instrument applications.
- Three body sizes available.
- Pressure unaffected by supply pressure or demand changes.
- Bracket and pressure gauge can be mounted from 2 directions.
- Compact and lightweight.
- Superior relief flow characteristics.



Specifications

Model	Basic type			Air operated type	
	IR10□0	IR20□0	IR30□0	IR2120	IR3120
Max. supply pressure	1.0 MPa				
Min. supply pressure ⁽¹⁾	Set pressure + 0.05 MPa		Set pressure + 0.1 MPa	Set pressure + 0.05 MPa	Set pressure + 0.1 MPa
Regulating pressure range	IR1000: 0.005 to 0.2 MPa IR1010: 0.01 to 0.4 MPa IR1020: 0.01 to 0.8 MPa	IR2000: 0.005 to 0.2 MPa IR2010: 0.01 to 0.4 MPa IR2020: 0.01 to 0.8 MPa	IR3000: 0.01 to 0.2 MPa IR3010: 0.01 to 0.4 MPa IR3020: 0.01 to 0.8 MPa	0.01 to 0.8 MPa	0.01 to 0.8 MPa
Input signal pressure ⁽²⁾	—			0.01 to 0.8 MPa	0.01 to 0.8 MPa
Sensitivity	Within 0.2% of full span				
Repeatability	Within ±0.5% of full span				
Linearity ⁽³⁾	—			Within ±1% of full span	
Monitor Air consumption ⁽⁴⁾	Bleed hole: 3.5 ℓ/min (ANR) or less (Supply pressure: 1.0 MPa) Exhaust port: 1.2 ℓ/min (ANR) or less (at maximum set pressure)	Bleed hole: 3.5 ℓ/min (ANR) or less (Supply pressure: 1.0 MPa) Exhaust port: 0.9 ℓ/min (ANR) or less (at maximum set pressure)	Bleed hole: 9.5 ℓ/min (ANR) or less (Supply pressure: 1.0 MPa) Exhaust port: 2 ℓ/min (ANR) or less (at maximum set pressure)	Bleed hole: 3.5 ℓ/min (ANR) or less (Supply pressure: 1.0 MPa) Exhaust port: 0.9 ℓ/min (ANR) or less (at maximum set pressure)	Bleed hole: 9.5 ℓ/min (ANR) or less (Supply pressure: 1.0 MPa) Exhaust port: 2 ℓ/min (ANR) or less (at maximum set pressure)
Port size	1/8	1/4	1/4, 3/8, 1/2	1/4	1/4, 3/8, 1/2
Pressure gauge port	1/8 (2 locations)				
Ambient and fluid temperature	-5 to 60°C (No freezing)				
Weight (kg)	0.14	0.30	0.64	0.35	0.71

Note 1) With the condition of no flow on the output side. Together with the set pressure, be sure to maintain a minimum differential pressure of 0.05 MPa for models IR1000 and IR2000, and 0.1 MPa for model IR3000.

Note 2) Applicable only to air operated types IR2120 and IR3120.

Note 3) Indicates the linearity of the output pressure with respect to the input signal pressure.

Note 4) Air is normally being discharged to the atmosphere.

How to Order

IR 2000-F02

Precision regulator

Body size

1	IR1000
2	IR2000
3	IR3000

Adjustment type

0	Handle type
1	Air pilot

Regulating pressure range
For series IR1000/2000

0	0.005 to 0.2 MPa
1	0.01 to 0.4 MPa
2	0.01 to 0.8 MPa

Note) Air operated type is model IR2120 only.
For series IR3000

0	0.01 to 0.2 MPa
1	0.01 to 0.4 MPa
2	0.01 to 0.8 MPa

Note) Air operated type is model IR3120 only.

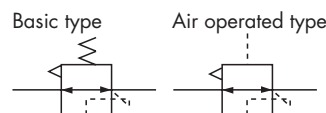
Port size

Symbol	size	Application		
		IR1000	IR2000	IR3000
01	1/8	●		
02	1/4		●	●
03	3/8			●
04	1/2			●

Thread type

F	G
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Symbol



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Accessory (Option)/Part No.

Description	Part no.								
	IR1000	IR1010	IR1020	IR2000	IR2010	IR2020/2120	IR3000	IR3010	IR3020/3120
Bracket	P36201023			P36202028			P36203018		
Pressure gauge *	G33-2-01	G33-4-01	G33-10-01	G43-2-01	G43-4-01	G43-10-01	G43-2-01	G43-4-01	G43-10-01

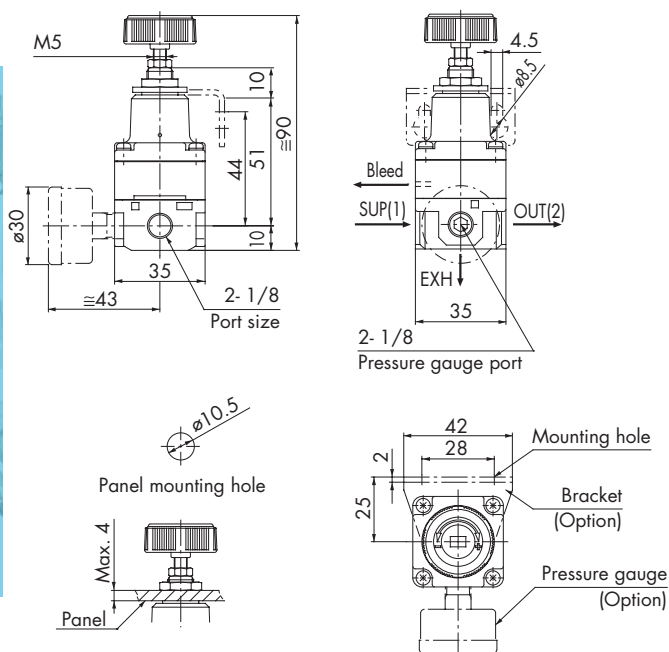
* Accuracy $\pm 3\%$ (Full span)

Spares Kits

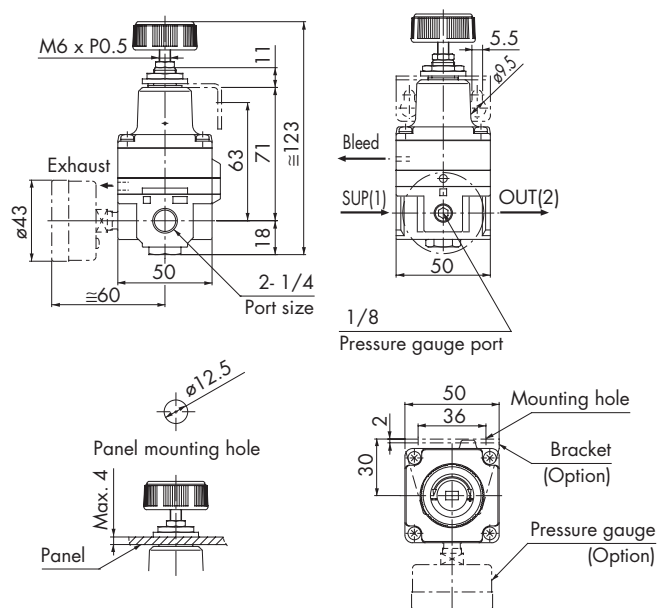
Applicable model	IR1000	IR2000	IR3000
Spares kit	KT-IR1000	KT-IR2000	KT-IR3000

Dimensions

IR1000-01



IR2000-02



IR3000-0

