

Precision Regulator

Series IR1000/2000/3000

	Series	Model	Regulating pressure range	Port size	Page
Basic Type	Series IR1000 	IR1000	0.005 to 0.2 MPa	1/8	553
		IR1010	0.01 to 0.4 MPa		
		IR1020	0.01 to 0.8 MPa		
	Series IR2000 	IR2000	0.005 to 0.2 MPa	1/4	553
		IR2010	0.01 to 0.4 MPa		
		IR2020	0.01 to 0.8 MPa		
	Series IR3000 	IR3000	0.01 to 0.2 MPa	1/4, 3/8, 1/2	553
		IR3010	0.01 to 0.4 MPa		
		IR3020	0.01 to 0.8 MPa		
Air Operated Type	Series IR2000 	IR2120	0.01 to 0.8 MPa	1/4	553
	Series IR3000 	IR3120	0.01 to 0.8 MPa	1/4, 3/8, 1/2	553

ARJ

AR425
to 935

AMR

ARM

ARP

IR

IRV

VEX1□

SRH

SRP

SRF

ARX20

VCHR

ITV

IC

PVQ

VEF
VEP

VER

VEA

VY2

VBA
VBAT

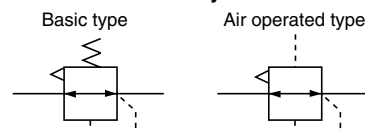
AP100

Precision Regulator

RoHS

Series IR1000/2000/3000

JIS Symbol



Standard Specifications

Model	Basic type			Air operated type	
	IR10□0	IR20□0	IR30□0	IR2120	IR3120
Max. supply pressure	Max. 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	IR2000: 0.005 to 0.2 MPa	IR3000: 0.01 to 0.2 MPa	0.01 to 0.8 MPa	0.01 to 0.8 MPa
	IR1010: 0.01 to 0.4 MPa	IR2010: 0.01 to 0.4 MPa	IR3010: 0.01 to 0.4 MPa		
	IR1020: 0.01 to 0.8 MPa	IR2020: 0.01 to 0.8 MPa	IR3020: 0.01 to 0.8 MPa		
Input signal ⁽²⁾ pressure	—			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	
Air consumption ⁽⁴⁾ (At supply pressure of 1.0 MPa)	4.4 ℓ/min (ANR) or less	4.4 ℓ/min (ANR) or less	11.5 ℓ/min (ANR) or less	4.4 ℓ/min (ANR) or less	11.5 ℓ/min (ANR) or less
Port size	Rc 1/8	Rc 1/4	Rc 1/4, 3/8, 1/2	Rc 1/4	Rc 1/4, 3/8, 1/2
Pressure gauge port	Rc 1/8 (2 locations)				
Ambient and fluid temperature	-5 to 60°C (No freezing)				
Mass (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. The basic type is excepted.

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 from a bleed hole or an exhaust port.

How to Order

IR 2 0 0 0 — 02 — — — —

Precision regulator

Body size

1	IR1000
2	IR2000
3	IR3000

Type of setting

0	Basic type (Handle)
1	Air operated type (Series IR2000/3000 only)

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.

Thread type

Nil	Rc
N	NPT*
F	G*

* Option

Port size

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

Suffix 1

Nil	—
T	For high temp. environments (-5 to 100°C) (Max. 80°C with pressure gauge.)
L	For low temp. environments (-30 to 60°C)

Suffix 2

Nil	—
Note) R	Pressure gauge, Bracket, Name plate, Mounting on the opposite side

Note) The standard mounting position of the pressure gauge is on the front, when viewing the regulator with the SUP side to the left and OUT side to the right.

Accessory

Nil	None
B	With bracket
G	With pressure gauge*

* Pressure gauge is included, (but not assembled).

Made to Order Specifications (Refer to page 560)

Symbol	Specifications/Content
X1	Non-grease specifications
X120	Compatible with modular connection brackets(Refer to page 554)
X465□	With digital pressure switch (ISE30A)

* 1 Add prefix (10-) for the clean room specification.
* 2 Add prefix (20-) for the copper-free and fluorine-free specification.
* 3 Add prefix (80-) for the ozone-resistant specification.
* 4 Manifold specification is available for IR1000 and IR2000. (Except IR2120 and IR3000)