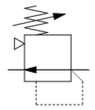
IRV 10/20 Series Vacuum Regulator







Ordering Code

IRV 10/20 Series Vacuum Regulator

IRV 20 - □ C08 □ □

Body size
10: Max. flow 140L/min (ANR)
20: Max. flow 240L/min (ANR)

Fittings
Nil: Straight
L: Elbow

Connection tubing O.D.

Symbol	Tubing O.D.		IRV10	IRV20
C06	Metric	Φ6	●	●
C08		Φ8	●	●
C10		Φ10	–	●

Accessory 1
Nil: None
B: With bracket
L: With bottom bracket

Accessory 2

Nil	None*1)		
G	Pressure gauge*2,3) (IRV10: GZ33-K-01, IRV20: GZ43-K-01)		
ZN	Digital pressure switch*3)	NPN open collector 1 output	With ZSE30A-01-N-ML
ZP		PNP open collector 1 output	With ZSE30A-01-P-ML
ZA		NPN open collector 2 outputs + Copy function	With ZSE30A-01-A-ML
ZB		PNP open collector 2 outputs + Copy function	With ZSE30A-01-B-ML

*1) Two plug nuts are mounted on the gauge port.
*2) Pressure gauge accuracy: Within ±3% of full scale
*3) Plug nut and gauge nut are included.

Specifications

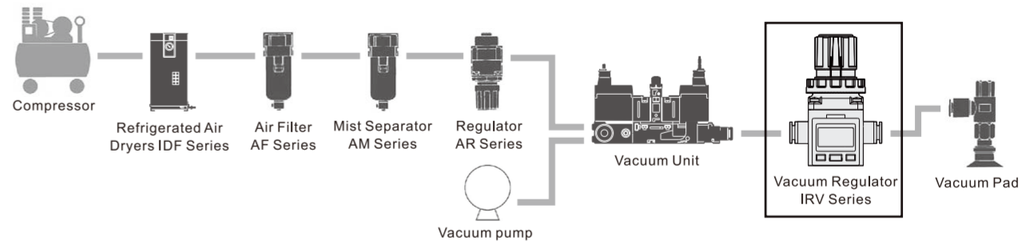
Model	IRV10	IRV20
Working medium	Air	
Set pressure range*1)	-100 to -1.3kPa	
Proof pressure*2)	100 kPa (Except with pressure gauge)	
Atmospheric intake consumption*3)	0.6 L/min (ANR) or less	
Knob resolution	0.13 kPa or less	
Working temperature	5 to 60°C	
VAC side tubing O.D.	Φ6,Φ8	Φ6,Φ8,Φ10
SET side tubing O.D.		

*1) Use caution it varies depending on the pressure in vacuum pump side.
*2) For vacuum regulators with a pressure gauge, the pressure gauge will be damaged if positive pressure is supplied. In the event that positive pressure is applied, the vacuum regulator will not be damaged; however, the main valve will open and positive pressure will enter the vacuum pump. This may cause malfunction of the vacuum pump. when the vacuum regulator is used in the adsorbing and transferring system, refer to the following piping example and avoid supplying positive pressure to the vacuum pump. The vacuum regulator cannot adjust positive pressure.
*3) Taking air from atmosphere all the time.

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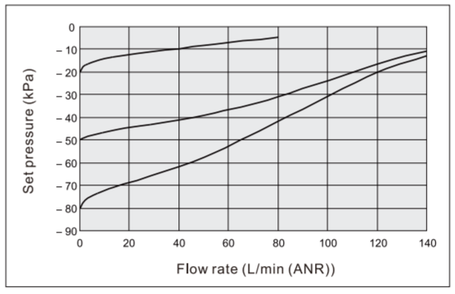
Application



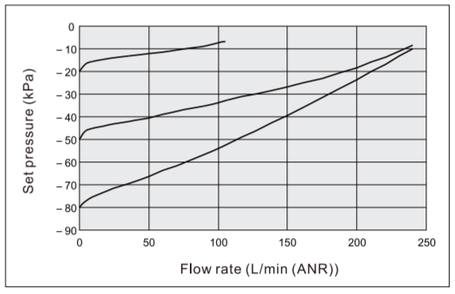
Flow Rate Characteristics (Representative Value)

Conditions
Vacuum pump exhaust speed: 2500 L/min
VAC side pressure: -101 kPa (At initial setting)

IRV10-C08 (One-touch fitting Φ8)

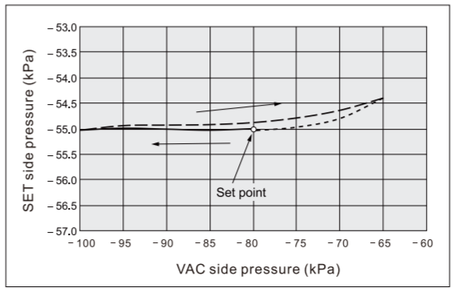


IRV20-C10 (One-touch fitting Φ10)

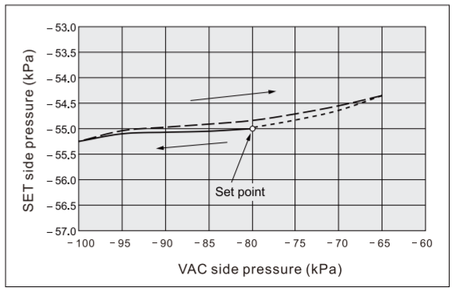


Pressure Characteristics (Representative Value)

IRV10



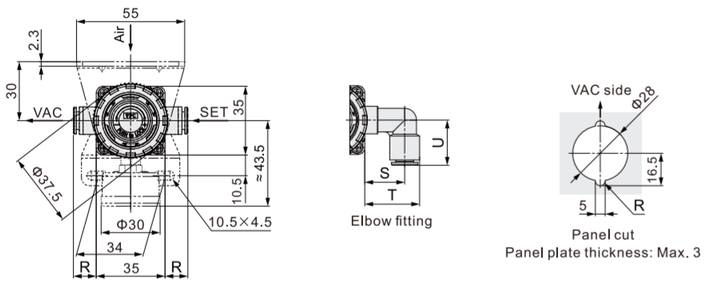
IRV20



IRV 10/20 Series Vacuum Regulator

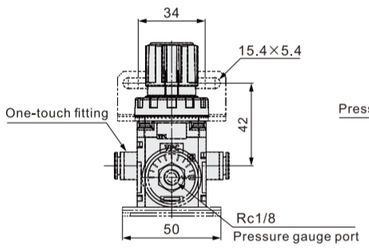
Main Dimensions

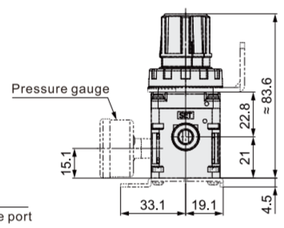
IRV10-□□□G: With pressure gauge



Elbow fitting

Panel cut
Panel plate thickness: Max. 3

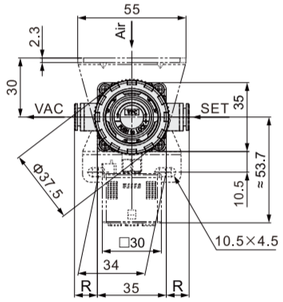


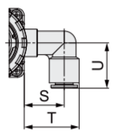


Fitting Part Dimensions (mm)

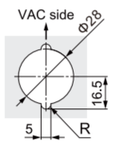
Fitting size	VAC/SET			
	Straight	Elbow	Elbow	Elbow
	R	S	T	U
Φ6	9.9	19.1	25.5	20
Φ8	11.6	20.3	27.9	23

IRV10-□□□Z NPAB: With digital pressure switch

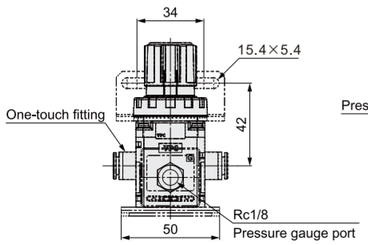


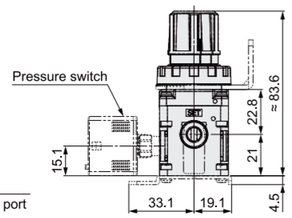


Elbow fitting



Panel cut
Panel plate thickness: Max. 3





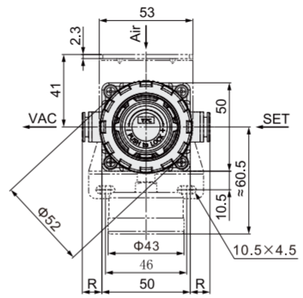
Fitting Part Dimensions (mm)

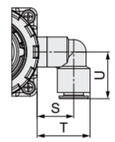
Fitting size	VAC/SET			
	Straight	Elbow	Elbow	Elbow
	R	S	T	U
Φ6	9.9	19.1	25.5	20
Φ8	11.6	20.3	27.9	23

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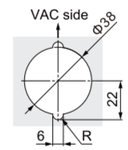
Main Dimensions

IRV20-□□□G: With pressure gauge

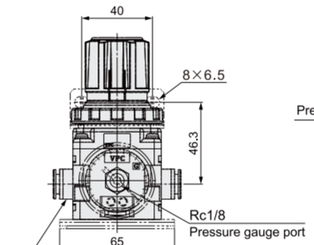


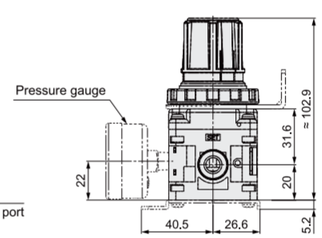


Elbow fitting



Panel cut
Panel plate thickness: Max. 4

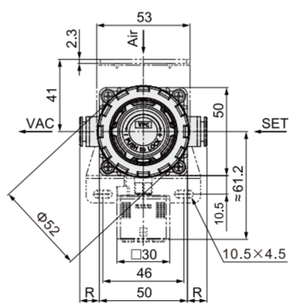


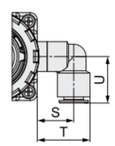


Fitting Part Dimensions (mm)

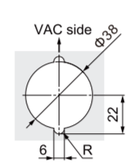
Fitting size	VAC/SET			
	Straight	Elbow	Elbow	Elbow
	R	S	T	U
Φ6	9.1	18	24.4	20.3
Φ8	10.5	19.2	26.8	23.3
Φ10	11.1	20.7	30	26.4

IRV20-□□□Z NPAB: With digital pressure switch

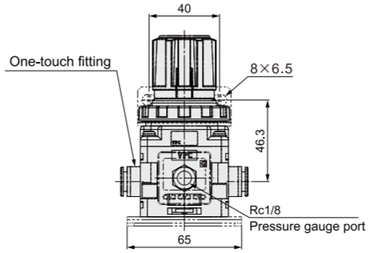


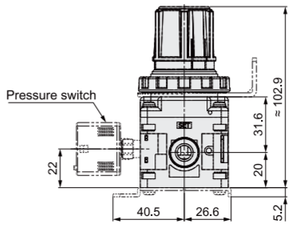


Elbow fitting



Panel cut
Panel plate thickness: Max. 4





Fitting Part Dimensions (mm)

Fitting size	VAC/SET			
	Straight	Elbow	Elbow	Elbow
	R	S	T	U
Φ6	9.1	18	24.4	20.3
Φ8	10.5	19.2	26.8	23.3
Φ10	11.1	20.7	30	26.4