

 Contact our sales office for delivery dates and prices as this is a special model.



P.G.Information (Specialized Product)

SP104X-014E
P: SO

Vacuum Regulator / IRV10 Series

Special options usable for various applications

SMC CORPORATION
4-14-1, SOTO-KANDA,
CHIYODA-KU,
TOKYO 101-0021, JAPAN
URL: <http://www.smcworld.com>

**Feature : This is an introduction for special options
which may be used for various applications.**

Table.1 List of Special options

	Special option	Description			Connections	
		Female connections	Gauge port Rc1/8 (only one side)	Female connections with rotation stop	Standard connections	Single sided connections
IRV10	X3	●	—	—	●	●
	X7	—	●	—	●	●
	X11	●	●	—	●	●
	X28	—	—	●	●	—

Specifications :

Fluid	Air
Set pressure range	−100~−1.3kPa
Withstand pressure	100kPa (Except with pressure gauge)
Ambient and Fluid temperature	5~60°C

How to Order:

◆ Female connections

IRV 10 [] - [] **02** [] [] - []

Body size

10	Max. flow 140ℓ/min (ANR)
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Connections

Nil	Standard connections
A	Single sided connections

Thread type ^{Note1)}

Nil	Rc
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Note1) For the special option "-X3", N (NPT thread) and F (G thread) are available.

Port size

Symbol	Port size	IRV10	IRV10A
01	1/8"	●	●
02	1/4"	●	—

Made to Order

See Table.1: List of special options for details.

Accessory 2

Nil	None ^{Note1)}		
G	With pressure gauge ^{Note2) Note3)} (IRV10: GZ33-K-01)		
ZN	With digital pressure switch ^{Note3)}	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 output	With ZSE30A-01-A-ML
ZB		PNP open collector 2 output	With ZSE30A-01-B-ML

Note1) Plug nut is mounted on the gauge port. When the Rc1/8 port is required, please order the optional gauge nut assembly P601010-18 separately.
Note2) Pressure gauge accuracy: Within ±3% of full scale.
Note3) Accessories are included in the same container.

Accessory 1 ^{Note1)}

Symbol	Content	X3	X11	X28
Nil	None	●	●	●
B	With bracket	●	●	●
L	With bottom bracket	●	●	—

Note1) Accessories are included in the same container.

◆ Built-in One-touch fittings

IRV 10 [] - [] **C08** [] [] - []

Body size

10	Max. flow 140ℓ/min (ANR)
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Connections

Nil	Standard connections
A	Single sided connections

Fittings

Nil	Straight
L	Elbow

Tube O.D.

Symbol	Tube O.D.	IRV10	IRV10A
C06	Metric	φ 6	●
C08		φ 8	●
N07	Inch	φ 1/4"	●
N09		φ 5/16"	●

Made to Order

See Table.1: List of special options for details.

Accessory 2

Nil	None ^{Note1)}		
G	With pressure gauge ^{Note2) Note3)} (IRV10: GZ33-K-01)		
ZN	With digital pressure switch ^{Note3)}	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 output	With ZSE30A-01-A-ML
ZB		PNP open collector 2 output	With ZSE30A-01-B-ML

Note1) Plug nut is mounted on the gauge port. When the Rc1/8 port is required, please order the optional gauge nut assembly P601010-18 separately.
Note2) Pressure gauge accuracy: Within ±3% of full scale.
Note3) Accessories are included in the same container.

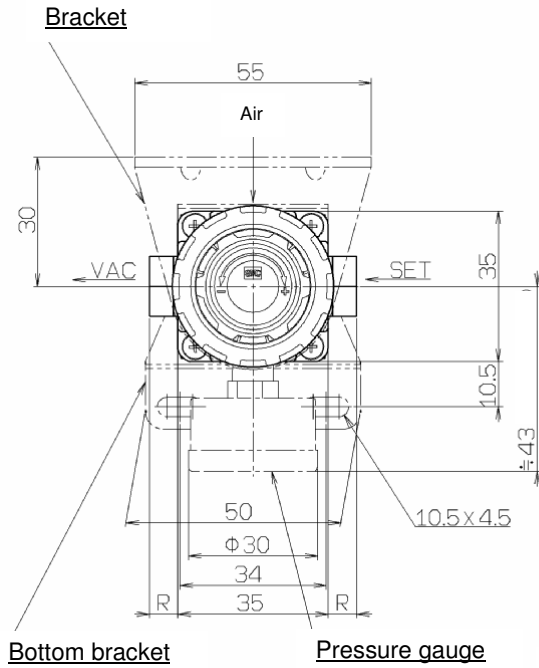
Accessory 1 ^{Note1)}

Symbol	Content	X7
Nil	None	●
B	With bracket	●
L	With bottom bracket	●

Note1) Accessories are included in the same container.

Dimensions: mm

◇IRV10-※-X3



How to attach fittings with female thread adapters
(Example of a one-touch fitting)

1. Screw one-touch fittings into the female thread adapters (1).
2. Insert the adapters 1. into the port and fix with the clip (2).

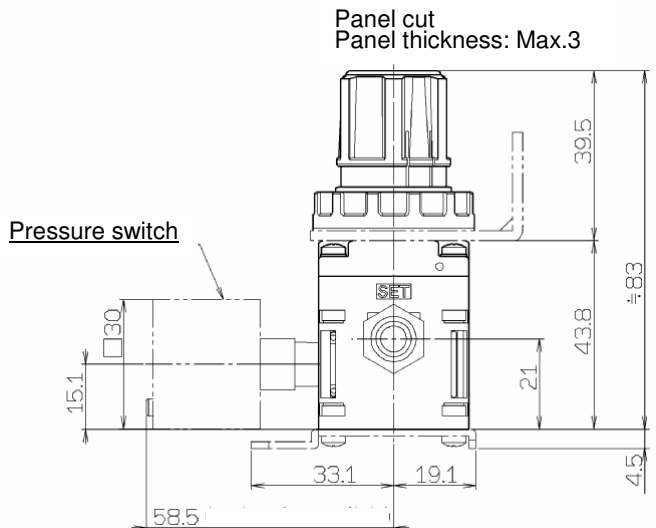
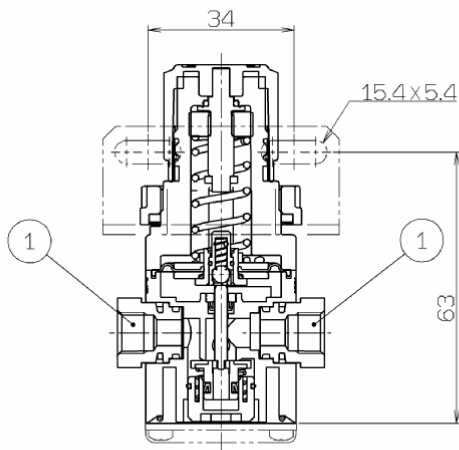
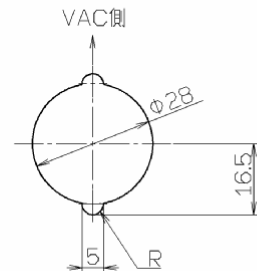
Note1) Do not fix the adapter before attaching the fitting.
The resin body may break.

Note2) The parts (1) and (2) will be bundled with the product.

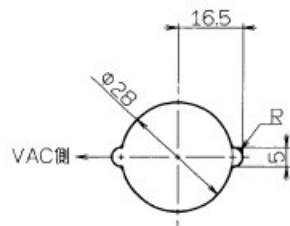
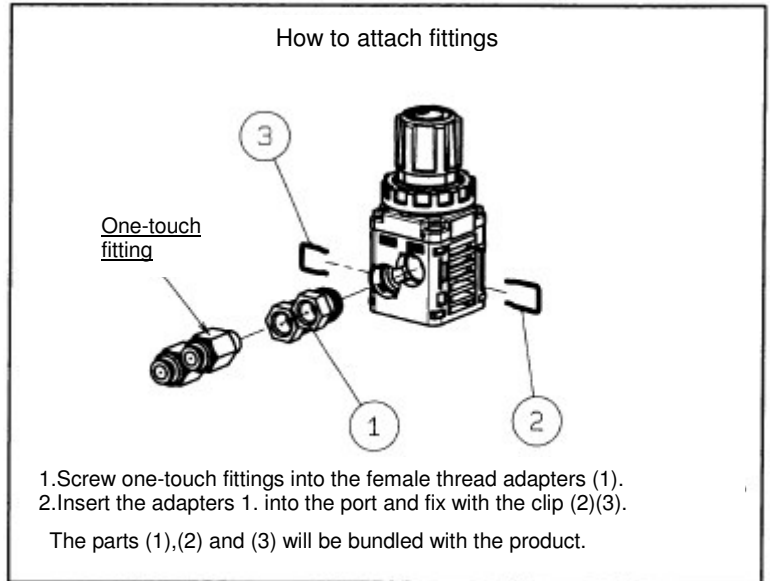
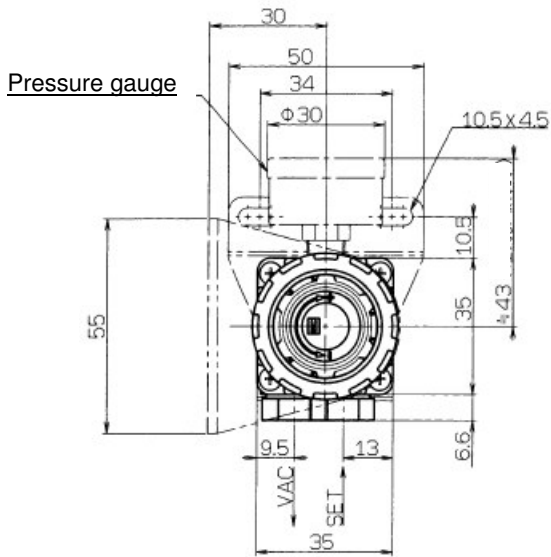
Note3) The one-touch fitting will not be bundled.

Fitting part dimensions

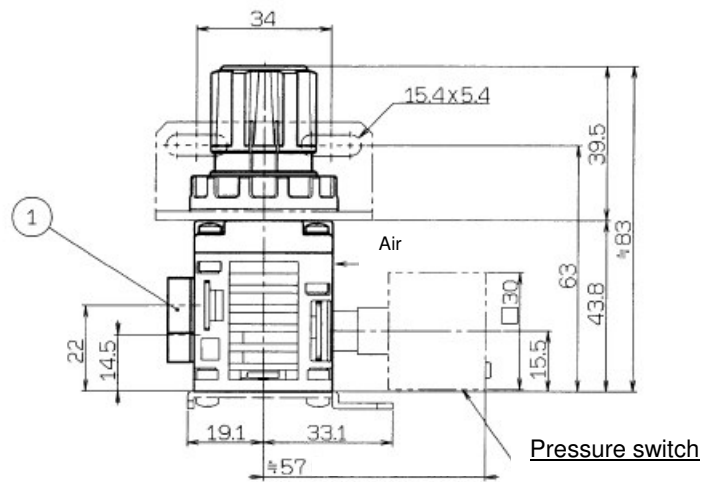
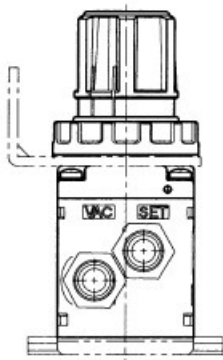
Port size	VAC/SET
	R
Rc1/8, G1/8	6.6
1/8NPT	7.6
Rc1/4, G1/4	11.6
1/4NPT	12.6



◇IRV10A-※-X3



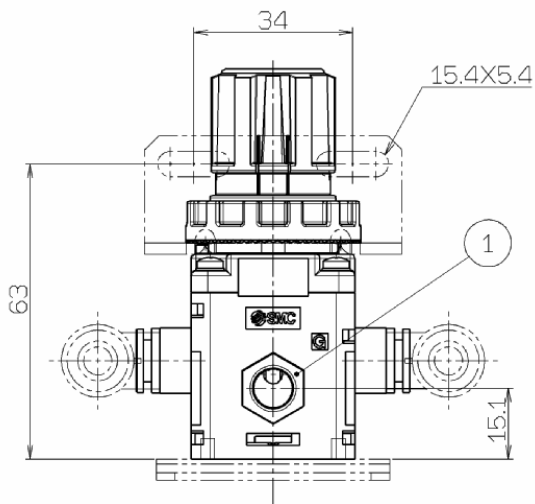
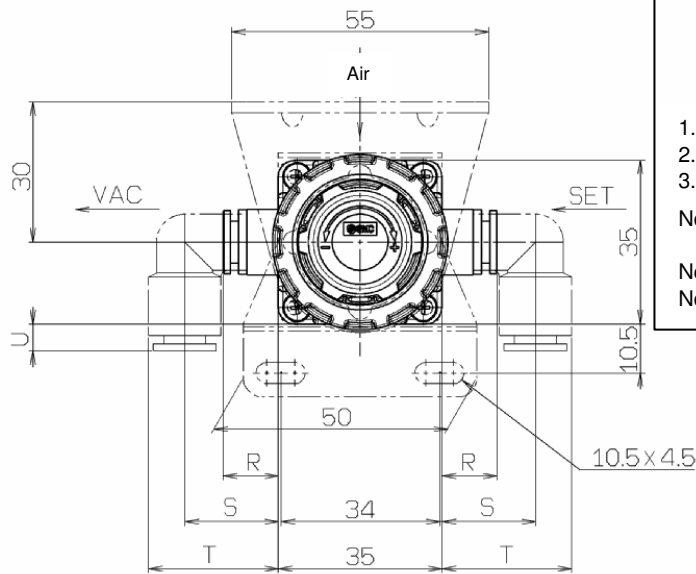
Panel cut
Panel thickness: Max.3



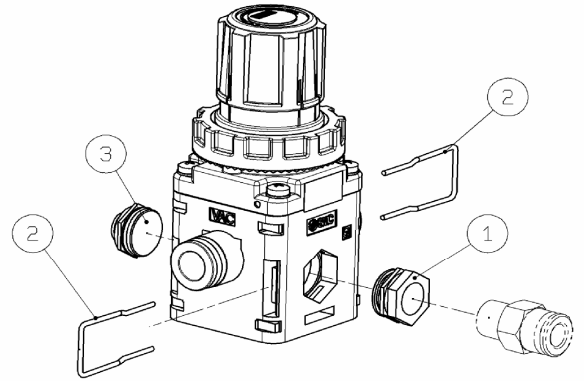
◇IRV10-※-X7

Fitting part dimensions

Fitting size	VAC/SET			
	Straight	Elbow	Elbow	Elbow
	R	S	T	U
φ6, φ1/4"	10	19	26	3
φ8, φ5/16"	12	20	28	6



How to attach a fitting with a gauge nut
(Example of a one-touch fitting)

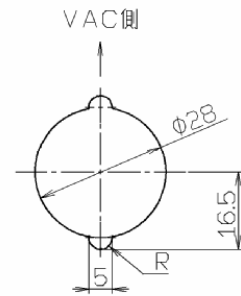


1. Screw the one-touch fitting into the gauge nut (1).
2. Insert the gauge nut 1. into the port and fix with the clip (2).
3. Insert a plug nut into the port on the other side of the body.

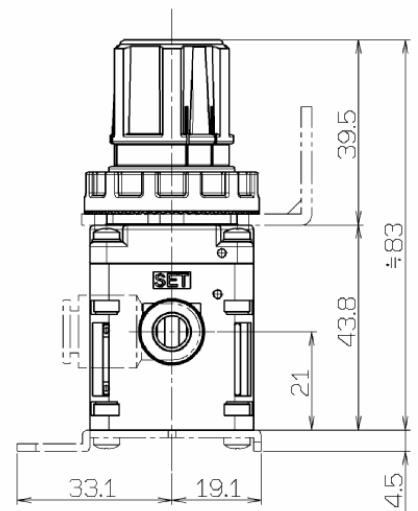
Note1) Do not fix the gauge nut before attaching the fitting.
The resin body may break.

Note2) The parts (1),(2) and (3) will be bundled with the product.

Note3) The one-touch fitting will not be bundled.



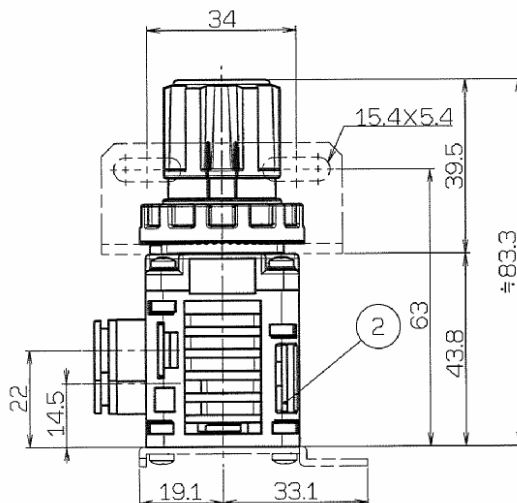
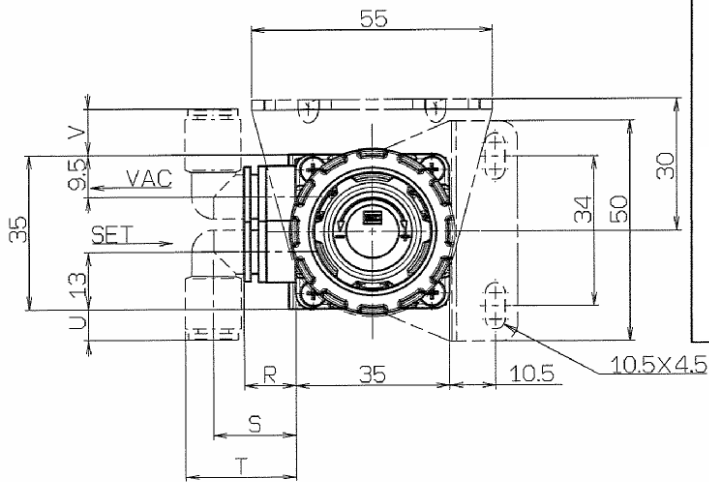
Panel cut
Panel thickness: Max.3



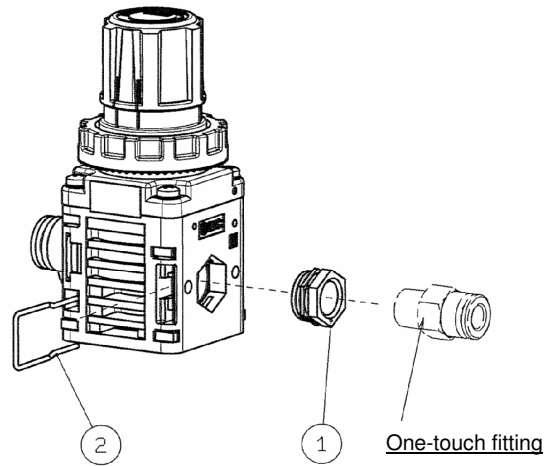
◇IRV10A-※-X7

Fitting part dimensions

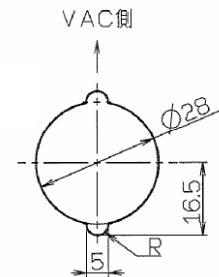
Fitting size	VAC/SET				
	Straight R	Elbow S	Elbow T	Elbow U	Elbow V
Φ6, φ1/4"	10	19	26	7.5	11
Φ8, φ5/16"	12	20	28	10.5	14



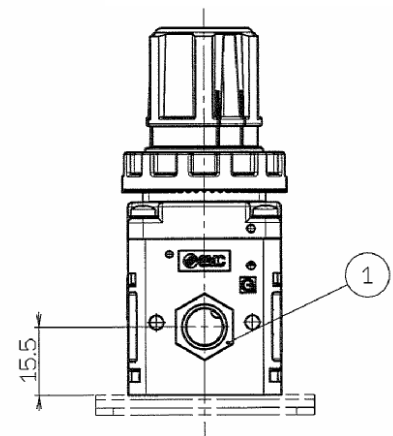
How to attach a fitting with a gauge nut
(Example of a one-touch fitting)



1. Screw the one-touch fitting into the gauge nut (1).
 2. Insert the gauge nut (1) into the port and fix with the clip (2).
- Note1) Do not fix the gauge nut before attaching the fitting.
The resin body may break.
- Note2) The parts (1) and (2) will be bundled with the product.
- Note3) The one-touch fitting will not be bundled.



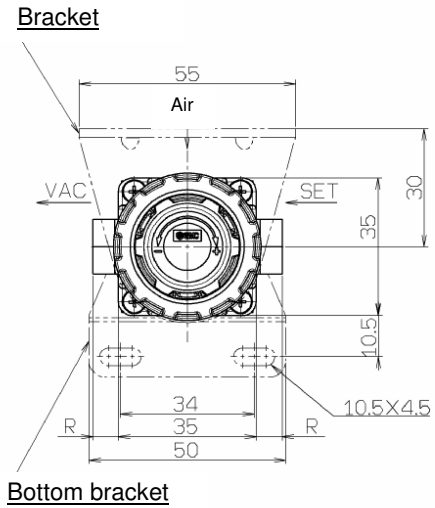
Panel cut
Panel thickness: Max.3



◇IRV10-※-X11

Fitting part dimensions

Port size	VAC/SET
	R
Rc1/8	6.6
Rc1/4	11.6



- How to attach fittings with female thread adapters

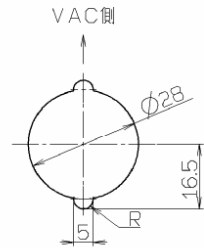
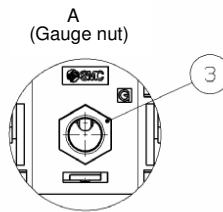
⇒It is the same as that of IRV10-※-X3.

(1) is the female thread adapter.

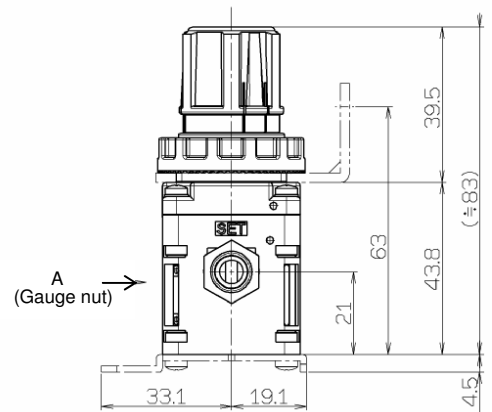
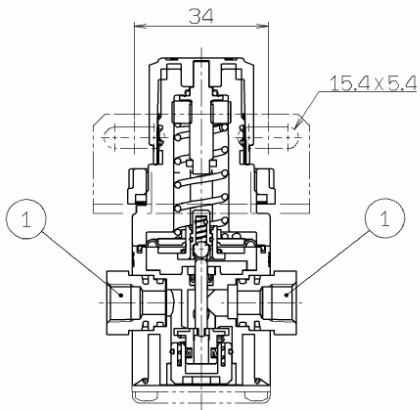
- How to attach a fitting with a gauge nut

⇒It is the same as that of IRV10-※-X7.

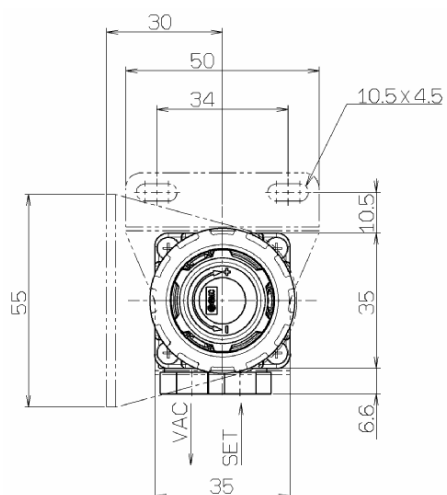
(3) is a gauge nut.



Panel cut
Panel thickness: Max.3



◇IRV10A-※-X11



- How to attach fittings with female thread adapters

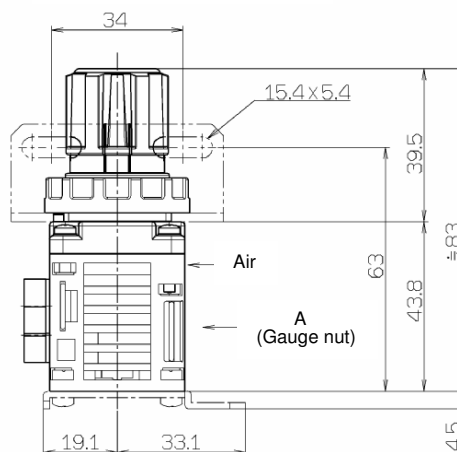
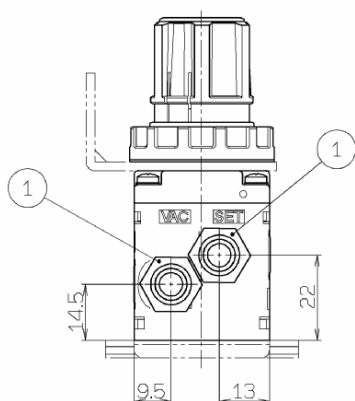
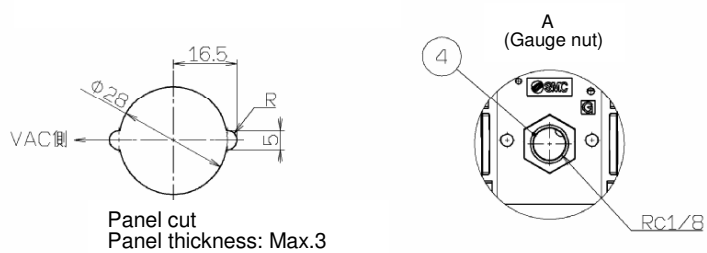
⇒ It is the same as that of IRV10A-※-X3.

(1) is the female thread adapter.

- How to attach a fitting with a gauge nut

⇒ It is the same as that of IRV10A-※-X7.

(4) is a gauge nut.



◇IRV10-※-X28

- Option to stop the tubing rotation.

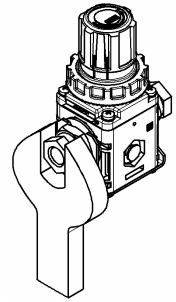
⇒The parts (2),(3),(4),(5) and (6)

are to stop the rotation of the tubing.

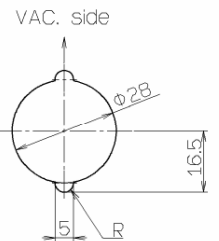
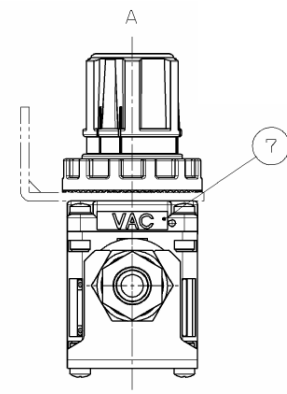
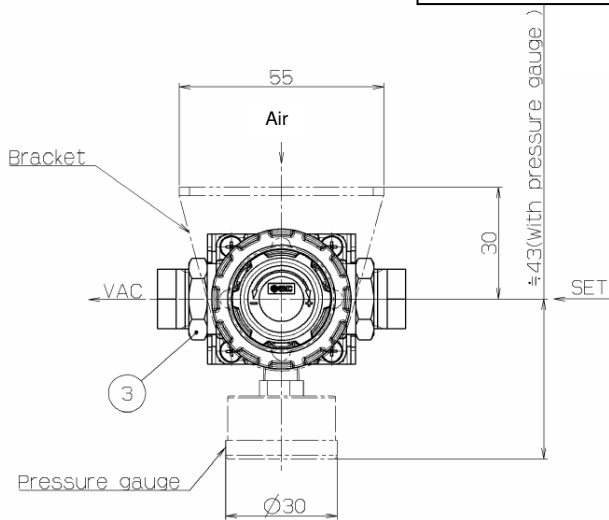
(1) is the female thread adapter.

(7) and (8) are port seals.

How to connect the piping



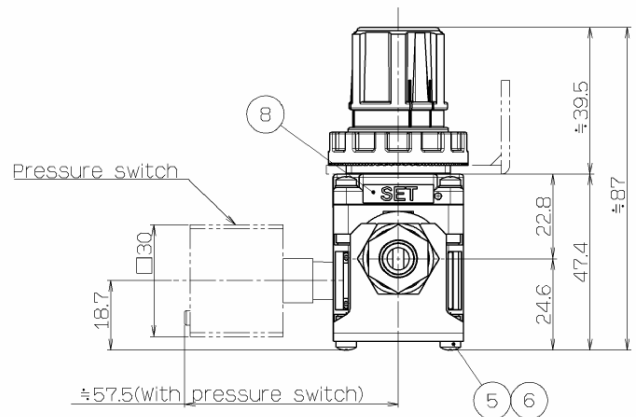
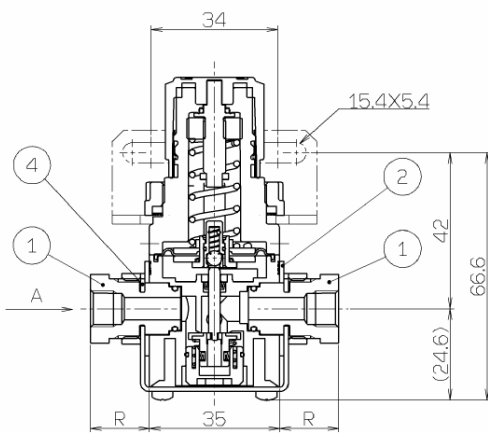
When connecting the tubing, please hold the female thread adapter with a spanner, etc., to prevent it from rotating.



Panel cut
Panel plate thickness max.3

Fitting part dimensions

Fitting size	VAC/SET	R
Rc1/8		15.9
Rc1/4		20.3



⚠ Caution To ensure the safest possible operation of this product, please be sure to thoroughly read the "Safety Instructions" in our "Best Pneumatics" catalog before use.