Air Regulator (SAR)

SAR100~600 Series

- With the backflow function, the SAR series incorporates a mechanism which exhausts the air pressure through the outlet side efficiently.



SAR600 SAR400 SAR300 SAR200 SAR100

How to order

SAR 4 00 - ○ 04 BGK

① Air Regulator

② **Body Size**
1 - 1/8
2 - 1/4
3 - 3/8
4 - 1/2, 3/4
6 - 1

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

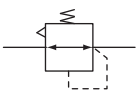
⑤ **Accessory(Optional)**
Nil - None Bracket / None Gauge
B - Bracket
G - Gauge

G	Round type
Gs	Square embedded type

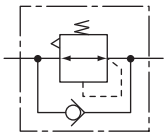
Note) SAR100 is available only round type gauge.
K - With backflow function
Note) SAR100 can not attach a backflow function.

Symbol

SAR



SAR with backflow function



Specification

Fluid	Compressed Air				
Max. operating pressure	10bar (1.0MPa)				
Max. supply pressure	15bar (1.5MPa)				
Ambient and Media temp.	-5~60℃ (No freezing)				
Regulating range	0.5~8.5bar (0.05~0.85MPa)				
Gauge port	SAR100	SAR200	SAR300	SAR400	SAR600
	1/16	1/8		1/4	
Construction	Relief type				

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

③ Please contact SKP when a circuit requires the use of a regulator having relief sensitivity with high precision and setting accuracy.

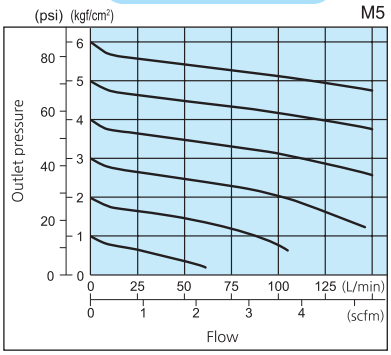
④ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

Series SAR100~600

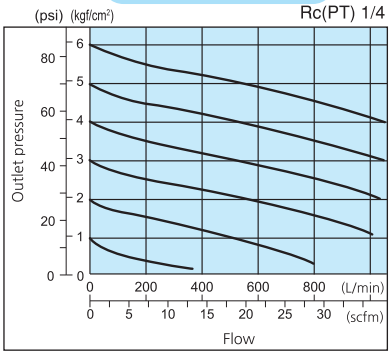
FLOW CHARACTERISTICS

Inlet pressure 7kg/cm²

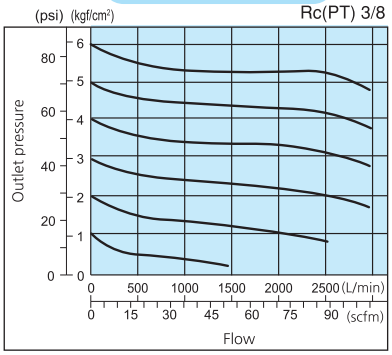
SAR 100



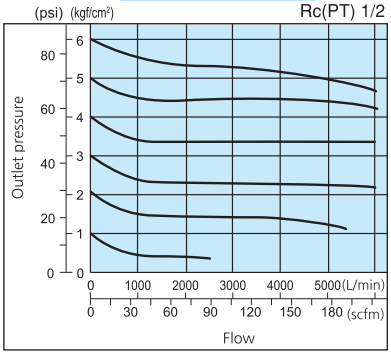
SAR 200



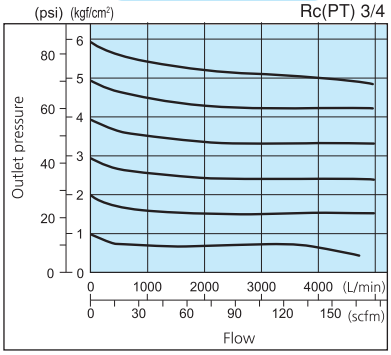
SAR 300



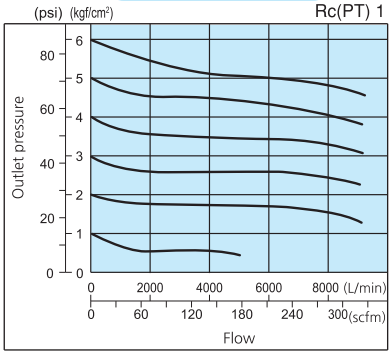
SAR 400-04



SAR 400-06



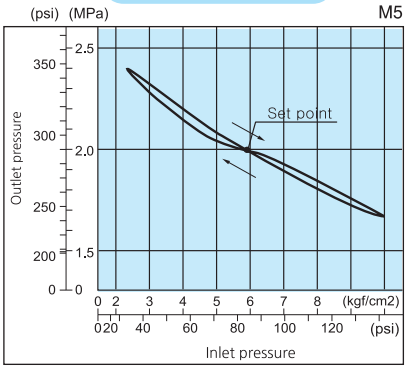
SAR 600



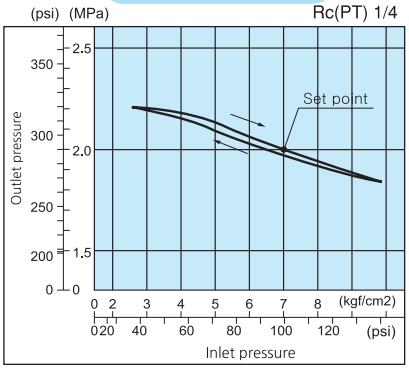
PRESSURE CHARACTERISTICS

Inlet pressure 7kg/cm², Outlet pressure 2kg/cm², Flow 20L/min(ANR)

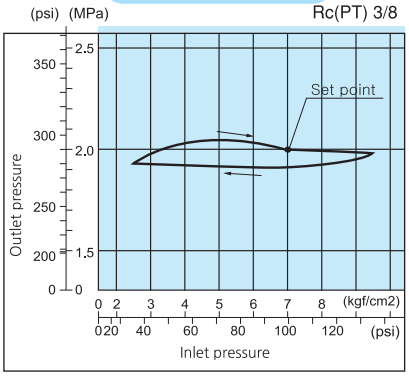
SAR 100



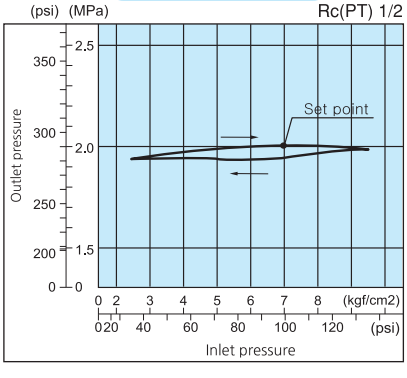
SAR 200



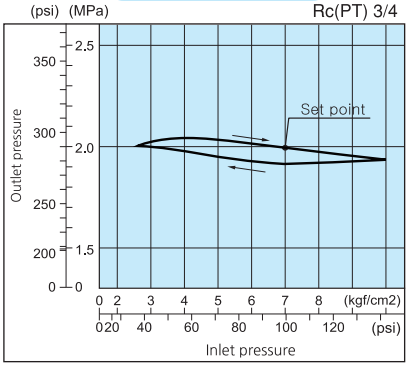
SAR 300



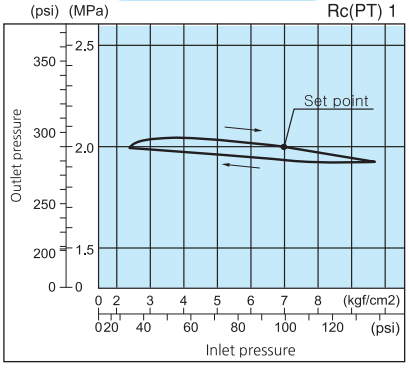
SAR 400-04



SAR 400-06

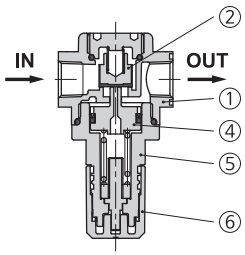


SAR 600

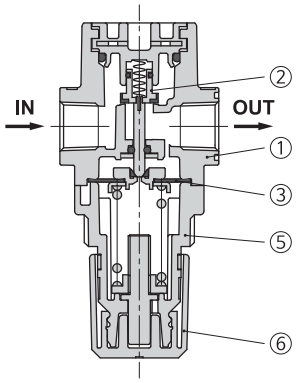


STRUCTURE / PARTS

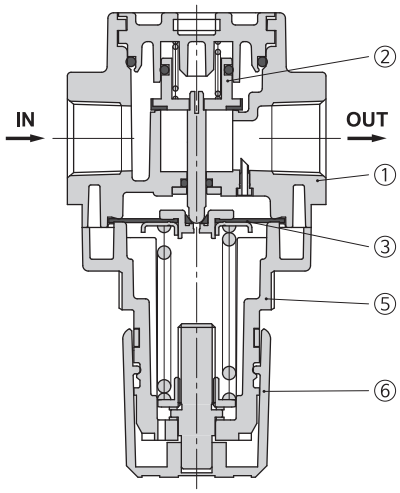
SAR100



SAR200



SAR300 to 600

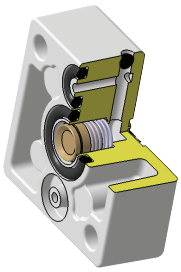


▪ Component Parts

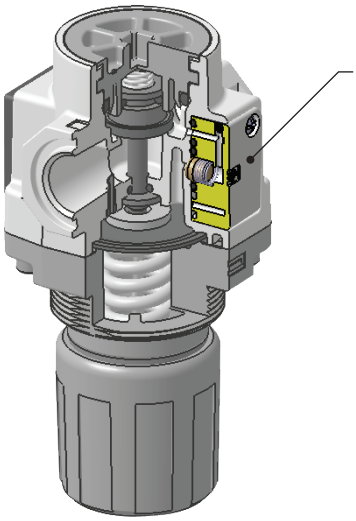
No.	PARTS	MATERIAL
①	Body	ALDC
②	Check valve Ass'y	Brass, NBR
③	Diaphragm Ass'y	NBR
④	Piston [1)]	N66G
⑤	Cover [2)]	N66G
⑥	Handle	ABS

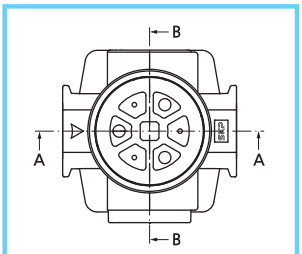
Note : 1. The SAR100 is a piston type. Assembly of a piston and a seal.
2. SAR600 cover material is ALDC

■ Backflow function adapter



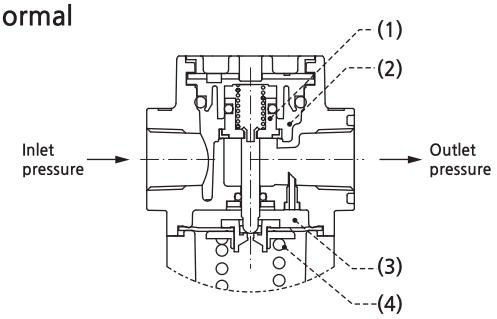
■ Regulator with Backflow function adapter installed.

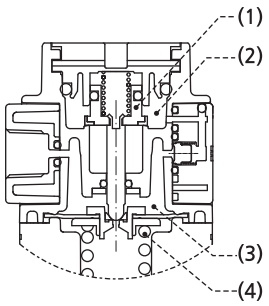


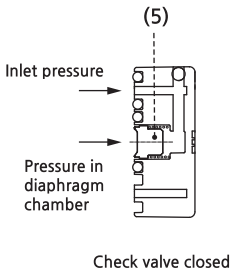


■ AR200~600, AW200~600

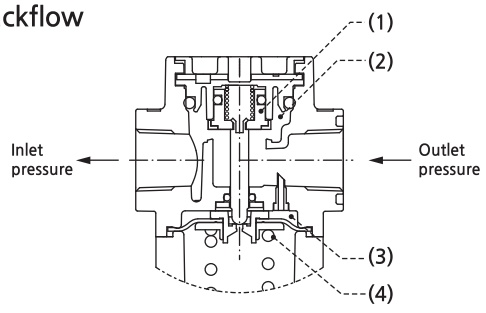
Normal

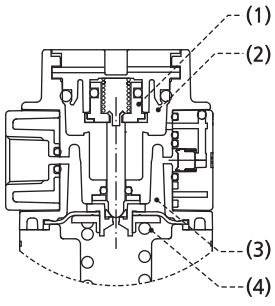


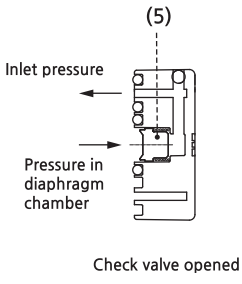




Backflow





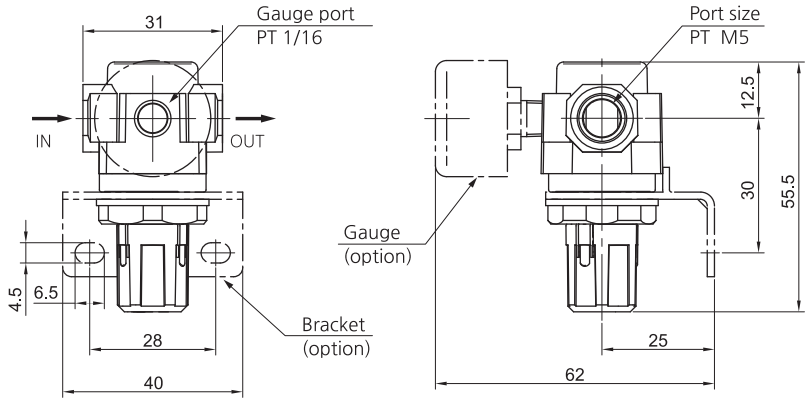


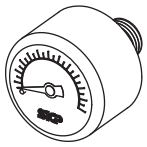
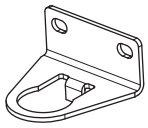
work	Description for the operation state by the backflow function adapter
normal	Because the inlet pressure(1) is higher than the regulating pressure, Check valve(5) closes and operates as a normal regulator.
backflow	When the inlet pressure(1) is shut off and released, the presure in the diaphram chamber (3) is released into the inlet side(1) to open the check valve(5). This lowers the pressure in the diaphragm chamber(3) and the force generated by the pressure of the regulator cover spring(4) opens the regulator check valve(2) The outlet pressure is released to the inlet side(1)

DIMENSIONS (mm)

SAR 100

■ SAR100-□01(M5)□□

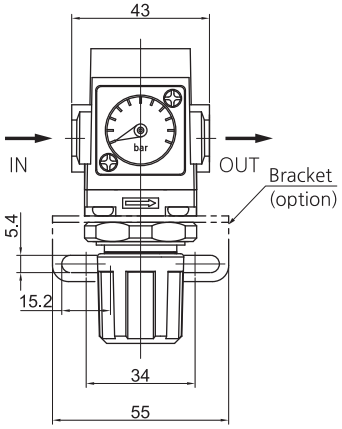


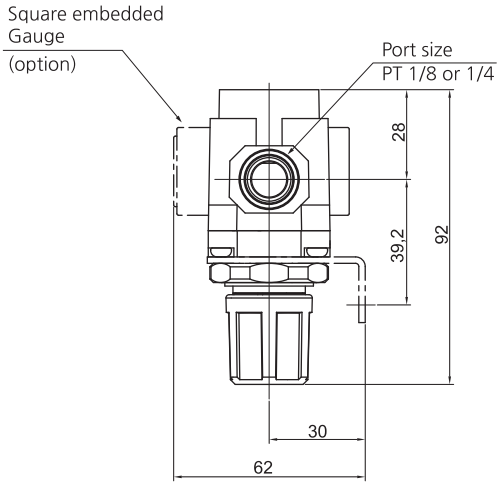
Option	G : Round type Gague	B : Bracket
Model	 Model : G25 R 1/16	 B120

DIMENSIONS (mm)

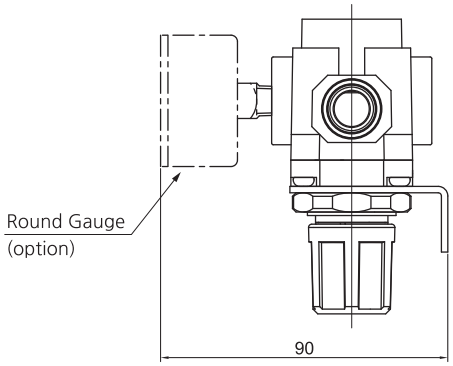
SAR 200

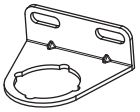
■ SAR200-□02□□





■ Dimensions of each model with an option attached

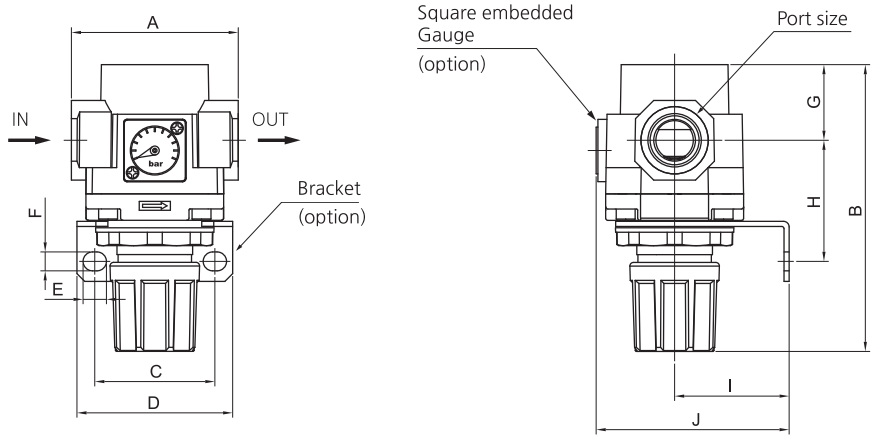


Option	Gs : Square embedded Gauge	G : Round type Gague	B : Bracket
Model	 Gs28	 G40, R1/8	 B220

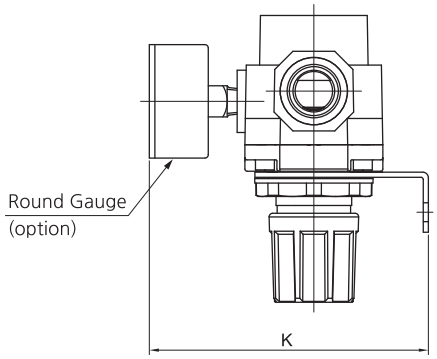
DIMENSIONS (mm)

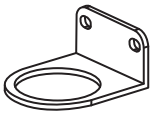
SAR 300~400

■ SAR300-□03□□
SAR400-□04(06)□□



■ Dimensions of each model with an option attached



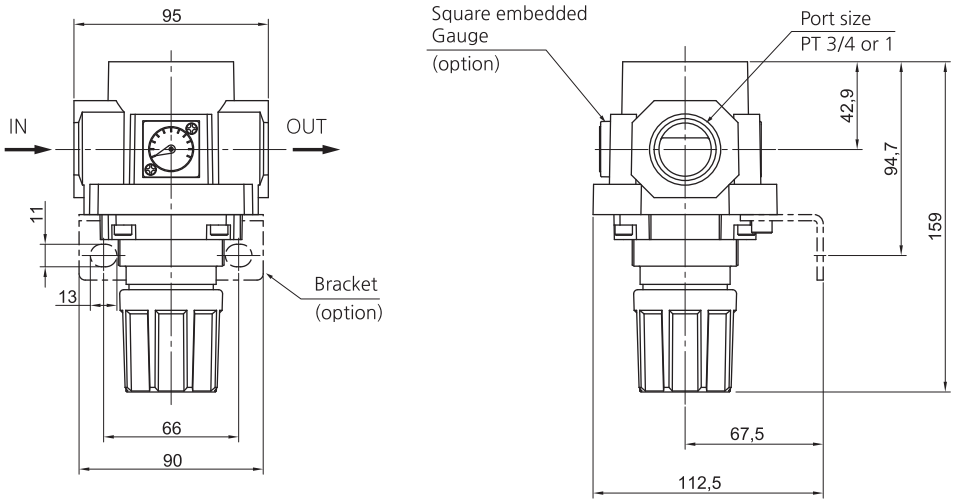
Option	G : Square embedded type Gague	G : Round type Gauge	B : Bracket
Model	 Gs28	 SAR300 : G40, R1/8 SAR400 : G50, R1/4	 SAR300 : B320 SAR400 : B420

Model	Port size	A	B	C	D	E	F	G	H	I	J	K
SAR300-03	1/4, 3/8	57	117	40	53	8	6.5	28.4	45.7	41	72	107
SAR400-04	1/2	75	125	54	70	10.5	8.5	34	54	50	87	127
SAR400-06	3/4	75	127	54	70	10.5	8.5	34.5	55.5	50	87	127

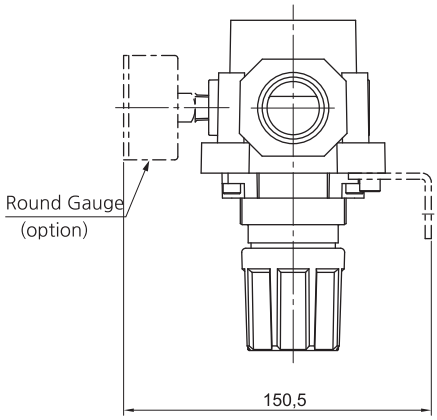
DIMENSIONS (mm)

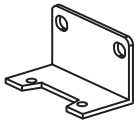
SAR 600

■ SAR600-□06□□
SAR600-□10□□



■ Dimensions of each model with an option attached



Option	G : Square embedded type Gauge	G : Round type Gauge	B : Bracket
Model	 Gs28	 G50, R1/4	 B600