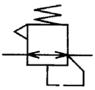
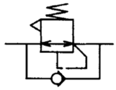
Air Regulator / R45, R55, R105

JIS Symbol

Standard type



Reversible type



Pressure gauges in the photo are optional.

Representation

R 4 5 L - 0 3 G B S

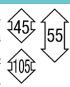
Model No.
R45, R55, R105

Pressure adjustment range
No mark : 0.03~0.8MPa
L : 0.02~0.42MPa

Bracket
No mark : No bracket
BS : Direct mounting bolt
BM : Both sides supporting bracket
BF : Rear side supporting bracket
P : Panel mountring

Pressure gauge
No mark : No pressure gauge
G : Pressure gauge

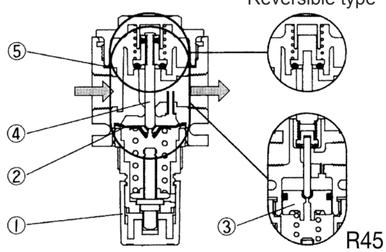
Port size
02 : Rc¼
03 : Rc⅜
04 : Rc½
06 : Rc¾



Specifications

Model No.	Unit	R45	R55	R105
Port size		Rc¼	Rc¼, ⅜, ½	Rc½, ¾
Pressure gauge connection port		Rc⅛		
Reduced pressure range	MPa (kgf/cm^2)	0.03~0.8 [0.3~8] (L: 0.02~0.42 [0.2~4.2])		
Max. operating pressure	MPa (kgf/cm^2)	1.4 [14]		
Surrounding temperature range	°C	5~65		
Weight	kg	0.19	0.30	0.64

Construction



Components and Parts

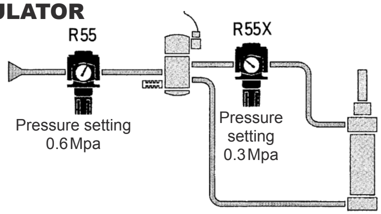
No.	Name	R45	R55	R105	Material
1	Adjusting knob	B450218		B1050419	POM
2	Diaphragm assembly	—	B550307, 08, 09, 10	R0103406, 07, 08, 09	SS41, BC, NBR
3	Piston assembly	B450212, 13	—	—	PE NBR
4	Disc assembly	B450210, 11	B550312, 13	B1050410, 11	BC NBR
5	Bottom gasket	B45BB01	B55BB01	AS138	NBR

AN EXAMPLE USE OF THE REVERSIBLE REGULATOR

Thrust force adjustment for push side and pull side of air cylinder

Usual air regulator uses a balanced disc for improving pressure characteristics,Therefore,air cannot easily flow from the reduced side to the supply side,so that the air cylinder will not smoothly operate and proper thrust force cannot be obtained.

Reversible type regulator easily flows back air with a disc assembly unbalanced,making it possible to adjust the thrust force of the air cylinder smoothly.

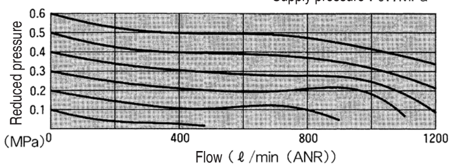


Example of high pressure setting on rod push side and low pressure setting on rod pull side.

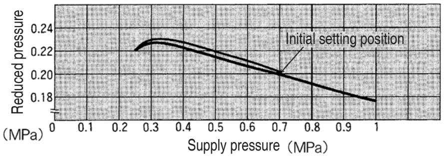
Flow characteristics & Pressure characteristics

(Unit : mm)

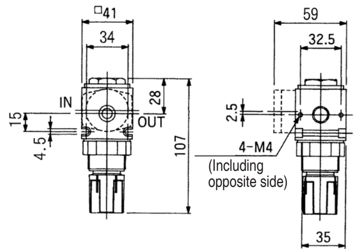
R45



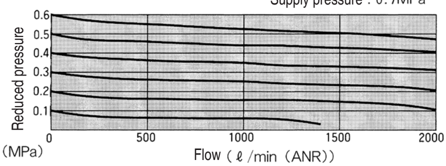
R45



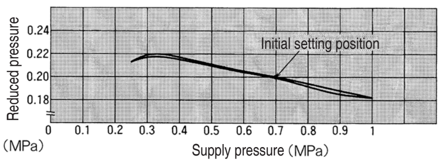
R45



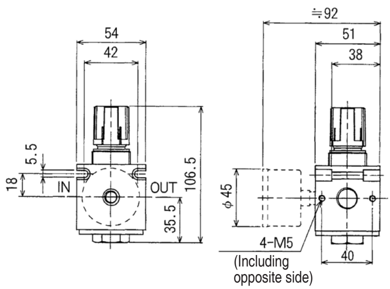
R55



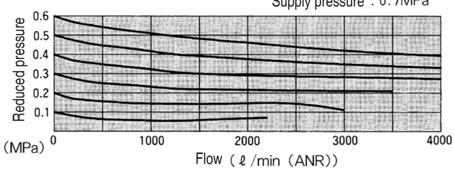
R55



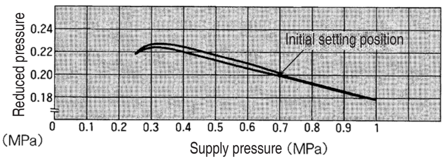
R55



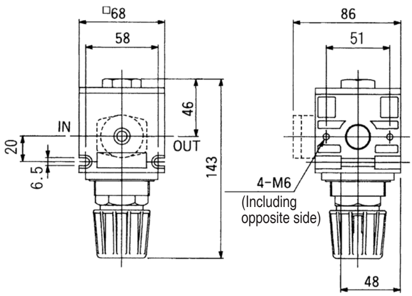
R105



R105



R105



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