

Pressure Reducing Valve

Model: RP-9,10, 11 (for Steam)

Pilot operated type pressure reducing valve for high-pressure steam.

This product works stably at maximum pressure reduction ratio 20:1 and high differential pressure.

The face-to-face dimensions are the same as those of the former RP-2H Type pressure-reducing valve, but the weight is 40% lighter.



Specifications

Type	Ductile cast iron		Cast steel	Stainless steel
Model name	RP-9		RP-10	RP-11
Code name	RP9-L	RP9-M	RP10-C	RP11-D
Applicable fluid	Steam			
Fluid temperature	Max. 220°C		Max.250°C*1	Max.250°C
Applicable primary pressure	Max. 2.0MPa		Max. 3.0MPa	
Adjustable secondary pressure	0.03~0.8MPa*2			
Minimum reducing rate	20:1			
Minimum pressure differential Across the disc	Size 15~80mm : 0.05MPa, Size 100~150mm : 0.07MPa			
Lock up pressure	Max. 0.02MPa			
Offset pressure	Within 0.02MPa (Adjustable secondary pressure 0.03~0.035MPa) Within 0.03MPa (Adjustable secondary pressure over 0.035MPa~0.07MPa) Within 0.05MPa (Adjustable secondary pressure over 0.07MPa~0.8MPa)			
Leakage allowance	Less than 0.05% of rated flow			
End connection	Flanged JIS 20KRF*3		Flanged JIS 30KRF*4	
Materials	Body	Ductile cast iron	Cast steel	Stainless steel
	Disc & seat	Stainless steel		
	Piston & cylinder	Cast bronze	Stainless steel	Stainless steel
Valve body pressure test	1.5 times of flange rated pressure			
Installation	Upright installation on horizontal pipe			

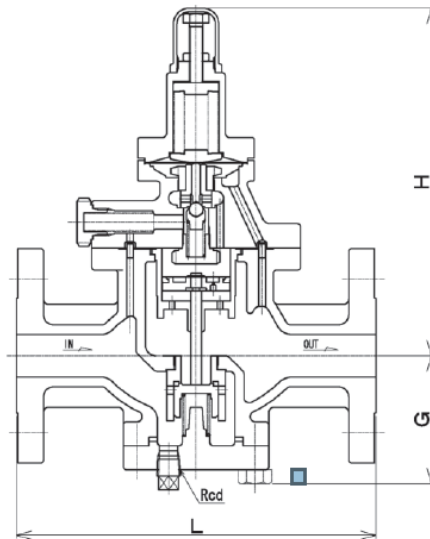
*1. RP-10T Type for high-temperature steam (Max.350°C) is also available.

*2. RP-9N (size 15-80mm: 0.6-1.95MPa: size 100-150mm: 0.8-1.93MPa) and RP-10N, 11N Type (0.8-2.0MPa) for high adjustable secondary pressure are also available.

*3. Products with JIS 10, 16K flange are available.

*4. Products with JIS 10, 16, 20K flange are available.

Construction



*1. The structure may vary depending on material and nominal diameter.

*2. The materials of main body and dimensions are the same as those of the former RP-2H model.

Dimensions

RP-9 Type (Body: Ductile cast iron)

(mm)

Size	L	G	H	d	Cv value	Mass (kg)
15(1/2")	170	77	216	1/4"	1	7.5
20(3/4")	170	77	216	1/4"	2.5	7.5
25(1")	210	77	216	1/4"	4	9
32(1 1/4")	210	96	237	1/4"	6.5	12
40(1 1/2")	220	96	237	1/4"	9	12.5
50(2")	250	104	247	1/4"	16	15.5
65(2 1/2")	290	115	262	3/8"	25	20.5
80(3")	350	122	277	3/8"	36	26.5
100(4")	384	142	342	3/8"	64	60
125(5")	434	192	372	3/8"	100	90
150(6")	544	209	407	3/8"	144	120

Flange code JIS 20KRF

RP-10 Type (Body: Cast steel), RP-11 Type (Body: Stainless steel)

(mm)

Size	L	G	H	d	Cv value	Mass (kg)
15(1/2")	198	80	217	1/4"	1	7.5
20(3/4")	198	80	217	1/4"	2.5	7.5
25(1")	228	80	221	1/4"	4	9
32(1 1/4")	232	97	238	1/4"	6.5	12
40(1 1/2")	248	97	238	1/4"	9	12.5
50(2")	280	107	248	1/4"	16	15.5
65(2 1/2")	288	119	263	3/8"	25	20.5
80(3")	366	126	278	3/8"	36	26.5
100(4")	426	146	342	3/8"	64	60
125(5")	454	197	372	3/8"	100	90
150(6")	564	216	407	3/8"	144	120

Flange code JIS 30KRF