

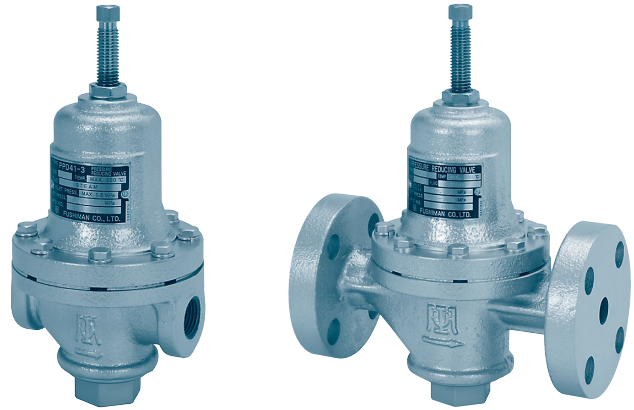
Direct acting

Type PPD41-3 Pressure Reducing Valves

For steam

1 Pressure Reducing Valves (For steam)

- Compact design for small flow rate
- Free ball type valve made of wear-resistant material
- Heat-resistant rubber diaphragm performs sharp response to pressure fluctuation



Specifications

Fluid	Pressure (MPa)		Max. temp. (°C)	Material for main parts					Connection
	Inlet	Outlet set range		Body	Spring case	Valve disc & seat	Bottom cover	Diaphragm	
Steam	0.05-1.6	0.03-0.15 0.1-0.7	Sat-220	Cast iron	Cast iron	Stainless steel	Brass	Heat resistant synthetic rubber	Screwed JIS Rc
	0.05-1.0			Cast iron			Brass		Flanged JIS10KFF
	0.05-1.6			Cast steel			Stainless steel		Flanged JIS20KRF
	0.05-1.0			Stainless cast steel			Stainless steel		Flanged JIS10KFF

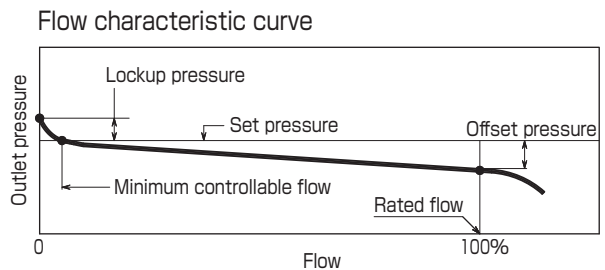
Remarks 1. ASME class 150RF and class 300RF flange of the body made from cast steel are available.
2. Diaphragm made from stainless steel is available.

Performance

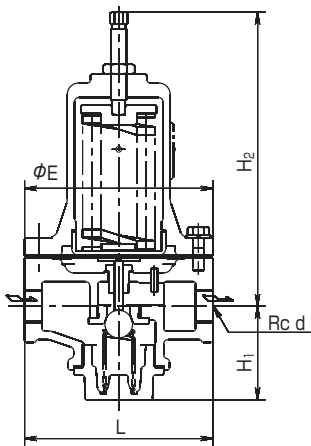
Min. differential pressure	0.02MPa
Offset pressure	10% of max. set range or less
Lockup pressure	0.02MPa or less
Min. controllable flow	0.35kg/h
Seat leakage volume	0.05% of rated flow or less

Cv values

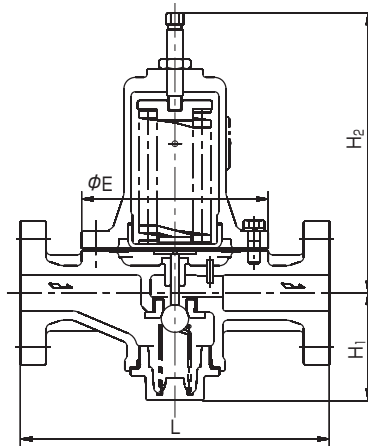
Size	15	20 · 25
Cv	0.4	1



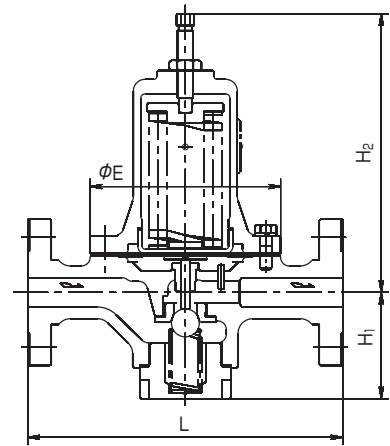
Construction & Dimensions



Cast iron, Screwed



Cast iron, Flanged



Cast steel, Stainless cast steel, Flanged

Type PPD41-3 Pressure Reducing Valves

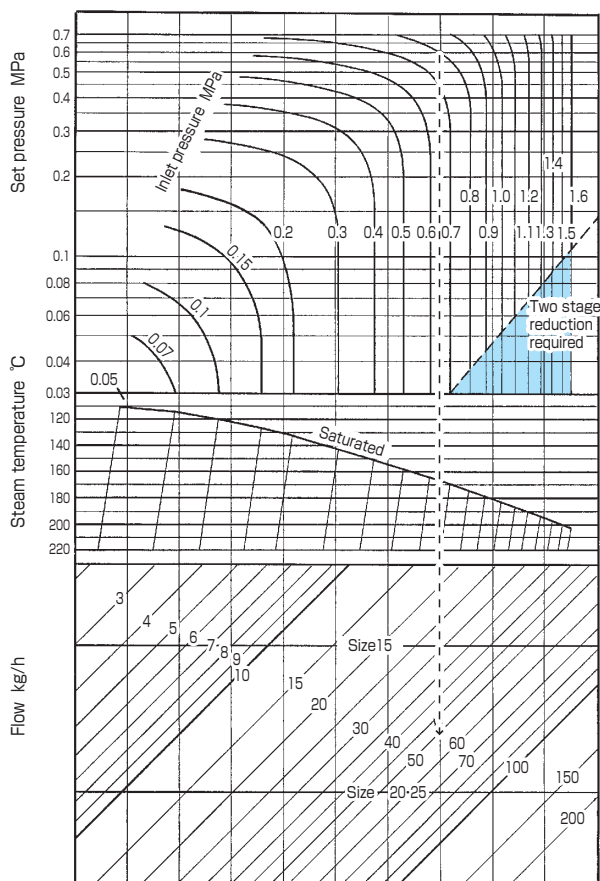
Dimensions and weights

(mm, kg)

Body	Size	Dimensions					Weight	Connection
		d	L	H ₁	H ₂	E		
Cast iron	15	1/2	95	51	165	100	2.6	Screwed JIS Rc
	20	3/4	130	65	222	130	5.8	
	25	1	130	65	222	130	5.8	
Cast iron	15	—	170	62	162	100	4.7	Flanged JIS10KFF
	20	—	215	75	218	130	8	
	25	—	215	75	218	130	9	
Cast steel	15	—	211	73	213	130	8.3	Flanged JIS20KRF
	20	—	215	73	213	130	8.7	
	25	—	215	73	213	130	9.3	
Stainless cast steel	15	—	207	73	210	130	8.3	Flanged JIS10KFF
	20	—	211	73	210	130	8.7	
	25	—	211	73	210	130	9.3	

Sizing curve

Use the following chart to select the suitable valve size.



In the event that the inlet pressure or the outlet pressure is not constant but stays within range, select the minimum difference in pressure between the inlet pressure and outlet pressure to choose the correct size.

Example

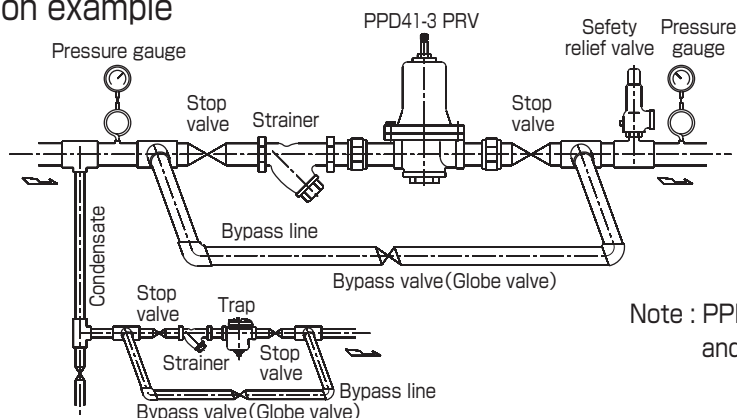
Inlet pressure : 0.8MPa
 Outlet pressure : 0.6MPa
 Temperature : Saturated
 Flow : 50kg/h

Draw a vertical line from the intersection of the inlet pressure line and the outlet pressure line down to the saturated line.

As the fluid temperature is saturated, continue to draw a line downward until it reaches 50kg/h flow line.

As the final intersecting point is between the size 15 line and the size 20,25 line, the required valve size is 20 or 25.

Installation example



Note : PPD41-3 can be installed in both horizontal and vertical piping.