

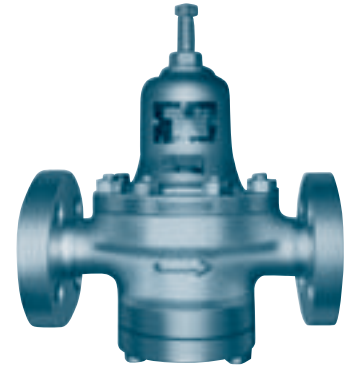
**Direct acting**

# Type PPD41B Pressure Reducing Valves

**For gas**

**1 Pressure Reducing Valves (For gas)**

- Negligible influence is exerted by inlet pressure change due to the use of a pressure balancing construction.
- To cope with high pressure use of PPD41B-2.
- For larger flow rate, use type PHP30 pressure reducing valve.



## Specifications

Fluid	Pressure (MPa)		Max. temp. (°C)	Material for main parts				Connection	
	Inlet	Outlet set range		Body	Bottom cover	Spring case	Valve disc & stem		Diaphragm
Air & non-corrosive gases	0.7-4.0	0.6-1.6 1.3-2.3 2.0-3.0	0-60	Cast steel or Stainless cast steel	Stainless steel	Cast steel or carbon steel	Stainless steel (Teflon seated)	Synthetic rubber	Flanged JIS40KRF

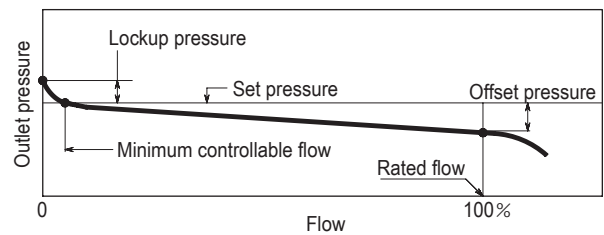
Remark ASME class 300RF and class 600RF flange are available.

## Performance

Min. differential pressure	0.1MPa
Offset pressure	Approx. 10% of max. set range
Lockup pressure	Approx. 0.1MPa
Min. controllable flow (air) (¹)	0.3m³/h (normal)
Seat leakage	0.1% of rated flow or less

Note (¹) : Except for air, the flow rate should be divided by  $\sqrt{G}$  (G : sp.gr., air : 1).

Flow characteristic curve



## Cv values

Size	15	20	25
Cv	1.8	2.6	3.9

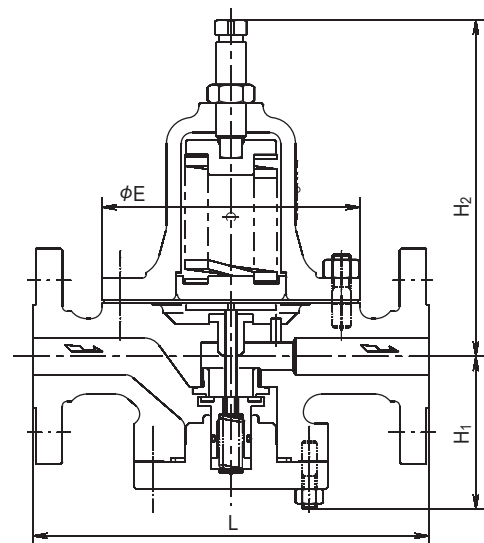
Note

Use as the flow rate either the Cv value calculation or the maximum flow rate, depending on which is the smaller rate. Use the smaller value as the rated flow. Maximum flow rate conforms to the following formula which is based on the velocity 30m/s at valve outlet.

$$\text{Max. flow rate } V_{LM} = K \cdot P_2 \cdot \frac{273}{G(273+t)} \text{ m}^3/\text{h (normal)}$$

- $P_2$  : Set pressure MPa abs.
- $t$  : Temperature °C
- $G$  : Specific gravity (air : 1)
- $K$  : 218 for size 15
- 392 for size 20
- 641 for size 25

## Construction & Dimensions



Dimensions and weights

Size	L	H <sub>1</sub>	H <sub>2</sub>	E	Weight
15 · 20	223	83	182	140	14
25	227	83	182	140	16

(mm, kg)