

**Direct acting**

# Type AW Pressure Reducing Valves

**For all Fluid**

- Simple construction.
- Stainless steel diaphragm allows for use with steam, gases and liquids.


**1 Pressure Reducing Valves (For steam, gas, liquid)**

## Specifications

Pressure (MPa)		Temp. (°C)	Fluid	Material for main parts					Connection	
Inlet	Outlet set range			Body	Spring case	Bottom cover	Valve disc & seat	Diaphragm		
1.0 and lower	(Standard) 0.03 - 0.055 0.055 - 0.085	0 - 60	Air, water, non-corrosive gases & liquids	Cast iron	Cast iron	Cast iron	Stainless steel	Synthetic rubber	Flanged JIS10KFF	
2.0 and lower	0.085 - 0.13 0.13 - 0.2			Cast steel		Carbon steel			Flanged JIS20KRF	
	0.2 - 0.3			Stainless cast steel		Stainless steel				
1.0 and lower	(Medium) 0.30 - 0.45	0 - 220	Steam, non-corrosive gases & liquids	Cast iron		Cast iron		Stainless steel	Stainless steel	Flanged JIS10KFF
2.0 and lower	0.45 - 0.7 0.7 - 1.0			Cast steel		Carbon steel				Flanged JIS20KRF
	(High) 1.0 - 1.6			Stainless cast steel		Stainless steel				

## Performance

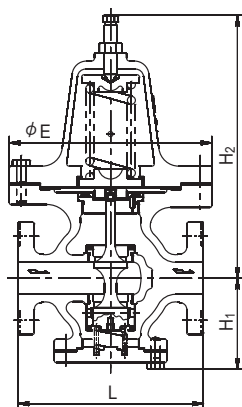
Offset pressure	10 - 20% of max. set pressure
Seat leakage	0.5% of rated flow
Max. pressure reducing ratio	10 : 1

## Cv values

Material of diaphragm	Size	Outlet set pressure range (MPa)							
		0.03 - 0.055	0.055 - 0.085	0.085 - 0.13	0.13 - 0.2	0.2 - 0.3	0.3 - 0.45	0.45 - 0.7	above 0.7
<b>Cv</b>									
Synthetic rubber	15	0.40	0.78	1.30	1.71	1.55	1.74	1.75	1.75
	20	0.42	0.82	1.38	2.11	1.79	2.20	2.28	2.28
	25	0.42	0.82	1.38	2.14	1.82	2.23	2.28	2.28
	40	0.70	1.34	2.23	3.88	2.72	3.70	3.36	3.36
	50	0.79	1.50	2.52	4.44	3.65	5.35	5.12	5.12
Stainless steel	15	0.08	0.15	0.24	0.78	0.96	0.96	1.08	1.08
	20	0.09	0.17	0.28	0.79	1.02	1.02	1.11	1.11
	25	0.09	0.17	0.28	0.80	1.02	1.02	1.11	1.11
	40	0.21	0.41	0.66	1.49	1.58	1.64	2.20	2.20
	50	0.35	0.69	1.10	1.88	2.09	2.09	2.20	2.20

Remark : Cv value will be double of above value when 20% offset is allowed.

## Construction



## Dimensions and weights

Material Connection	Size	L	H <sub>1</sub>	H <sub>2</sub>	E	Weight
Cast iron JIS 10K	15	186	89	320	225	25
	20	190	89	320		25
	25	190	89	320		28
	40	230	113	328		38
	50	250	127	336		40
Cast steel, Stainless cast steel JIS 20K	15	182	93	320	225	27
	20	186	93	320		27
	25	186	93	320		30
	40	226	117	328		40
	50	246	131	336		45

Remark : Size 65 is available.