

Pressure Reducing Valves

The Pressure Reducing Valve is designed to provide a reduced outlet pressure from any given inlet pressure.

Pressure reducing methods

Spring loaded - A force is created from an adjustable spring to act upon a diaphragm or piston to balance a pressure on the downstream side of the valve.

Internally Dome Loaded - Pressurised gas is stored in a dome on one side of a diaphragm or piston to balance downstream fluid pressure on the other side. In this case the dome is loaded by means controlled by the operation of needle valves provided for this purpose.

Externally Dome Loaded - Pressurised gas is stored in a dome on one side of a diaphragm or piston to balance downstream fluid pressure on the other side. A tapped thread connection is provided into the dome, which may be loaded from any suitable gas source. A convenient feature of this method is that a spring-loaded reducing valve may be used as a pilot valve to control dome pressure for ease of adjustment or to provide remote control.



A210 Dome loaded regulator and sprung loaded regulator with hand wheel

Spring Loaded Pressure Reducing Valves

Valve Type	Orifice mm (ins)	Ports (standard)	Pressure bar (psi)		Gas or Liquid
			Max Inlet	Outlet Range	
A10	3.2 (0.125)	3/8" BSP	415 (6,000)	0.35~70 (5~1,000)	Both
A11	3.2 (0.125)	3/8" BSP	415 (6,000)	70~275 (1000~4,000)	Both
A12	3.2 (0.125)	3/8" BSP	415 (6,000)	35~415 (500~6,000)	Both
A16	7.6 (0.300)	3/8" BSP	310 (4,500)	1.5~70 (20~1,000)	Both
A20	11.1 (0.437)	1/2" BSP	70 (1,000)	0.35~7 (5~100)	Both
A30	19.1 (0.750)	1" BSP	70 (1,000)	0.35~7 (5~100)	Both



Internal Dome Loaded Pressure Reducing Valves

Valve Type	Orifice mm (ins)	Ports (standard)	Pressure bar (psi)		Gas or Liquid
			Max Inlet	Outlet Range	
A100	11.1 (0.437)	1/2" BSP	70 (1000)	0.05~62 (0.75~900)	Gas only
A120	25.4 (1.000)	1 1/2" BSP	70 (1000)	0.05~62 (0.75~900)	Gas only
A130	50.8 (2.000)	3" BSP	70 (1000)	0.05~62 (0.75~900)	Gas only
A200	6.4 (0.250)	3/8" BSP	415 (6000)	2~240 (30~3500)	Gas only
A210	12.7 (0.500)	3/4" BSP	415 (6000)	3~240 (44~3500)	Gas only
A220	25.4 (1.000)	1 1/2" BSP	310 (4500)	5~240 (73~3500)	Gas only

External Dome Loaded Pressure Reducing Valves

Valve Type	Orifice mm (ins)	Ports (standard)	Pressure bar (psi)		Gas or Liquid
			Max Inlet	Outlet Range	
A101	11.1 (0.437)	1/2" BSP	70 (1000)	0.05~62 (0.75~900)	Both
A121	25.4 (1.000)	1 1/2" BSP	70 (1000)	0.05~62 (0.75~900)	Both
A131	50.8 (2.000)	3" BSP	70 (1000)	0.05~62 (0.75~900)	Both
A201	6.4 (0.250)	3/8" BSP	415 (6000)	2~240 (30~3500)	Both
A211	12.7 (0.500)	3/4" BSP	415 (6000)	3~240 (44~3500)	Both
A221	25.4 (1.000)	1 1/2" BSP	310 (4500)	5~240 (73~3500)	Both

