



Ratio Pressure Reducing Valves

The Ratio Pressure Reducing Valves are of fixed ratio type with ratios of 2:1, 3:1, 3:2 and others available on request. The valve is constructed of gunmetal and available with stainless steel seat/piston and/or PTFE coating on piston and bore on request. It reduces pressure to the required ratio to protect applications from damage caused by excess pressure. It also reduces surge and water hammer in pipelines.



Features of the Ratio P.R.V.

- All gunmetal construction to BS1400 LG2 for both fresh and flush water applications.
- Stainless steel seat ring and piston.
- Optional wear resistant PTFE coating on bore and piston for flush water systems.
- High grade synthetic rubber (NBR) for seat-ring and O-ring seals.
- Very reliable due to only one moving part that means minimum maintenance is required.
- Reducing both the static and dynamic fluid pressure to the required ratio regardless of the changes in inlet pressure and flow rate.
- Accurate control of pressure in service lines of fixed up-stream head situation, eg. in high rise buildings or mines.
- High flow rate when compared with conventional spring-loaded type pressure reducing valves.
- Reduces surge and water hammer in pipelines.

Specifications

Sizes: Female screwed end to BS21:
20mm (3/4") to 65mm (2 1/2")
Flanged ends to BS4504 PN16/PN25*
80mm (3") to 150mm (6")

Ratios: 2:1, 3:1, 3:2, and other ratios to order

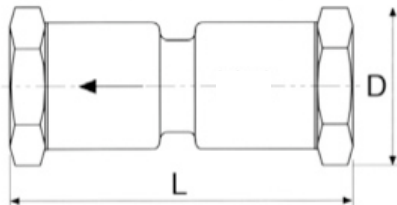
Operating Inlet Pressure

Screwed ends- min. 3 bar (300kPa, 44psi)
Max. 20 bar (2000kPa, 290 psi)
Flanged ends - Min. 2 bar (200kPa, 29psi)
Max. 20 bar (2000kPa, 290 psi)

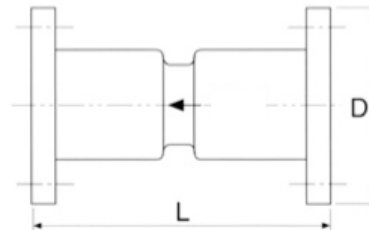
Testing Pressure: 30 bar (3000kPa, 435 psi)

*Optional with higher inlet pressure available on request.

Materials & Dimensions



SCREW CONNECTION	CONTROL BORE SIZE	D	L
25	25	58	126
32	32	76	170
40	40	91	170
50	50	105	179
60	60	123	193

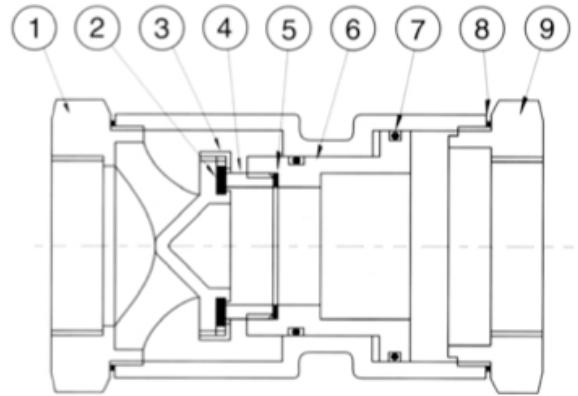


FLANGE CONNECTION	CONTROL BORE SIZE	D	L
80	80	200	155
100	100	220	200
150	150	285	230

Dimensions in mm

“YH” Ratio Pressure Reducing Valve

PART NO.	PART NAME	MATERIAL & SPEC.
1	INLET CONNECTOR / SEAT HOLDER	GUNMETAL BS1400 LG2
2	SEAT	NBR / EPDM
3	SEAT RETAINER	GUNMETAL BS1400 LG2
4	PISTON SEAT RING	STAINLESS STEEL
5	SEAL RING	NBR / EPDM
6	PISTON	STAINLESS STEEL; ALT.GUNMETAL / ZINC-FREE BRONZE BS1400
7	PISTON O-RING	NBR / EPDM
8	CONNECTOR O-RING	NBR / EPDM
9	OUTLET CONNECTOR	GUNMETAL BS1400 LG2



- Optional with special wear resistant PTFE coating on bore and piston.
- Other materials are available on request

Flow Rates

Maximum Flow Rate for open end in Litres Per Minute (L/min)

INLET PRESSURE (BAR)	CONTROL BORE SIZE (MM)					
	25	40	50	80	100	150
2	-	-	-	3100	5650	13400
3	170	355	660	4000	710	17500
5	220	470	865	5600	10000	24800
10	310	655	1210	6900	12000	30000
15	375	785	1455	7900	14000	34700
20	435	915	1695	8800	14700	38700

- The above flow figures are obtained from calculation and are intended for reference and as a guide only. For flow loss data, please refer to our office.

Valve Sizing

The size and type of valve is determined by the pipe size and/or flow capacity. Valve selection can be established by referring to the flow and dimension charts above.

With flange ends, it is essential to specify the valve body control size (for 100mm and 150mm) in addition to the flanged connections.

Installation

- All screwed valves should be installed with at least one union.
- Direction of flow has been clearly indicated on the body of the valve.
- Valves can be installed in any position, vertical or horizontal.
- Protect the valve from heat of oxy torch, etc.
- All pipelines must be thoroughly flushed out prior to installation.
- Y-type or U-type strainers are recommended to install before the valves.