

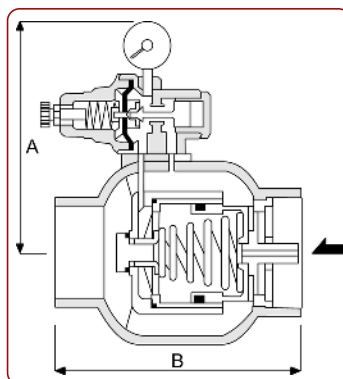


DESCRIPTION

Pressure Sustaining Valve. Pilot Sustaining valve is adjusted by means of adjustment screw on pilot assembly. Internal diaphragm controls main valve body piston. Pressure gauge indicates sustaining pressure setting. Maintains safe pipeline pressure by balancing inlet and downstream pressures during normal system running and emergency conditions.

Pressure Adjusting Range:

- 0.2 - 4 Bar
- 3 - 10 Bar

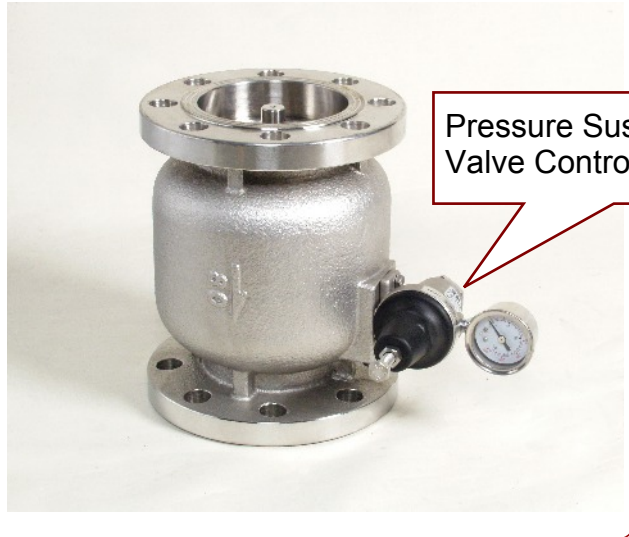


SPECIFICATIONS & DIMENSIONS

Model: Ported Body				Orifice mm	Min	Maximum Differential Pressures. Bar.				KV L/Min.	Weight Kg	Dimensions. mm	
A	B	C	Bronze			Cast Iron	Ductile Iron	Stainless Steel	A			B	
P04	50		1 1/2"	50	0.3	16	16	20	22	686	3.5	75	120
P04	65		2"	65	0.3	16	16	20	22	1072	8	95	200
Model: Flanged Body PN16. (PN10, PN25 & ANSI available upon request)													
P04	50		2"	50	0.3	16	16	20	22	1072	10	95	190
P04	65		2 1/2"	65	0.3	16	16	20	22	1501	13	100	210
P04	80		3"	80	0.3	16	16	20	22	2002	16	115	225
P04	100		4"	100	0.3	16	16	20	22	3718	22	127	250
P04	125		5"	125	0.3	16	16	20	22	5577	30	150	280
P04	150		6"	150	0.3	16	16	20	22	7865	42	165	310
P04	200		8"	200	0.3	16	16	20	22	14300	85	205	420
P04	250		10"	250	0.3	16	16	20	22	22880	150	240	470
P04	300		12"	300	0.3	16	16	20	22	31460	200	275	530
P04	350		14"	350	0.3	16	16	20	22	42900	285	405	600
P04	400		16"	400	0.3	16	16	20	22	50050	350	435	600
P04	450		18"	450	0.3	16	16	20	22	74360	620	495	750
P04	500		20"	500	0.3	16	16	20	22	82940	650	495	750

ORDER CODES

A	Body	B	Ported Body	Flanged Body. PN16. (PN10, PN25 & ANSI available upon request)					C	Seals (fluid temp min / max)	
T	Bronze	O	1 1/2" BSP	2A	2" PN16	6A	6" PN16	16A	16" PN16	0	NBR (-10°C to + 80°C)
C	Cast Iron	P	2" BSP	25A	2 1/2" PN16	8A	8" PN16	18A	18" PN16	1	VITON (-10°C to + 90°C)
D	Ductile Iron			3A	3" PN16	10A	10" PN16	20A	20" PN16		
H	304 Stainless Steel			4A	4" PN16	12A	12" PN16				
I	316 Stainless Steel			5A	5" PN16	14A	14" PN16				


P04 PRESSURE SUSTAINING VALVE


Pressure Sustaining
Valve Controller

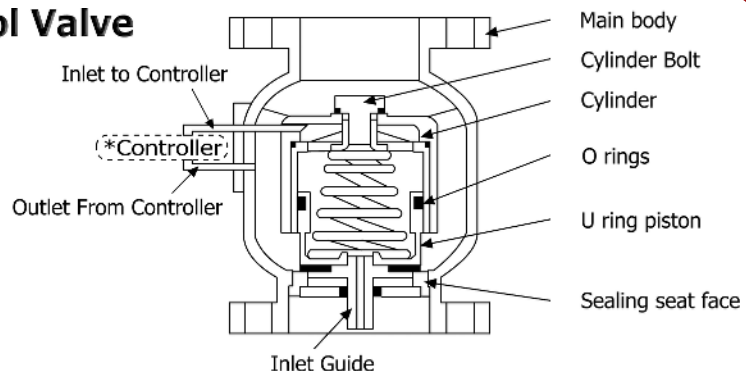
- **Easy installation & commissioning**
- **Compact body**
- **Lightweight yet robust**
- **NO external pipe work**
- **Higher KV flow rates**
- **Easy adjustment**

Pressure Sustaining Valve.

Pilot Sustaining valve is adjusted by means of adjustment screw on pilot assembly. Internal diaphragm controls main valve body piston. Pressure gauge indicates sustaining pressure setting. Maintains safe pipeline pressure by balancing inlet and downstream pressures during normal system running and Emergency conditions.

DESIGN PRINCIPLES
Multi Function Control Valve

* By substituting the controller valve, the multi - function valve can become:
Solenoid Valve
Float Valve
Pressure Relief Valve
Pressure Reducing Valve
Pressure Sustaining Valve
Check Valve


Multi-Function Valve Operating Principles.

The valve body houses the control Piston assembly which operates in the cylinder. The media enters the inlet guide and fills the cylinder. The cylinder has an outlet which supplies the media to the Controller, which could be Solenoid, Float, Pressure Relief, Pressure Reducing or Pressure Sustaining. If the controller is closed, the media cannot escape from the cylinder, so the valve remains closed. When the controller opens, the media is discharged from the cylinder and the U Ring Piston moves and the valve opens.

The benefits of the design are:

- Low and High Pressure Applications
- Valve works in either vertical or horizontal plain
- Straight flow path allows for high flow KV
- Elegant design which is compact and lightweight

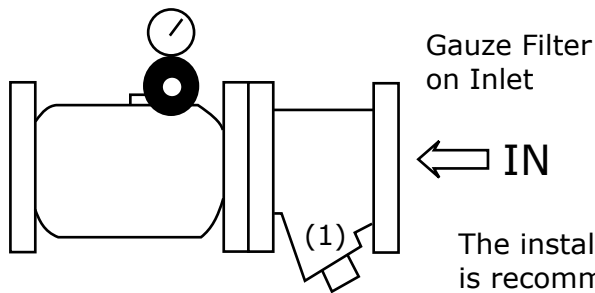
	Working Pressure (Bar)	Test Pressure
Cast Iron	16	24
Ductile Iron	20	32
Bronze	16	24
Stainless Steel	22	35



INSTALLATION PROCEDURE



- **Only 1 Adjustment to make**
- **Compact body**
- **Lightweight**
- **No external pipe work**
- **Tamper proof facility**



The installation of a Gauze Filter on the valve Inlet is recommended to ensure optimum performance. Depending on the system, the filter should be cleaned as part of a regular maintenance schedule. Isolate the system and remove the media pressure. Unscrew the cap (1) And remove the gauze strainer. Clean and dry the gauze filter.

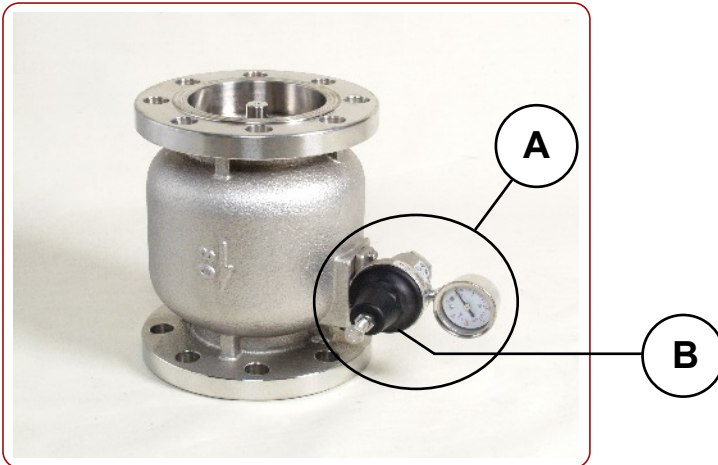
INSTALLTION PROCEDURE

Before Installation:

1. Clean & remove all the impurities inside the pipe.
A Gauze filter is recommended to maintain optimum performance.
2. Make sure the flow direction, indicated on the valve body is correct.
3. The setting pressure gets higher by turning the adjusting stem clockwise.
4. The pressure gauge indicates the sustaining pressure.

Adjusting The Setting Pressure:

1. Turn anti-clockwise the adjusting stem to the lowest pressure.
2. Adjust the pressure to the required setting pressure by turning the stem clockwise.

**SUGGESTED ROUTINE MAINTENANCE SCHEDULE**

- **P04 Sustaining Valve**
- **Suggested Schedule**
- **Maintenance Plan**

MAINTENANCE SCHEDULE

The P04 Series Pressure Sustaining Valve is designed to give many years of trouble free operation. The valve will complete many years of active service, typically between 3 and 5 years, depending on site conditions, media, temperature etc. The simple design is the key to this longevity, by allowing maintenance staff to carry out simple visual inspections. The valve has a single Pilot Assembly (A) which can be replaced as a spare part in a matter of minutes. This assembly also has a cap assembly (B) that can be removed in order to replace the internal diaphragm. Whilst this is a simple operation, we suggest that the complete Pilot assembly (A) is replaced as this is more cost effective, and easier for maintenance staff to administer.

Before Maintenance:

Isolate the valve from the system pressure. Make sure that the plant cannot restart. Confirm to all personnel the Maintenance Procedure.

1. Remove the two securing bolts holding the Pilot Sustaining Valve assembly to the main body (A).
2. Check the rubber seal and make sure the hollow dowel that locates the Pilot assembly is retained.

Monthly Schedule:

Visual check of valve for leaks, damage and set pressure.

6 Monthly Schedule:

Check the Pilot Assembly and pressure gauge for signs of external leaks or damage.

Yearly Schedule:

Replace the Pilot Assembly if required(A).