



W21 S / W21 N



W21 G

Introduction

The W21 is a Direct acting, Balanced seat design, Diaphragm operated PRV with option of built in filter.

Application

The W21 PRV is designed to protect household appliances like Boilers, water purifiers washing machine etc. from pressurization damage. It is also useful in saving water consumption at basin, sink or bath outlets. Reducing pressure and maintaining it a constant level minimizes flow noise in installation.

By installing a PRV, the pressure can be set to desired value and maintained constant even when there is wide inlet pressure fluctuation.

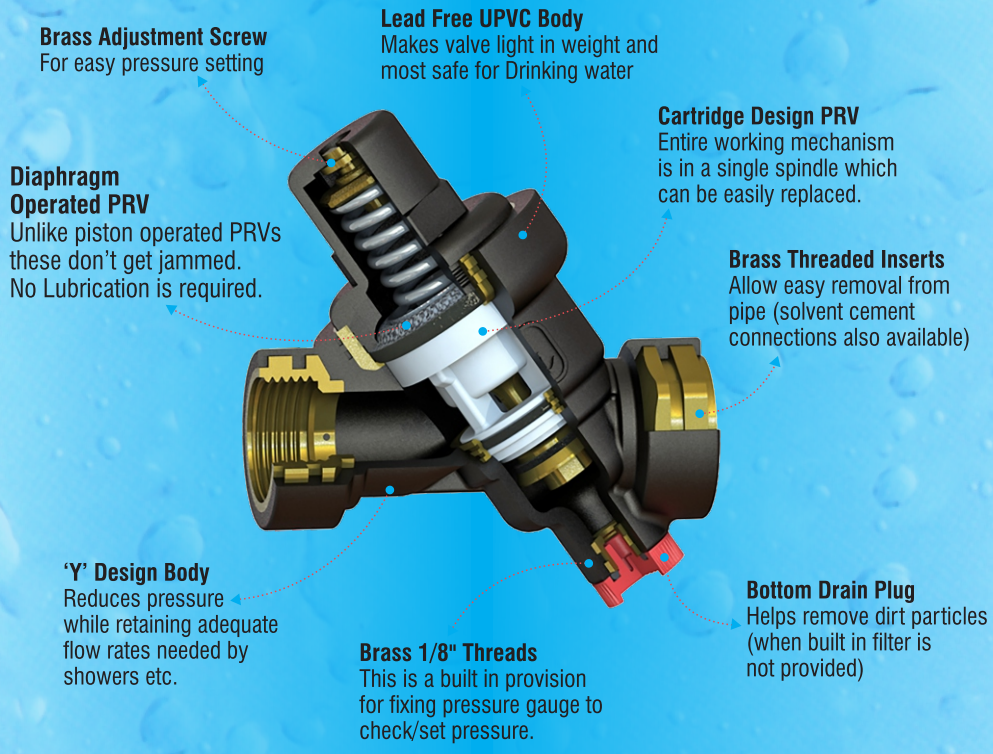
Method of Operation

Spring loaded pressure reducing valves operate by means of a force equalising system. The force of a diaphragm operates against the force of an adjustment spring. If the outlet pressure & therefore diaphragm force fall because water is drawn, the then greater force of the spring causes the valve to open. The outlet pressure then increases until the force between the diaphragm & the spring are equal again. The inlet pressure has no influence in either opening or closing of the valve. Because of this, inlet pressure fluctuation does not influence the outlet pressure.

Special Features

- Since the prv is Diaphragm operated it has better pressure control ,less noise and maintenance compared to the older piston operated PRVs.
- More over Diaphragm is thin walled , corrugation shaped for better flexibility & smoother operation. Increased surface area of diaphragm reduces overall size of PRV. i.e. compactness.
- Compact and light weight.
- Nylon reinforced NBR Diaphragm for better strength and longer life.
- 'Cartridge' design internals - entire working mechanism is in a cartridge which operates independent of the body. Thus, servicing is without removing body from pipeline.
- In-built provision for inserting pressure gauge.
- The W21 has a unique inclined seat arrangement which gives more flow capacity as compared to other household PRVS.
- Lead free UPVC body in W21 N & S makes valve light in weight and most safe for drinking water.
- Bottom drain plug in W21 N and W21 S helps remove dirt particles when builtin filter is not provided.
- Brass Adjustment screw for Easy pressure setting.

Pressure Reducing Valve - W21



Material

Body : Bronze/ GunMetal body(W21 G)
UPVC (W21 N & W21 S)

Internals : S.S., NBR; Brass; Acetal

Built-in Filter : *available on request

Bonnet : Nylon

Range of Application

Medium : water, compressed air, nitrogen

Inlet Pressure : Maximum 13.0 kg/cm²
(tested at 20 bar)

Max. Temp. : 70° C (W21 G),
55° C (W21 N & W21 S)

Connection size : 15,20 mm

End connections : BSP Female threaded (G & N)
Solvent Cement (S)

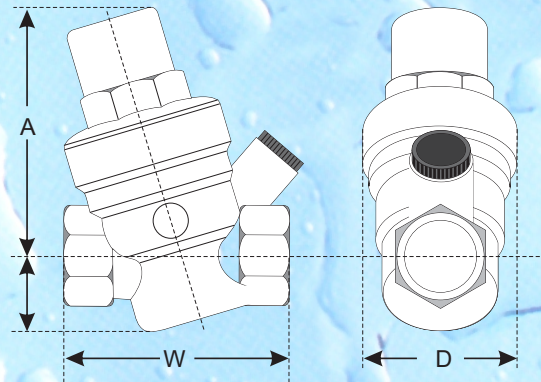
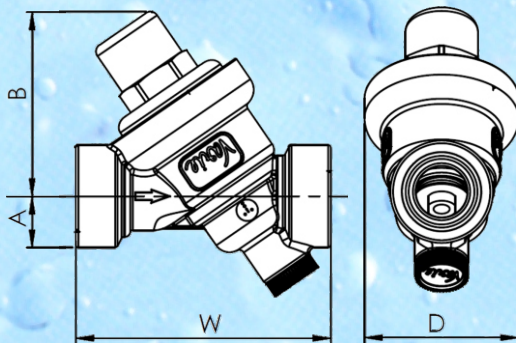
Outlet Pressure : 1.0 to 5.0[#] kg/cm²
Higher temperatures & inlet pressure on request.

Accessories

PTK- Pressure testing Kit



For checking & setting of pressure on PRV



Dimensions in mm - W21 N / W21 S.

Size mm	W	A	B	D	Weight kg	KVS
15	94.5	19	68.4	57	0.29 / 0.25	1.5
20	94.5	19	68.4	57	0.29 / 0.23	1.8

Dimensions in mm W21 G.

Size mm	W	A	B	D	Weight kg	KVS
15	70	60	26	48	0.4	1.4
20	74	60	26	48	0.6	1.7