



BPV

22mm Automatic Bypass Valve

Installation Instructions

Application:

The BPV automatic bypass valves are designed to maintain water flow in central heating systems equipped with TRVs. They achieve this by ensuring a minimum flow rate through the boiler and limiting circulation pressure when water paths may be closed.

TRVs gradually close as each radiator heats the room. To counteract flow restrictions caused by TRV closures, the BPV adjusts to the desired set point. As system resistance increases due to TRV closures, the BPV permits increased flow to maintain the required pre-set system differential pressure.

The regulation provided reduces system noise associated with TRV or zone valve closures, prevents pump impeller wear caused by high flow resistance, and extends the life of the boiler's heat exchanger by guaranteeing a minimum flow rate at all times.



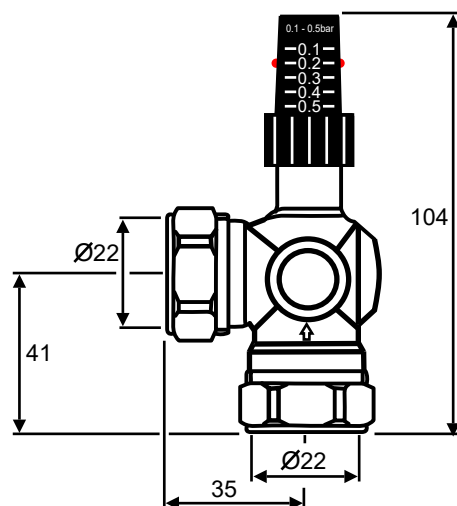
Installation:

The bypass valve should be installed between the flow and return lines with flow in the direction of the arrow (see Fig 1). For larger installations requiring higher capacity, multiple valves can be installed in parallel.

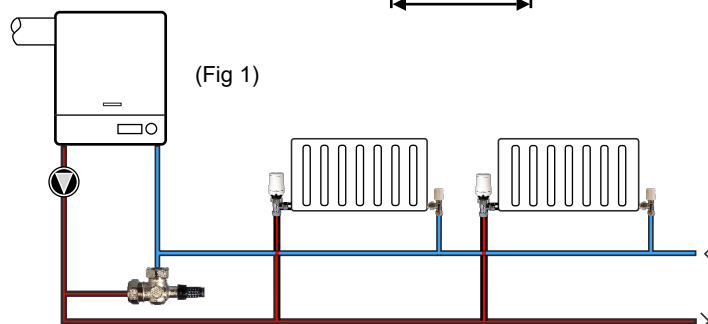
Settings:

The valve can be manually adjusted from 0.1 Bar to 0.5 Bar. A setting of 0.2 to 0.3 Bar is typically sufficient for most installations.

If the differential pressure is too low or the bypass flow is excessive, the pressure setting should be increased. Conversely, if the differential pressure is too high or the bypass flow is insufficient, the pressure setting should be decreased.



BPV Automatic Bypass Valve	
Connections	22mm Compression
Max Working Temperature	100 °C
Max Working Pressure	10 bar
Adjustment Scale (bar)	0.1 to 0.5
Flow Capacity	1 to 5 m ³ /h



Cert No: RS 30178

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