

## Banico DV range Diverter Valves

DV range valves are manufactured under strict quality controlled conditions, each and every valve being fully tested for leakage and operation before being packed.

The diverter valve performs a critical function within the overall operation of the boiler, being activated every time there is a demand for domestic hot water. One of the main advantages of these combination boilers is that they provide domestic hot water at mains pressure, eliminating the need for cold water tanks and shower booster pumps. The diverter valve is the component within the boiler that responds when a hot water tap is opened and diverts primary (heating) water to a heat exchanger in which the mains pressure domestic water is heated to a comfortable level.

The valve comprises a brass body with five water connections. On the diaphragm chamber, identified by the eight screws clamping the two parts together, there is a ½" domestic water inlet connection with an O-ring seal, and a ½" externally threaded domestic water outlet connection. The inlet, which includes a filter to prevent contamination by dirt, is connected to the incoming mains cold water supply. The outlet is connected to a domestic hot water heat exchanger, and features an adjustable flow regulator.

The shaft or spindle projects from the centre of the diaphragm chamber and is fitted with black plastic pusher disc that presses on the micro switches when the valve is actuated. Inside this chamber there is the flexible rubber diaphragm, mounted on stainless steel discs, retained in the correct position by carefully selected springs. The diaphragm is made from ethylene propylene rubber, The stainless steel shaft is located in PTFE bearings that contain rubber O-rings that ensure no leakage.

The primary body of the valve includes a ¾" primary water inlet connection and two primary (heating) water outlet connections. In the winter, the heating water flows through the 1" externally threaded outlet connection when the valve is in the non-actuated position, and this heating water is discharged into the central heating system and circulated around the heating system before it returns to the boiler, where it re-enters the main heat exchanger. When there is a demand for domestic hot water, the cold mains water entering and leaving the diaphragm chamber causes the valve to change position. Now the heating water flows through the ¾" externally threaded primary water outlet connection to be passed to the connected domestic hot water heat exchanger. In the summer, there is no flow of primary water until the boiler detects a requirement for domestic hot water.

Supplied with full set of washers.

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Controls