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Introduction

In an unvented domestic hot water system the expansion vessel is installed in the cold water supply pipe close to the hot water cylinder or calorifier.

Expansion vessels are designed to absorb the increase in volume of water created by thermal expansion as the temperature rises.

A domestic hot water system is a 'closed system' when it is isolated from the public water supply by a uni-directional valve such as a check valve, backflow preventer or pressure reducing valve.

To absorb the increase in volume of water within the storage cylinder provision must be made for the expansion by fitting a suitably sized expansion vessel.

Jetflow Valve

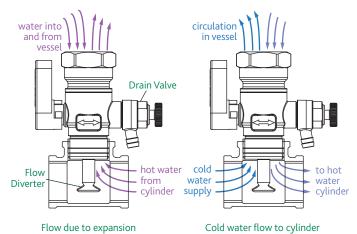
As the pressure in the system changes the pre-charge pressure will allow water into the expansion vessel or force it out again.

Unless the temperature and pressure change significantly it is likely that the same water may remain in the bladder of the vessel for a considerable time.

Two of the method used to minimise the risk of Legionella are to keep the water flowing and to avoid/minimise any 'dead legs' to the water outlet such as a tap or shower.

Fitting a flowjet valve between the cold water supply pipe and the expansion vessel encourages water flow into and out of the vessel as hot water is drawn off and more cold water flows into the storage cylinder.

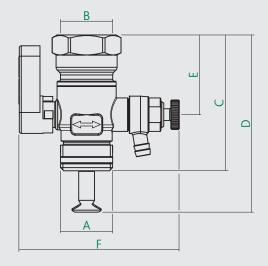
The flow of cold mains water into the bladder lowers the temperature of the mixed water, which reduces the pressure and allows the pre-charge pressure to force a small volume of water out of the vessel thus aiding cirulation.

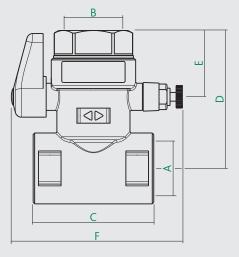


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Dimensions





| Prod Code | А | В | С | D | E | F | kg |
|-----------|------|------|----|------|------|-------|----|
| PVACC1 | G¾B | G3⁄4 | 69 | 90 | 40.5 | 82 | |
| PVACC2 | G1¼B | G1¼ | 80 | 91.5 | 44 | 113.5 | |

The Flowjet valve enable 4 functions to be performed easily.

- Continuous water flow through the bladder helping to maintain the quality of the potable water by minimising stagnation.
- Isolation should the expansion vessel need to be removed
- **Bypass**

Drain facility to allow the expansion vessel to be drained without draining the circuit or system.

Technical Specification

| Max. working pressu | re: | 16 bar | | |
|---------------------|-----------|------------------------|--|--|
| Max. operating temp | perature: | 70°C | | |
| Connection threads: | | BE EN ISO 228 parallel | | |
| Body material: | Brass | BS EN 12420 CW617N | | |

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