

# Expansion Vessel

## Model EVUP – Heating & Domestic - 10 bar - Datasheet

### Description

Range of expansion vessels with replaceable bladder for heating and boosted domestic cold or hot water services. Model EVUP is rated at 10 bar and approved for wholesome water applications.

### Connection

BSP Male connection in base (end for horizontal types)  
See code in table for size e.g. 25MP = 1" male parallel.

| Specification              |     |                  |
|----------------------------|-----|------------------|
| Pressure Supply            | bar | 10 max.          |
| Temperature                | ° C | -10 to 70 max.   |
| Factory Pre-charge         | bar | 4.0 (Nitrogen)   |
| Water Regulations Approval |     | 2209753          |
| Materials                  |     |                  |
| Body                       |     | Carbon Steel     |
| Bladder                    |     | Synthetic Rubber |
| Flange & Inlet             |     | Carbon Steel     |
| Coating                    |     | Powder Epoxy     |

### Applications

- Unvented heating systems
- Boosted cold water service
- Boosted hot water service

### Fitting Kit

The vessel must be pre-charged with air before use and periodically (e.g. annually) thereafter. The vessel must be drained of water before charging. To achieve this a proper isolator and drain tap should be used. Valves up to DN25 (up to and including 100 litres) have a wire lock and union connection.



Ball Valve – Wired, Drain Tap & Union Model BVEV

### Pre-charge Pressure

The air pressure – with zero water pressure – is normally set at 0.2 bar less than the switch-on pressure of a booster pump. A Schrader valve is fitted. 200 litres vessels and larger have a 1/2" male tube at the top intended for a pressure gauge - otherwise this should be capped.

### Water Regulations

When used for boosted cold water, the vessel may be described as an "air vessel" or "hydro pneumatic pressurised vessel". In this application a safety relief valve is not required. When used to accommodate thermal expansion, clause R17.3 suggests the expansion capacity should be 4% of volume of the hot water storage system. G17.1 requires safety devices.



100 Litre Vertical  
EVUP100



### Dimensions

| Lt   | Diameter mm | Height mm | Connection | Weight (Kg) |
|------|-------------|-----------|------------|-------------|
| 8    | 206         | 325       | 3/4"       | 1.8         |
| 12   | 280         | 310       | 3/4"       | 2.4         |
| 18   | 280         | 380       | 3/4"       | 2.8         |
| 25   | 280         | 500       | 3/4"       | 4.7         |
| 33   | 354         | 455       | 3/4"       | 6.6         |
| 50   | 409         | 605       | 1"         | 9.5         |
| 60   | 409         | 740       | 1"         | 14          |
| 80   | 480         | 730       | 1"         | 16          |
| 100  | 480         | 835       | 1"         | 19          |
| 140  | 480         | 1015      | 1"         | 29          |
| 200  | 634         | 970       | 1 1/4"     | 40          |
| 300  | 634         | 1270      | 1 1/4"     | 54          |
| 400  | 740         | 1245      | 1 1/4"     | 70          |
| 500  | 740         | 1475      | 1 1/4"     | 79          |
| 600  | 740         | 1860      | 1 1/2"     | 103         |
| 800  | 740         | 2325      | 1 1/2"     | 195         |
| 1000 | 740         | 2804      | 1 1/2"     | 228         |

### Codes and Descriptions

| Size                       | Code        | Description                                                 |
|----------------------------|-------------|-------------------------------------------------------------|
| 8 Lt                       | EVUP8       | 8 Lt Exp Vessel Potable 10 bar Ø206X325 High 3/4" BSP       |
| 12 Lt                      | EVUP12      | 12 Lt Exp Vessel Potable 10 bar Ø280X310 High 3/4" BSP      |
| 18 Lt                      | EVUP18      | 18 Lt Exp Vessel Potable 10 bar Ø280X380 High 3/4" BSP      |
| 25 Lt                      | EVUP25      | 25 Lt Exp Vessel Potable 10 bar Ø280X500 High 3/4" BSP      |
| 33 Lt                      | EVUP33      | 33 Lt Exp Vessel Potable 10 bar Ø354X455 High 3/4" BSP      |
| 50 Lt                      | EVUP50      | 50 Lt Exp Vessel Potable 10 bar Ø409X605 High 1" BSP        |
| 60 Lt                      | EVUP60      | 60 Lt Exp Vessel Potable 10 bar Ø409X740 High 1" BSP        |
| 80 Lt                      | EVUP80      | 80 Lt Exp Vessel Potable 10 bar Ø480X730 High 1" BSP        |
| 100 Lt                     | EVUP100     | 100 Lt Exp Vessel Potable 10 bar Ø480X835 High 1" BSP       |
| 140 Lt                     | EVUP140     | 140 Lt Exp Vessel Potable 10 bar Ø480X1015 High 1" BSP      |
| 200 Lt                     | EVUP200     | 200 Lt Exp Vessel Potable 10 bar Ø634X970 High 1 1/4" BSP   |
| 300 Lt                     | EVUP300     | 300 Lt Exp Vessel Potable 10 bar Ø634X1270 High 1 1/4" BSP  |
| 400 Lt                     | EVUP400     | 400 Lt Exp Vessel Potable 10 bar Ø740X1245 High 1 1/4" BSP  |
| 500 Lt                     | EVUP500     | 500 Lt Exp Vessel Potable 10 bar Ø740X1475 High 1 1/4" BSP  |
| 600 Lt                     | EVUP600     | 600 Lt Exp Vessel Potable 10 bar Ø740X1860 High 1 1/2" BSP  |
| 800 Lt                     | EVUP800     | 800 Lt Exp Vessel Potable 10 bar Ø740X2325 High 1 1/2" BSP  |
| 1000 Lt                    | EVUP1000    | 1000 Lt Exp Vessel Potable 10 bar Ø740X2804 High 1 1/2" BSP |
| 25 Lt                      | EVUP25H     | 25 Lt Exp Vessel Potable 10 bar Ø280X520 High 1 1/4" BSP    |
| 50 Lt                      | EVUP50H     | 50 Lt Exp Vessel Potable 10 bar Ø409X503 High 1 1/4" BSP    |
| 80 Lt                      | EVUP80H     | 80 Lt Exp Vessel Potable 10 bar Ø480X595 High 1 1/4" BSP    |
| 100 Lt                     | EVUP100H    | 100 Lt Exp Vessel Potable 10 bar Ø740X2804 High 1 1/4" BSP  |
| Expansion Vessel Isolators |             |                                                             |
| DN20                       | BVEV20SNDT  | DN20 Economy Expansion Vessel Isolator                      |
| DN20                       | BVEV20FUDT  | DN20 Ball Valve Exp.Vess. Wired Drain Tap Union             |
| DN20                       | BVEV20FUDTL | DN20 Ball Valve Exp.Vess. Large Drain Tap Union             |
| DN25                       | BVEV25FUDT  | DN25 Ball Valve Exp.Vess. Wired Drain Tap Union             |
| DN25                       | BVEV25FUDTL | DN25 Ball Valve Exp.Vess. Large Drain Tap Union             |
| DN32                       | BVEV32FUDT  | DN32 Ball Valve Exp.Vess. Wired Drain Tap Union             |
| DN32                       | BVEV32FUDTL | DN32 Ball Valve Exp.Vess. Large Drain Tap Union             |

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