

## Flat Round Expansion Vessel

### Size: 18 Ltr Heating

- Precharge  $1 \pm 20\%$  bar
- Maximum working pressure 3 bar
- Maximum operating temperature 90 °C
- Dimensions D 387 x 200 | Height
- Water connection 3/4"
- SBR high resistant rubber bladder produced according to CE norm 97/23



### Technical features

Crimped or welded carbon steel shells. Synthetic SBR rubber according to DIN 4807-3 norm for every capacity therefore maximizing the tank drawdown. Vessels are painted with long lasting external epoxy-polyester powder coating and are 100% factory tested.

### Approvals: -

CE endorsed, BSI TUV

Please note: this vessel is not to be installed in an open circuit.

An additional item which should be included when purchasing a vessel is the vessel isolation connection valve. This allows the vessel to be removed for maintenance without draining the fluid from the system.

In a closed heating system, water cannot be compressed and any increase in water volume due to the increase of its temperature is absorbed by the expansion vessel. When water is cold, the precharge pressure of the tank presses the diaphragm against the tank. As temperature increases, the expanded water volume pushes against the membrane and water enter the tank, providing additional space to the system. With the temperature decrease, the air cushion forces water back into the system. This permits the system to maintain the pressure, helping to reduce energy consumption.