



## EXPANSION **VESSELS**



- **for heating systems**
- **for solar thermal systems**
- **for systems with DHW heating**

# Expansion Vessels

Pressure expansion vessels are designed to compensate for fluid volume changes caused by temperature changes, and to keep the system overpressure within the prescribed range. They are used in heating systems, solar thermal systems and drinking water circuits when hot water heaters are installed in the system.

The vessels are made of high-quality steel coated with anticorrosion surface layer, with a non-permeable highly elastic membrane resistant to high temperatures. The membrane can be replaced in vessels of 50l volume and bigger.

All expansion vessels are 100% tested and certified according to Directive 2014/68/EU of the European Parliament and of the Council on pressure equipment (PED).

## EXPANSION VESSELS FOR HEATING SYSTEMS - HS

HS Expansion vessels are designed to be installed in heating systems or in sealed cooling circuits, permitting to absorb heating fluid volume fluctuations caused by its temperature changes. They are preset to 1.5 bar pressure, the max. working temperature is 99°C.

### Wall hung models



| Code  | Name                   | Volume | Connection | Max. working pressure |
|-------|------------------------|--------|------------|-----------------------|
| 13731 | HS005 expansion vessel | 5      | 3/4"       | 6                     |
| 13732 | HS008 expansion vessel | 8      | 3/4"       | 6                     |
| 13734 | HS012 expansion vessel | 12     | 3/4"       | 6                     |
| 13735 | HS018 expansion vessel | 18     | 3/4"       | 6                     |
| 13736 | HS025 expansion vessel | 25     | 3/4"       | 6                     |
| 13737 | HS040 expansion vessel | 40     | 3/4"       | 6                     |

### Leg models, with replaceable membrane



| Code  | Name                    | Volume | Connection | Max. working pressure |
|-------|-------------------------|--------|------------|-----------------------|
| 13738 | HS035* expansion vessel | 35     | 3/4"       | 5                     |
| 13739 | HS050 expansion vessel  | 50     | 3/4"       | 6                     |
| 13740 | HS060 expansion vessel  | 60     | 1"         | 6                     |
| 13741 | HS080 expansion vessel  | 80     | 1"         | 6                     |
| 13742 | HS100 expansion vessel  | 100    | 1"         | 6                     |
| 13743 | HS150 expansion vessel  | 150    | 6/4"       | 6                     |
| 13744 | HS200 expansion vessel  | 200    | 6/4"       | 6                     |
| 13745 | HS250 expansion vessel  | 250    | 6/4"       | 6                     |
| 13746 | HS300 expansion vessel  | 300    | 6/4"       | 6                     |
| 13747 | HS400 expansion vessel  | 400    | 6/4"       | 6                     |
| 13748 | HS500 expansion vessel  | 500    | 6/4"       | 6                     |
| 13749 | HS600 expansion vessel  | 600    | 6/4"       | 6                     |
| 13750 | HS700 expansion vessel  | 700    | 6/4"       | 6                     |

\* HS035 expansion vessel has no replaceable membrane

## EXPANSION VESSELS FOR SOLAR THERMAL SYSTEMS – SL

They are preset to 2.5 bar pressure, the max. working temperature is 130°C.

### Wall hung models



| Code  | Name                   | Volume | Connection | Max. working pressure |
|-------|------------------------|--------|------------|-----------------------|
| 13720 | SL012 expansion vessel | 12     | 3/4"       | 8                     |
| 13721 | SL018 expansion vessel | 18     | 3/4"       | 8                     |
| 13722 | SL025 expansion vessel | 25     | 3/4"       | 8                     |
| 13723 | SL040 expansion vessel | 40     | 3/4"       | 8                     |

### Leg models, with replaceable membrane



| Code  | Name                    | Volume | Connection | Max. working pressure |
|-------|-------------------------|--------|------------|-----------------------|
| 13724 | SL050 expansion vessel  | 50     | 3/4"       | 10                    |
| 13725 | SL080 expansion vessel  | 80     | 3/4"       | 10                    |
| 13726 | SL0100 expansion vessel | 100    | 1"         | 10                    |
| 13727 | SL0150 expansion vessel | 150    | 6/4"       | 10                    |
| 13728 | SL0200 expansion vessel | 200    | 6/4"       | 10                    |
| 13729 | SL0300 expansion vessel | 300    | 6/4"       | 10                    |
| 13730 | SL0500 expansion vessel | 500    | 6/4"       | 8                     |

## EXPANSION VESSELS FOR DRINKING WATER – HW

HW Expansion vessels are designed for operation in systems with DHW heating. Besides the volume fluctuations they also absorb water hammers, extending the service life and increasing the reliability of both hot water storage tanks and the entire system. Their pressure is preset to 2 bar (floor standing)/3,5 bar (wall hung), the max. working temperature is 99°C.

### Wall hung models



| Code  | Name                   | Volume | Connection | Max. working pressure |
|-------|------------------------|--------|------------|-----------------------|
| 13752 | HW016 expansion vessel | 0.16   | 1/2"       | 15                    |
| 13753 | HW002 expansion vessel | 2      | 1/2"       | 10                    |
| 13754 | HW005 expansion vessel | 5      | 3/4"       | 8                     |
| 13755 | HW008 expansion vessel | 8      | 3/4"       | 8                     |
| 13756 | HW012 expansion vessel | 12     | 3/4"       | 8                     |
| 13757 | HW018 expansion vessel | 18     | 3/4"       | 8                     |
| 13758 | HW025 expansion vessel | 25     | 3/4"       | 8                     |
| 13759 | HW040 expansion vessel | 40     | 3/4"       | 8                     |

### Leg models, with replaceable membrane



| Code  | Name                    | Volume | Connection | Max. working pressure |
|-------|-------------------------|--------|------------|-----------------------|
| 13760 | HW060 expansion vessel  | 60     | 1"         | 10                    |
| 13761 | HW080 expansion vessel  | 80     | 1"         | 10                    |
| 13762 | HW0100 expansion vessel | 100    | 1"         | 10                    |
| 13763 | HW0200 expansion vessel | 200    | 6/4"       | 10                    |
| 13764 | HW0300 expansion vessel | 300    | 6/4"       | 10                    |
| 13765 | HW0400 expansion vessel | 400    | 6/4"       | 10                    |

## Service Valves for expansion vessels

Designed for an easy expansion vessel pressure check.  
No need to drain a system for maintenance.

### Main advantages:

- Easy installation
- Safety shutoff ball valve
- Integrated drain valve

| Connection thread | Code  |
|-------------------|-------|
| G 3/4"            | 8770  |
| G 1"              | 12295 |
| G 6/4"            | 14492 |



## Wall Mount Expansion Vessel Brackets

### Multipurpose mounting arm.

It is fitted with G 3/4" F thread to connect an expansion vessel, G 3/4" M to connect to a heating system, G 3/8" F for an automatic air vent valve, G 1/2" M for a safety valve and G 1/4" F for a pressure gauge.

Code: 10046



### Expansion vessel bracket and connection kit.

Connection fittings (with 3/4" M and F threads) with a double check valve, permitting quick and safe expansion vessel disconnection without leaks.

Code: 7766

Separate valve without the bracket can be ordered under code 19722.



### Wall mount bracket.

Code: 12174



## Replaceable membranes

For bigger expansion vessels, the inner elastic membrane can be replaced.

Codes of replaceable membranes by expansion vessel model and volume.

| Volume | HS    | SL    | HW    |
|--------|-------|-------|-------|
| 50     | 13785 | 13775 | -     |
| 60     | 13769 | -     | 13788 |
| 80     | 13769 | 13776 | 13789 |
| 100    | 13770 | 13776 | 13789 |
| 150    | 13771 | 13777 | -     |
| 200    | 13771 | 12763 | 13791 |
| 250    | 13772 | -     | -     |
| 300    | 13772 | 13786 | 13792 |
| 400    | 13773 | -     | 13792 |
| 500    | 13774 | 13787 | -     |
| 600    | 13774 | -     | -     |
| 700    | 13774 | -     | -     |

