



# Expansion Vessel Data Sheet

## BOSS Heating Vessels 8 - 25 litre

(Mounting Bracket Included)

For sealed heating installations (acc. to EN12828)  
and chilled water (cooling) installations.



### Advantages

- Flexible diaphragms with rolling action.
- Nitrogen gas filling for longer maintenance of pre-pressure.
- The ribbed profile on the diaphragm prevents it from sticking to the inside wall of the vessel and ensures inflow of expansion water at the slightest increase in pressure.
- Uncoated water connection thread ensures easy and water tight installation.
- Top quality steel.
- Each vessel is factory tested.

### Technical Specifications

- Maximum working pressure: 3.0 bar.
- Suitable for addition of glycol-based antifreeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 110°C.  
(Please refer to maximum recommended diaphragm temperature below)
- Diaphragm Temperature Range: -10 / 70°C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Deep drawn steel vessel halves with zinc plated steel clench ring.
- Red (RAL 3002) epoxy powder coating.
- Diaphragm: SBR.

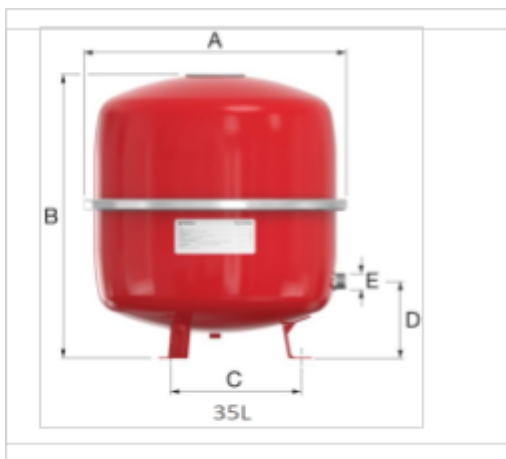
Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions				Syst. conn. (E) BSP Male	Dry Weight [kg]	Product Code
				A [mm]	B [mm]	Ø C [mm]	D [mm]			
BOSS Heating 8/1.5 [3bar]	8	1.5	3.0	245	277	-	-	3/4"	2.2	19711030
BOSS Heating 12/1.5 [3bar]	12	1.5	3.0	286	273	-	-	3/4"	2.3	19711041
BOSS Heating 18/1.5 [3bar]	18	1.5	3.0	286	381	-	-	3/4"	2.9	19711052
BOSS Heating 25/1.5 [3bar]	25	1.5	3.0	328	402	-	-	3/4"	3.5	19711063



# Expansion Vessel Data Sheet

## BOSS Heating Vessels 35 litre

For sealed heating installations (acc. to EN12828)  
and chilled water (cooling) installations.



### Advantages

- Flexible diaphragms with rolling action.
- Nitrogen gas filling for longer maintenance of pre-pressure.
- The ribbed profile on the diaphragm prevents it from sticking to the inside wall of the vessel and ensures inflow of expansion water at the slightest increase in pressure.
- Uncoated water connection thread ensures easy and water tight installation.
- Top quality steel.
- Each vessel is factory tested.

### Technical Specifications

- Maximum working pressure: 3.0 bar.
- Suitable for addition of glycol-based antifreeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 110°C.  
(Please refer to maximum recommended diaphragm temperature below)
- Diaphragm Temperature Range: -10 / 70°C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Deep drawn steel vessel halves with zinc plated steel clench ring.
- Red (RAL 3002) epoxy powder coating.
- Diaphragm: SBR.
- 35 litre : With feet.

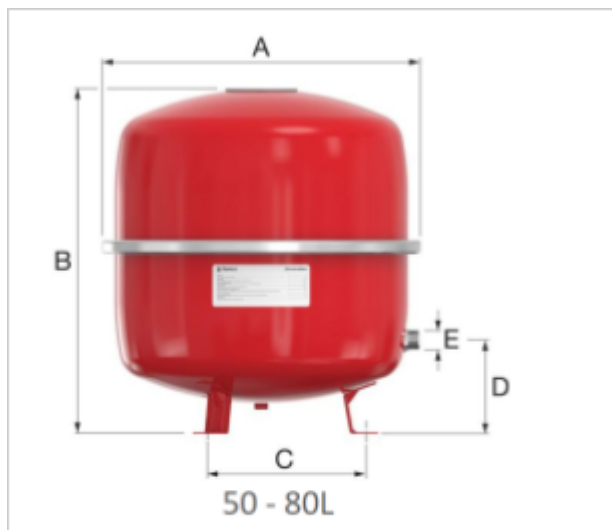
Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions				Syst. conn. (E) BSP Male $\frac{3}{4}$ "	Dry Weight [kg]	Product Code
				A [mm]	B [mm]	Ø C [mm]	D [mm]			
BOSS Heating 35/1.5 [3bar]	35	1.5	3.0	396	435	263	118		5.6	19711074



# Expansion Vessel Data Sheet

## BOSS Heating Vessels 50 - 80 litre

For sealed heating installations (acc. to EN12828)  
and chilled water (cooling) installations.



### Advantages

- Flexible diaphragms with rolling action.
- Nitrogen gas filling for longer maintenance of pre-pressure.
- The ribbed profile on the diaphragm prevents it from sticking to the inside wall of the vessel and ensures inflow of expansion water at the slightest increase in pressure.
- Uncoated water connection thread ensures easy and water tight installation.
- Top quality steel.
- Each vessel is factory tested.

### Technical Specifications

- Maximum working pressure: 6.0 bar.
- Suitable for addition of glycol-based antifreeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 110°C.  
(Please refer to maximum recommended diaphragm temperature below)
- Diaphragm Temperature Range: -10 / 70°C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Deep drawn steel vessel halves with zinc plated steel clench ring.
- Red (RAL 3002) epoxy powder coating.
- Diaphragm: SBR.
- 50 - 80 litre : With feet.

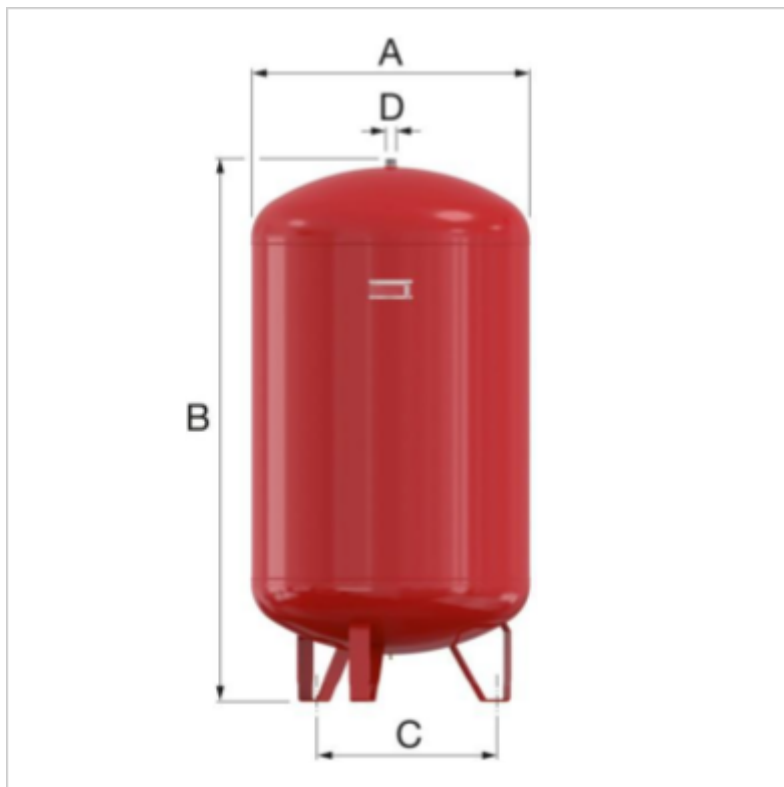
Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions				Syst. conn. (E) BSP Male	Dry Weigh [kg]	Product Code
				A [mm]	B [mm]	Ø C [mm]	D [mm]			
BOSS Heating 50/1.5 [6 bar]	50	1.5	6.0	437	493	263	134	3/4"	11.4	19711085
BOSS Heating 80/2.0 [6 bar]	80	2.0	6.0	519	534	360	140	1"	15.0	19711096



# Expansion Vessel Data Sheet

## BOSS Heating Vessels 100 - 1000 litre

For sealed heating installations (acc. to EN12828)  
and chilled water (cooling) installations.



### Advantages

- Flexible diaphragms with rolling action.
- Nitrogen gas filling for longer maintenance of pre-pressure.
- The ribbed profile on the diaphragm prevents it from sticking to the inside wall of the vessel and ensures inflow of expansion water at the slightest increase in pressure.
- Uncoated water connection thread ensures easy and water tight installation.
- Top quality steel.
- Each vessel is factory tested.

### Technical Specifications

- Maximum working pressure: 6.0 bar.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 110°C.  
(Please refer to maximum recommended diaphragm temperature below)
- Diaphragm Temperature Range: -10 / 70°C.
- Suitable for addition of glycol-based antifreeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Tilting height:  
800L: 1865 mm.  
1000L: 2195 mm.
- All welded construction.
- Red (RAL 3002) epoxy powder coating.



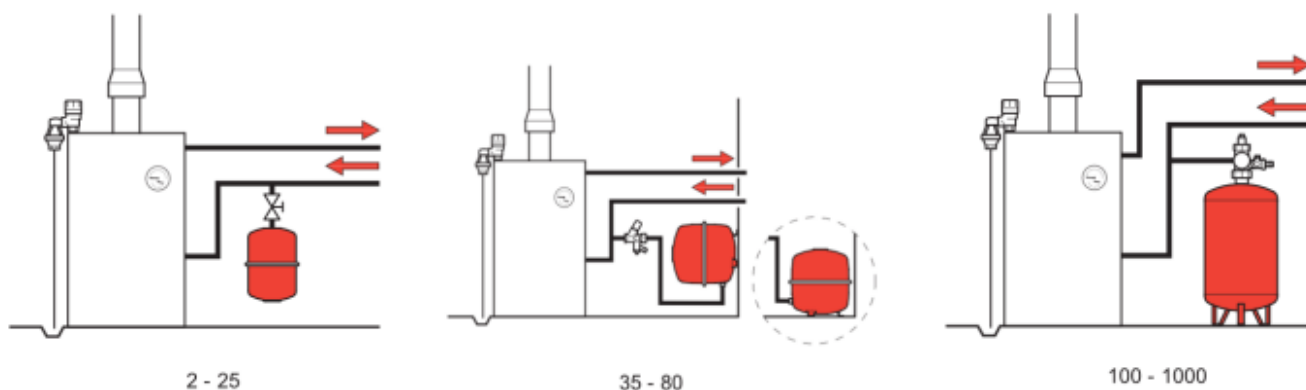
# Expansion Vessel Data Sheet

Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D) BSP Male	Dry Weight [kg]	Product Code
			A [mm]	B [mm]	Ø C [mm]			
BOSS Heating 100/2.0 [6 bar]	100	2.0	484	784	360	1"	19.1	19711104
BOSS Heating 150/2.0 [6 bar]	150	2.0	484	1024	360	1"	23.7	19711115
BOSS Heating 200/2.5 [6 bar]	200	2.5	484	1300	360	1"	27.6	19711126
BOSS Heating 300/2.5 [6 bar]	300	2.5	600	1330	450	1"	44.0	19711137
BOSS Heating 400/2.5 [6 bar]	400	2.5	790	1180	610	1"	57.2	19711148
BOSS Heating 500/2.5 [6 bar]	500	2.5	790	1330	610	1"	63.0	19711211
BOSS Heating 600/2.5 [6 bar]	600	2.5	790	1538	610	1"	69.8	19711159
BOSS Heating 800/2.5 [6 bar]	800	2.5	790	1888	610	1"	84.1	19711170
BOSS Heating 1000/2.5 [6 bar]	1000	2.5	790	2268	610	1"	101.0	19711181



## Installation & Placement:

To ensure that the temperature at the BOSS diaphragm does not exceed 70°C (system flow <90°C), the vessel should be installed on the coldest part of the system, (typically the return pipe to the heat exchanger). For systems running at elevated temperatures (90°C flow), an intermediate vessel may be required to provide additional heat dissipation.



## Mounting of the BOSS vessels

- 2 – 25 Litres Vessels are to be mounted by means of a suspension bracket (MB 2)
- 35 – 80 Litres Vessels are to be mounted with the feet on the wall or upright on the bottom