

PRESSURE EXPANSION VESSELS WITH FIXED GAS FILLING

EVN4 - EVN140



SPIROEXPAND®

Pressurisation
Refilling
Monitoring

IMPROVE EFFICIENCY AND LIFESPAN

IMPROVE SYSTEM EFFICIENCY AND LIFESPAN WITH SPIROEXPAND PRESSURISATION SYSTEM.

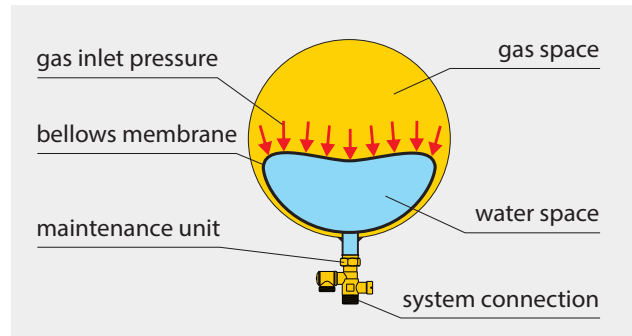
Temperature fluctuations in heating and cooling, cause the system water to expand and contract, resulting in volume changes in the system.

The system water expands when the water temperature rises, increasing the pressure and load on individual components (including the circulation pump, couplings, etc.) and pipes. If the pressure in a system is too high it will affect the components' lifespan or result in leakage. When the temperature drops, the volume decreases, which reduces the pressure on the system. A too low system pressure can result in air intake which reduces system efficiency and can cause corrosion; a heating or cooling system's greatest enemy.

Non-optimal pressure build-up in a system has very serious consequences for entire system performance (efficiency) and lifespan. Investment in a high quality pressurisation system tailored to your heating or cooling system's requirements is essential in optimising system pressure. Optimised system pressure maximises system component functioning and guarantees trouble-free, cost-effective performance.

Function and construction

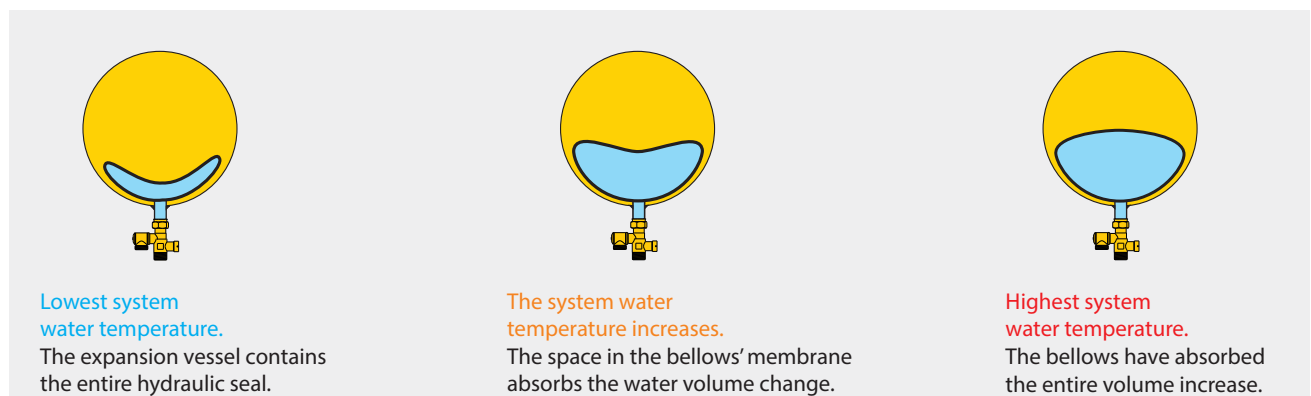
Closed expansion vessels are primarily a safety device for systems that use water as a heat transfer medium to transfer energy from the heating and/or cooling system to a living or user space. An expansion vessel also helps improve system efficiency and reliability by optimising



Impact of gas pre-pressure

system component functioning and by protecting these components.

A standard expansion vessel has two chambers separated by a membrane. Spirotech expansion vessels comprise high-quality bellows, which completely enclose the system water. This prevents the system water from coming into contact with the vessel's sheet metal wall, which reduces corrosion. The space in the bellows' membrane serves to absorb the change in water volume during heating. The pre-pressure in the expansion vessel gas area pushes the system water back into the system when it cools down.



Impact of gas pre-pressure

SAFETY EXPANSION VESSELS

FOR HEATING, AIR-CONDITIONING AND COOLING WATER SYSTEMS

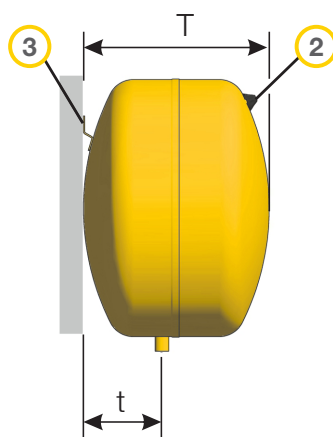
Safety expansion vessel for closed hot water, heating, air-conditioning and cooling water systems based on EN12828, with non-replaceable membrane to collect the water and gas filling with pressure relief valve, including connection for a maintenance unit (accessory).

TECHNICAL DATA

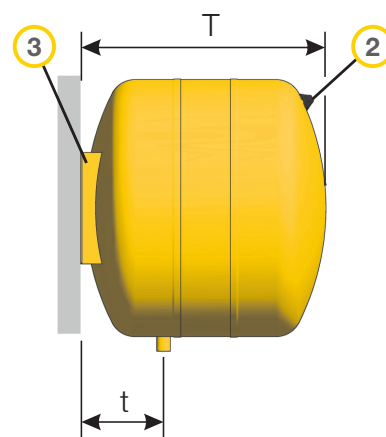
EVN4 - EVN140



EVN4 - EVN140



EVN4 - EVN100



EVN140

- 1 Expansion joint (integration in the system return line, max. continuous temperature load at the joint of 70 °C).
- 2 Pressure relief valve with cap and valve protection cap.
- 3 Wall bracket for EVN4 -EVN100 designed as a single-point bracket. The EVN140 has a four-point bracket for wall or floor mounting.

- Tested according to the 2014/68/EU pressure equipment directive.
- Maximum system temperature without/with supply tank: 90/110 °C.
- Maximum temperature at joint: 70 °C.
- Maximum operating pressure: 3 bar.
- Permitted system medium: Water or water/glycol mix.
- Unique warranty period of 5 years.

Type	Volume [Litres]	Pre-pressure [bar]	Diameter D [mm]	Depth T [mm]	Joint t [mm]	Joint [°]	Weight [kg]
EVN4	4	0,8	360	197	80	Rp3/4	3,5
EVN8	8	0,8	360	197	80	Rp3/4	3,5
EVN12	12	0,8	360	197	80	Rp3/4	3,5
EVN18	18	0,8	360	237	80	Rp3/4	3,8
EVN25	25	1,0	400	252	90	Rp3/4	5,0
EVN35	35	1,0	440	290	110	Rp3/4	7,0
EVN50	50	1,0	500	318	145	Rp3/4	10,5
EVN80	80	1,0	600	368	165	Rp3/4	14,5
EVN100	100	1,0	600	433	184	Rp3/4	16,0
EVN140	140	1,0	600	572	193	Rp3/4	20,0

PACKING UNIT

TYPE	VPE	Number / VPE	l, b, h (mm)	Weight (kg)
EVN4	Pallet	48	1200 x 0800 x 2250	197
EVN8	Pallet	48	1200 x 0800 x 2250	197
EVN12	Pallet	48	1200 x 0800 x 2250	197
EVN18	Pallet	48	1200 x 0800 x 2250	216
EVN25	Pallet	42	1260 x 0850 x 2300	231
EVN35	Pallet	36	1260 x 0950 x 2350	284
EVN50	Pallet	28	1200 x 1000 x 2300	308
EVN80	Pallet	20	1260 x 1260 x 2200	355
EVN100	Pallet	16	1260 x 1260 x 2000	323
EVN140	Pallet	12	1260 x 1260 x 2050	268

FOR MORE INFORMATION ABOUT

SPIROEXPAND PRODUCTS, VISIT OUR WEBSITE.

Heating and cooling systems are complex, especially when used in combination with other systems and installations.

This makes it more difficult to detect and analyse malfunctions, especially in the event of a breakdown.

Spirotech offers you expert advice and solutions. We determine the cause and resolve problems. Feel free to contact us.

MAXIMISING PERFORMANCE FOR YOU

Spirotech is a leader in improving heating and cooling system water quality. Our family company has over 60 years of experience in preventing and removing air and contaminants from energy systems. With our products you can expect lower energy consumption, increased comfort, reduced wear and tear and maximum system uptime. Our reliable and customer-oriented solutions ensure top performance and maximum returns. We work with our partners, suppliers and investors to create added value with quality solutions for homes, office buildings and industrial processes. Spirotech has an extensive network of carefully-selected importers in over 70 countries.

MAXIMISING PERFORMANCE FOR YOU



Visit [spirotech.co.uk](https://www.spirotech.co.uk) for other solutions or more information.