

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

Expansion vessels keep the pressure of the installation stable by temporarily absorbing the extra water volume that is generated by heating or cooling installations.



Advantages

- Sustainable expansion vessels thanks to innovative technology.
- The Flexcon Premium expansion vessels have a plastic membrane (12 35 litres) made of thermoplastic polyolefin (TPO). The new membrane has a high flexibility and low permeability. The environmental performance of the new membrane is much better and TPO can be burned cleaner or recycled into products more effectivly.
- The plastic membrane is much lighter because it requires up to 50% less material. This saves raw materials, energy (production) and fuel (transport) and results in a large reduction of CO2 emissions.
- The box is made from FSC certified cardboard and the version with the lowest available CO2 footprint has been selected.
- A long service life is guaranteed with a 15-year warranty and therefore also saves on maintenance.
- Extremely low permeability of the diaphragm ensures that pre-charge pressure is maintained for longer.
- The flexible diaphragms, with rolling action, are preformed and, in contrast to a bag type bladder, prevent stretching so that their properties are preserved over the long term.
- The two halves of the vessel are coated prior to assembly, not afterwards. Therefore there is no risk of corrosion on the clamp ring and the diaphragm does not have a service life-reducing thermal shock during production.
- The unique zinc plated steel clench ring construction clamps the diaphragm between the two deep drawn steel vessel halves. This not only ensures a perfect seal but also prevents mechanical damage of the diaphragm during use (load distribution over the entire clamping area and not at 1 central suspension point).
- The gas side is filled with nitrogen, and not with air, so that corrosion is prevented and the pressure loss is even more limited.
- The nitrogen air valve is countersunk on the vessel to protect it from damage, it is in turn further protected by a cover plate from recycled plastic.
- 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.
- The uncoated taper water connection thread ensures easy and water tight installation.
- Finished with a gleaming epoxy-powder coating.
- Each vessel is functionally tested before it leaves the factory.

Technical Specifications

- Maximum working pressure: 6.0 bar.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 110 °C.
- Min./ max. temperature diaphragm: -10 / 90 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.



• Flexcon Premium 35 - 80: With feet and including mounting kit.









| Туре | Capaci ty [l] | Pre- charge [bar] | Dimensions | | | | Diaphgr | Syst. | Weight | | Order Code |
|-------------------------------|---------------------|-------------------------|------------|-----------|-------------|-----------|---------|--------------|--------|-----|---------------|
| | | | A [mm] | B [mm] | Ø C [mm] | D [mm] | am | conn. (E) | [kg] | - | Code |
| Flexcon Premium 2/0.5 [6bar] | 2 | 0.5 | 216 | 144 | - | - | Butyl | G 3/4" M | 1.7 | 120 | 16937 |
| Flexcon Premium 2/2.5 [6bar] | 2 | 2.5 | 216 | 144 | - | - | Butyl | G 3/4" M | 1.7 | 120 | 16938 |
| Flexcon Premium 4/0.5 [6bar] | 4 | 0.5 | 216 | 192 | - | - | Butyl | G 3/4" M | 2.1 | 90 | 16939 |
| Flexcon Premium 4/2.5 [6bar] | 4 | 2.5 | 216 | 192 | - | - | Butyl | G 3/4" M | 2.1 | 90 | 16940 |
| Flexcon Premium 8/0.5 [6bar] | 8 | 0.5 | 245 | 277 | - | - | Butyl | R 3/4" | 3.2 | 50 | 16941 |
| Flexcon Premium 8/2.5 [6bar] | 8 | 2.5 | 245 | 277 | - | - | Butyl | R 3/4" | 3.2 | 50 | 16942 |
| Flexcon Premium 12/0.5 [6bar] | 12 | 0.5 | 286 | 309 | - | - | TPO | R 3/4" | 4.5 | 36 | 16944 |
| Flexcon Premium 12/2.5 [6bar] | 12 | 2.5 | 286 | 309 | - | - | TPO | R 3/4" | 4.5 | 36 | 16945 |
| Flexcon Premium 18/0.5 [6bar] | 18 | 0.5 | 286 | 405 | - | - | TPO | R 3/4" | 4.7 | 48 | 16947 |
| Flexcon Premium 18/2.5 [6bar] | 18 | 2.5 | 286 | 405 | - | - | TPO | R 3/4" | 4.7 | 48 | 16948 |
| Flexcon Premium 25/0.5 [6bar] | 25 | 0.5 | 328 | 421 | - | - | TPO | R 3/4" | 5.8 | 25 | 16950 |
| Flexcon Premium 25/2.5 [6bar] | 25 | 2.5 | 328 | 421 | - | - | TPO | R 3/4" | 5.8 | 25 | 16952 |
| Flexcon Premium 35/0.5 [6bar] | 35 | 0.5 | 396 | 435 | 263 | 118 | TPO | R 3/4" | 8.1 | 18 | 16954 |
| Flexcon Premium 35/2.5 [6bar] | 35 | 2.5 | 396 | 435 | 263 | 118 | TPO | R 3/4" | 8.1 | 18 | 16956 |
| Flexcon Premium 50/0.5 [6bar] | 50 | 0.5 | 437 | 493 | 263 | 134 | Butyl | R 3/4" | 11.4 | 12 | 16958 |
| Flexcon Premium 50/1.0 [6bar] | 50 | 1.0 | 437 | 493 | 263 | 134 | Butyl | R 3/4" | 11.4 | 12 | 16932 |
| Flexcon Premium 50/1.5 [6bar] | 50 | 1.5 | 437 | 493 | 263 | 134 | Butyl | R 3/4" | 11.4 | 12 | 16959 |
| Flexcon Premium 50/2.5 [6bar] | 50 | 2.5 | 437 | 493 | 263 | 134 | Butyl | R 3/4" | 11.4 | 12 | 16960 |
| Flexcon Premium 80/0.5 [6bar] | 80 | 0.5 | 519 | 534 | 360 | 140 | Butyl | R 1" | 15.0 | 12 | 16962 |
| Flexcon Premium 80/1.0 [6bar] | 80 | 1.0 | 519 | 534 | 360 | 140 | Butyl | R 1" | 15.0 | 12 | 16935 |
| Flexcon Premium 80/1.5 [6bar] | 80 | 1.5 | 519 | 534 | 360 | 140 | Butyl | R 1" | 15.0 | 12 | 16963 |
| Flexcon Premium 80/2.5 [6bar] | 80 | 2.5 | 519 | 534 | 360 | 140 | Butyl | R 1" | 15.0 | 12 | 16964 |



























Find more information online:

Installation and operating instruction
Declaration of conformity PED 2014/68/EU
CE Declaration of Conformity Module A
CE Declaration of Conformity Module B
UKCA Declaration of conformity

UKCA Declaration of Conformity Module A

UKCA Declaration of Conformity Module B

Flexcon Premium 2 - 80 DWG

Flexcon Premium 2 - 80 STEP

Flexcon Premium 2 - 80 RFA

<u>Leaflet</u>

Brochure Life cycle assessment Flexcon Premium

White paper - A half is more than one

Packaging data

Install video Flexcon Premium





Product Data Sheet 2024/05/03

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