

SURGE VESSEL

# Bladder Surge Vessel

REF **EFC-410** ISSUED 16 Jun 2026

## SPECIFICATIONS

Size	<b>100L–120,000L</b>
Media	<b>Potable water, Raw water, Wastewater, Irrigation water</b>

## STANDARDS

Design	<b>PED 97/23/EC, EN 13445, ASME VIII-Div.1, PD 5500, CODAP 2000, AD-MERKBLATTER</b>
--------	---

## APPROVALS & CERTIFICATIONS

- ACS (drinking water bladder variants)
- WRAS (drinking water bladder variants)
- ISO 9001
- ISO 14001

## COATINGS & LINING

- Epoxy internal lining (carbon steel variants)

## APPLICATIONS

- Water transmission main surge protection
- Pump station water hammer control
- Municipal potable water supply networks
- Irrigation distribution systems
- Wastewater pumping mains
- Industrial pipeline pressure management



**MATERIALS**

---

body	<b>Carbon steel, Stainless steel</b>	bladder	<b>Polyurethane, Butyl (ACS/WRAS for potable water)</b>
------	--------------------------------------	---------	---

---

**FEATURES**

- Internal bladder physically separates pressurised air from pipeline fluid, preventing air absorption and maintaining the cushion volume indefinitely without compressor intervention
- Absorbs positive and negative pressure transients caused by pump trip or rapid valve closure, protecting mains and equipment from water hammer damage
- Butyl bladder variants ACS-certified or WRAS-approved for potable water service; polyurethane bladders for general service
- Carbon steel or stainless steel pressure shell; design per client specification and site hydraulic analysis
- Capacities from 100 litres to 120,000 litres, sized per transient hydraulic analysis
- Manufactured to PED 97/23/EC and internationally recognised pressure vessel codes including EN 13445 and ASME VIII-Div.1

**OPTIONS & NOTES**

- Specify required capacity in litres when enquiring (range: 100–120,000 L). Vessel is sized per site hydraulic transient analysis.