WaterBoost

AWB / AWBH Accumulator Vessel

Installation, Operation &

Maintenance Guide

Please leave this guide with the property owner — it contains important warranty, maintenance and safety information.

WRAS Approved | **5 Year Warranty** | **CE Compliant**

1. Product description

The WaterBoost AWB (vertical) and AWBH (horizontal) accumulator vessels store mains water under pressure, ready to deliver an immediate high-flow burst the moment a tap or shower opens. The internal butyl diaphragm separates the air charge from the water chamber, maintaining consistent pressure and flow throughout the property.

These vessels are suitable for all domestic and light commercial applications where mains flow or pressure is insufficient. They must be installed on a cold water mains supply only and must not be used for any other application without written consent from WaterBoost.

2. Storage

If the vessel is not to be installed immediately, store it in a dry, frost-free, vibration-free location in its original packaging. Do not expose to temperatures below 4°C or above 35°C during storage.

3. Safety warnings

- This product must be installed by a qualified plumber in accordance with current Water Regulations and Building Regulations.
- Ensure the floor or surface is sufficiently strong to support the full weight of the vessel when filled with water. See Technical Specifications for filled weights.
- Vertical vessels must be secured to the floor using appropriate fixings to prevent toppling. Horizontal vessels must be secured to their cradles.
- Always depressurise and isolate the vessel before carrying out any work. Never attempt to dismantle the vessel.
- Do not use if the vessel shows signs of corrosion, damage or leakage.

WARNING: Depending on vessel size, two people may be required to position the unit safely. The 200L vessel weighs approx. 34 kg empty and 234 kg when full.

4. Location

Access:

The vessel must be readily accessible for maintenance and inspection.

Protection:

Install in a dry, frost-protected location. Avoid high humidity, excessive condensation or salt-laden environments.

Mains pressure:

A minimum static (resting) mains pressure of 2.0 bar is required. If mains pressure is below 2.0 bar, the vessel must be supplemented with a WaterBoost ACF1 booster pump.

Floor loading:

Ensure the floor can support the weight of the vessel when full. See Technical Specifications section.

Pipework:

Pipework to and from the vessel must be independently supported and clipped to prevent stress on connections.

Space:

Allow sufficient clearance around the vessel for installation, commissioning and ongoing access.

NOTE: If mains static pressure is below 2.0 bar, contact WaterBoost for advice on supplementary pump options.

5. What's included

Vertical (AWB)	Horizontal (AWBH)
WaterBoost AWB vertical accumulator vessel	WaterBoost AWBH horizontal accumulator vessel
1¼" BSP stainless steel water connection (pre-fitted)	1¼" BSP stainless steel water connection (pre-fitted)
Schrader valve (air charge valve, pre-fitted to vessel)	Schrader valve (air charge valve, pre-fitted to vessel)
Installation guide	Two mounting cradles (AWBH models)
	Installation guide

NOTE: Check all components within 24 hours of delivery. If anything is damaged or missing, contact WaterBoost immediately:

07464 644 830

sales@waterboost.co.uk

6. Installation

Step 1 Unpack & inspect the vessel

- Remove the vessel from its packaging and check for damage before installation.
- Do not install a damaged vessel — contact WaterBoost.

Step 2 Fit the water connection (vertical AWB vessels)

- Lay the vessel carefully on its side using packaging to protect the surface.
- Apply PTFE tape or liquid thread seal to the 1¼" BSP male thread.
- Screw the vessel connector into the tank elbow at the base. Tighten firmly — do not overtighten.
- Fit an isolation valve to the pipe tail protruding from the base. It is good practice to also install a drain port between the isolation valve and the vessel.
- Carefully stand the vessel upright.

Step 3 Position & fix the vessel (vertical AWB vessels)

- Secure the vessel to the floor using suitable fixings to prevent toppling.

WARNING: Vertical vessels must always be fixed to the floor. An unsecured vessel filled with water presents a serious risk of toppling, causing injury or property damage.

Step 4 Horizontal installation (AWBH vessels only)

- Fix the two mounting cradles to the floor at the correct spacing — refer to the dimensions sheet supplied with your vessel.
- Remove the plastic skirt from the vessel end by rotating anti-clockwise, unclipping and pulling off.
- Fit the vessel connector into the tank elbow using PTFE tape or liquid thread seal. Fit an isolation valve to the tail.
- Position the vessel centrally on the cradles with the outlet elbow facing upwards.
- Secure the vessel to the cradles.

6. Installation (continued)

Step 5 Connect the upstream pipework

- Install the upstream line-in kit (if used) on the rising main between the consumer's stopcock and the vessel inlet.
- The upstream kit must include: isolation valve, double check valve, pressure reducing valve (PRV) set to site conditions, and pressure gauge (when used).
- Do not use pipework smaller than the upstream connection size — this will impair performance.
- All solder joints must be completed and flux residues removed before completing the installation. Flux damage will void the warranty.
- If a water softener is to be installed, locate it between the upstream kit and the vessel inlet.
- If the WaterBoost ACF1 booster pump is used, locate it prior to any water softener.

Step 6 Connect downstream pipework

- Connect the vessel outlet to the downstream distribution pipework, supplying all cold (and where applicable, hot) services.
- All pipework must be independently supported and clipped at regular intervals.

7. Commissioning

Step 7 Check the vessel pre-charge air pressure

IMPORTANT: Air charge must only be checked and adjusted when the vessel is completely empty of water. Check the pre-charge before connecting to mains supply.

- Measure the static mains pressure at the site using a pressure gauge at the upstream gauge port.
- Set the vessel air charge to 65% of the measured static mains pressure using the Schrader valve at the top of the vessel. Example: 3.0 bar mains = 1.95 bar air charge.
- Use a tyre pressure gauge or dedicated air pressure tool. Never exceed 10 bar.

Static mains pressure	Required air charge (65%)	Max PRV setting
2.0 bar	1.3 bar	2.0 bar
2.5 bar	1.625 bar	2.5 bar
3.0 bar	1.95 bar	3.0 bar
3.5 bar	2.275 bar	3.5 bar
4.0 bar	2.6 bar	4.0 bar
4.5 bar	2.925 bar	4.5 bar
5.0 bar	3.25 bar	5.0 bar

Step 8 Fill and check for leaks

- Close all downstream outlet valves.
- Open the isolation valve and stopcock. Both pressure gauges will show movement as the vessel fills.
- Check all joints for leaks. Tighten or reseal as necessary.
- Once filled, open downstream outlets one at a time to verify flow and pressure.

8. Technical specifications

Parameter	Value
Max working pressure	**10 bar (1000 kPa)**
Min operating temperature	**4°C**
Max operating temperature	**90°C**
Max rated temperature	**90°C**
Shell material	**Carbon steel, two-part polyurethane coated**
Diaphragm	**100% chlorine-resistant butyl rubber**
Liner	**Virgin polypropylene**
Water connection	**1¼" BSP stainless steel**
Approvals	**WRAS, CE/PED, ACS, ISO-9001**
Warranty	**5 years**

Model	Capacity	Height/Length	Diameter	Connection	Empty kg	Full kg
AWB-200LV	200 L	1055 mm	532 mm	1¼" BSP	34.25	234
AWB-250LV	250 L	1227 mm	534 mm	1¼" BSP	39.24	289
AWB-300LV	300 L	1512 mm	534 mm	1¼" BSP	47.17	347
AWB-450LV	450 L	1551 mm	662 mm	1¼" BSP	69.85	520
AWBH-150LH	150 L	950 mm	558 mm	1¼" BSP	~28	178
AWBH-200LH	200 L	1026 mm	558 mm	1¼" BSP	~34	234
AWBH-250LH	250 L	1206 mm	558 mm	1¼" BSP	~39	289
AWBH-300LH	300 L	1505 mm	558 mm	1¼" BSP	~47	347

Shaded rows = horizontal (AWBH) models. Full weights are approximate — vessel capacity × 1.0 kg/L + empty weight.

9. Troubleshooting

Symptom	Probable cause	Action
Poor flow from outlets	Isolation valve not fully open	Check valve is fully open
Poor flow from outlets	Upstream pipework undersized	Verify pipe sizes match upstream kit specification
Low pressure	Mains static pressure below 2 bar	Fit WaterBoost ACF1 booster pump — contact us
Low pressure	PRV set too low	Check and adjust PRV — should be set to mains static pressure
Runs out of water quickly	Air charge too high	Re-check and adjust vessel pre-charge to 65% of mains pressure
Runs out of water quickly	Vessel undersized for demand	Consider a larger vessel or additional vessel in parallel
Water hammer / noise	Pipework not clipped/supported	Clip all pipework at regular intervals

10. Maintenance

WaterBoost accumulator vessels are maintenance-free under normal operating conditions. However, the following periodic checks are recommended:

- Annually: check the vessel air pre-charge pressure using a tyre gauge at the Schrader valve (vessel must be empty of water to do this). Adjust if required to 65% of current mains static pressure.
- Annually: visually inspect the vessel shell, pipework and connections for signs of corrosion, damage or leakage.
- Annually: check the pressure gauge readings upstream and downstream to confirm the system is operating within expected parameters.
- Every 5 years or if pressure loss is noted: consult WaterBoost for a full system inspection.

> **Do not attempt to dismantle the vessel. The vessel is a sealed pressurised unit. Any unauthorised modification will void the warranty and may be dangerous.**

11. Warranty

WaterBoost accumulator vessels are covered by a 5-year manufacturer's warranty from the date of purchase, subject to correct installation and use in accordance with these instructions.

The warranty covers defects in materials and workmanship. It does not cover: damage from incorrect installation, improper use, unauthorised modification, normal wear and tear, or flux damage to connections.

To make a warranty claim, contact WaterBoost with proof of purchase and the vessel model and serial number.

To register your warranty or make a claim:

WhatsApp: 07464 644 830

Email: sales@waterboost.co.uk

anglianpumping.com · waterboost.co.uk

Installation record — please complete and retain

Model number: _____ Installed by: _____

Serial number: _____ Site address: _____

Installation date: _____