

ATX-450 Twin Pure

Anti-Legionella Whole-House Mains Pressure Booster

Twin Flow-Thru™ vessels · 540 L useable capacity

Part No. **ATX-450-PURE-TWIN**

140 L/min

PEAK BURST FLOW

3.2 bar

MAX PRESSURE

540 L

USEABLE CAPACITY

40 dB(A)

NOISE LEVEL

WiFi

H2D APP

5/3 yr

TANK / PUMP
 WARRANTY

OVERVIEW

The WaterBoost **ATX-450 Twin Pure** is the highest-capacity Pure system in the range — pairing **two 450-litre Flow-Thru™ anti-Legionella vessels** with a single variable speed inverter pump in a manifolded assembly. It connects directly to the incoming cold water mains and boosts both pressure and flow the moment a tap opens.

Patented internal scoops and water vanes recirculate both vessels constantly so the water never stagnates — the freshest water quality possible. Peak burst flow of up to **140 L/min**, sustained **60 L/min @ 3.2 bar for up to 11 minutes**. No break tank, no overflow, just 2 water connections. WiFi via the H2D App for remote monitoring.

KEY FEATURES

- Twin Flow-Thru anti-Legionella vessels — total recirculation
- Variable speed inverter — only boosts the shortfall
- 2 × 450 L vessels · 540 L useable capacity (manifolded)
- Fully sealed — zero air contact with stored water
- No break tank, no overflow — just 2 connections
- 1½" BSP boosted outlet (through-flow vessels)
- Quiet operation — rated 40 dB(A)
- WiFi · H2D App · on-unit HMI display
- Dry run protection + anti-seize function
- 30-second pump swap via 2-clip dock
- WRAS approved · completely maintenance free

TECHNICAL SPECIFICATIONS

Model	ATX-450 Twin Pure
System type	Twin-vessel integrated booster
Vessels	2 × Flow-Thru anti-Legionella, steel · CAD-2 diaphragm
Accumulator capacity	900 L total · 540 L useable
Peak burst flow	Up to 140 L/min
Sustained flow	60 L/min @ 3.2 bar · 11 min
Continuous flow	12 L/min @ 3.0 bar
Max pressure	3.2 bar
Pump type	Single variable speed inverter
Noise level	40 dB(A)
Water connections	2 · 1½" BSP boosted outlet
Connectivity	WiFi · H2D App · HMI
Hygiene	Sealed + twin Flow-Thru recirculation
Dry run protection	Built in
Anti-seize function	Automatic
Maintenance bypass	2-clip · < 30 seconds
Approval	WRAS approved
Warranty	5 yr tank · 3 yr pump

WHAT'S INCLUDED

Unit:	ATX-450 Twin Pure — pump & 2 Flow-Thru vessels, manifolded
Bypass:	Integral 2-clip maintenance bypass
Control:	On-unit HMI + WiFi H2D App
Guide:	Installation & maintenance manual

IDEAL FOR

- High-occupancy properties & large 5+ bed homes
- HMOs, hotels, B&Bs, care, hospitality & healthcare
- Any property under a Legionella duty (ACoP L8 / HSG274)



HOW IT WORKS — TWO-PHASE OPERATION

PHASE 1 — STORED VOLUME

Instant high-flow boost

60 L/min @ 3.2 bar

SUSTAINED FOR UP TO 11 MINUTES

Delivered directly from the two pre-charged Flow-Thru vessels the moment an outlet opens. Peak burst flow up to **140 L/min**. Sufficient for five or more showers running simultaneously — the highest capacity in the range.

PHASE 2 — CONTINUOUS MAINS

Sustained boosted flow

12 L/min @ 3.0 bar

CONTINUOUS — NO DROP-OFF

Once stored volume is used, the pump continues to boost directly from mains. When demand stops, both vessels recharge automatically ready for the next burst.

- 1 Cold mains feeds directly into the Twin Pure — no break tank or loft tank required.
- 2 Two pressurised 450 L Flow-Thru accumulators store water ready to release the instant an outlet opens — both vessels constantly recirculated so the water never stagnates.
- 3 The variable speed pump monitors mains pressure and adds only the shortfall to reach target.
- 4 After the stored volume is used, the system continues boosting from mains until demand ends.
- 5 With demand stopped, both accumulators recharge automatically — ready for the next burst.

ENERGY EFFICIENCY — ONLY BOOSTS THE SHORTFALL

Variable speed inverter technology continuously measures incoming mains pressure and produces only the additional pressure needed to hit the 3 bar target. When mains pressure is already high, the pump works less. When mains pressure drops, the pump compensates — automatically and instantly.

Mains: 1.0 bar

Pump adds 2 bar

Mains 1 bar

Mains is low — the pump does **more** of the work to reach 3 bar.

Mains: 1.5 bar

Pump adds 1.5 bar

Mains 1.5 bar

Balanced — pump and mains share the load equally to hit target.

Mains: 2.0 bar

Pump adds 1 bar

Mains 2 bar

Mains is strong — the pump runs lightly, saving energy.



FLOW-THRU™ — HOW IT STAYS FRESH

Stagnation is the enemy of stored water. The patented Flow-Thru design forces fresh water through **each vessel** every time the system runs, so colonisation cannot establish — the freshest water quality possible, across both 450 L vessels.

- 1 Scoop redirects** — incoming water is diverted up into each tank chamber rather than parking at the inlet.
- 2 Total mix** — the patented water vanes drive full recirculation across both vessels: no dead volume, no stagnant pockets.
- 3 Fresh water out** — continuously turned-over water leaves the manifold to the property at high boosted flow.

HYGIENE BY DESIGN — HOW THE TIERS COMPARE

Every WaterBoost booster is sealed and beats open storage on hygiene. The Twin Pure goes furthest with active recirculation across both vessels — the right choice wherever the freshest water, a documented control regime, or sustained high-capacity flow matters.

OPEN BREAK TANK

- ✗ Open water surface — air, dust & debris
- ✗ Static water — Legionella risk management
- ✗ Periodic cleaning & inspection required
- ✗ Overflow pipe required
- ✗ Fixed pump output regardless of mains

STANDARD ATX — SEALED

- ✓ Fully sealed — zero air contact
- ✓ No overflow, no open surface
- Water can sit static at depth
- ✓ Variable speed — boosts the shortfall
- ✓ WRAS approved

ATX-450 TWIN PURE — FLOW-THRU ×2

- ✓ Sealed AND constantly recirculated — both vessels
- ✓ No static or stagnant volume
- ✓ Anti-Legionella by design
- ✓ 540 L useable · freshest water quality possible
- ✓ WRAS approved · maintenance free

The standard ATX remains an excellent sealed system for most homes. The single ATX-450 Pure adds Flow-Thru recirculation. The Twin Pure is specified wherever sustained high-capacity demand or a documented Legionella control regime is the priority. It supports your water-hygiene management but does not replace a competent Legionella risk assessment, which remains the duty-holder's responsibility.



KEY DIMENSIONS



A — Overall height (each vessel)	1822 mm
B — Vessel diameter (each)	662 mm
Number of vessels	2 · manifolded
Water connections	2 · 1½" BSP boosted outlet
Shipping weight (empty)	~150 kg
In-service weight (filled)	~690 kg

INSTALLATION CLEARANCE

Above unit (pump access)	150 mm min
Front (dock + bypass access)	300 mm min
Each side	50 mm min
Floor loading	Confirm before install

THROUGH-FLOW CONNECTION

Both Flow-Thru vessels are plumbed through-flow — service water passes through each vessel during normal use, so the stored volume is continuously recirculated across the twin assembly.

ATX RANGE — A / B

Model	A (Height)	B (Diameter)	Capacity	Useable
ATX-150	1209 mm	532 mm	150 L	90 L
ATX-200	1326 mm	532 mm	200 L	120 L
ATX-250	1498 mm	534 mm	250 L	150 L
ATX-300	1783 mm	534 mm	300 L	180 L
ATX-450	1822 mm	662 mm	450 L	270 L
ATX-450 Pure	1822 mm	662 mm	450 L	270 L
ATX-450 Twin Pure	1822 mm (each)	662 mm (each)	900 L (2 × 450)	540 L

All dimensions in millimetres — per vessel. The Twin Pure uses two ATX-450 Pure vessels with the Flow-Thru™ anti-Legionella vessel, manifolded behind a single variable speed pump assembly. In-service (filled) weight ~690 kg total. Confirm floor loading before installation. Minor dimensional variations may occur.