



Technical information

The Standard mechanism that operates all of Aladdin’s Autovent range is identical, with the only variation from Standard being the Low Temperature mechanism that was developed for under-floor heating manifolds.

All Aladdin valves have exactly the same operating characteristics. The only operational difference between the Standard and the Low Temperature models is the temperature that the valve will start to operate at: about 30°C for the Standard, and 20°C for the Low Temperature mechanism.

How the Standard mechanism works:

On the first fill, gas (air) passes quickly through the valve until water hits the mechanism. The water causes the special hygroscopic washers in the valve to expand which forces the plastic washer and its EPDM seal to seal against the bottom, shutting the valve off.

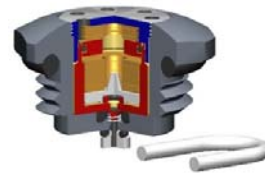
On the first fill only, it is usual to see a drop of water on the cap of the valve. When the radiator turns on, the temperature of the Autovent raises, the water absorbed in the hygroscopic washers evaporates through the 6 holes in the cap (see table below for vent times). If in the meantime gas has built up in the radiator, the gas will slowly and silently seep through the valve mechanism until water again touches the bottom of the hygroscopic washers which will expand and shut the valve immediately. This action NLB guarantees to operate for 5 years.

The speed of vent cycle varies with temperature and pressure; at higher temperatures and pressures the vent cycle is faster.

These tables relate to a 1 bar pressure cycle.

Standard Autovent

Temperature °C	40	50	60	70	80	90
Vent time (hrs)	6	5	3	1.5	1	0.5



After 5 years the radiator may again collect air in which case the cartridge has failed and requires replacement.

Autovents are guaranteed for 5 years.



- The valves are fully automatic, requiring no manual adjustment, and will not leak in the unlikely event of failure as a Patented backup failure safety mechanism is incorporated.
- They work when fitted at any angle.
- Their one-way valve makes them suitable for use with radiators which can cycle into negative pressure, typically loft conversion radiators or on the suction side of the pump.
- The innovative Hygroseal™ technology (Patent protected) utilises a ‘dual-seal positive valve closure’ which provides an extended, leak-free life.
- Installing the valves is a simple DIY job that doesn’t require system draining, a ‘less than one minute’ operation.
- Seals: The ½” BSP versions have EPDM O-ring seals which are sufficient, though some fitters prefer to use some plumbers tape.
- Operating pressure: to 10 bar.
- Operating temperature: to 120°C.

