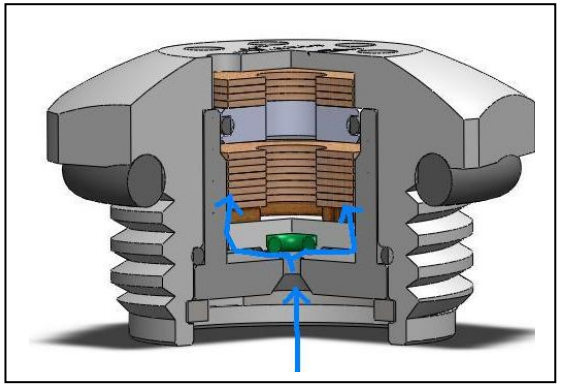
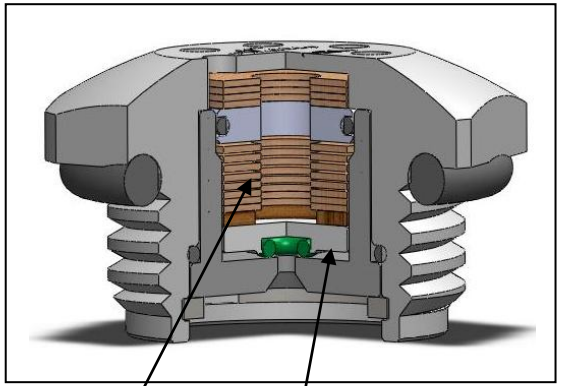
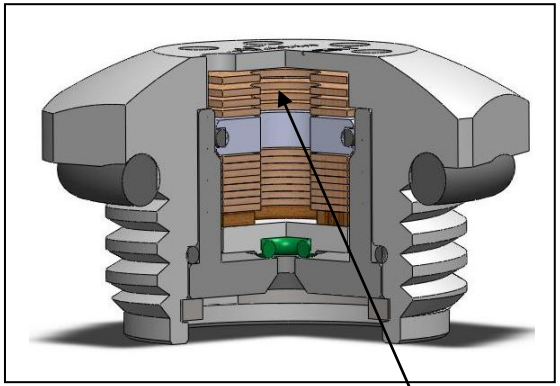
Aladdin Autovent – How It Works



Water entering the valve from the radiator expands the hygroscopic washers.



The expanded washers close the valve by pushing the plastic washer containing a viton seal against the inlet port.



At the end of valve life the top safety washers expand and close the valve permanently.

The Aladdin autovent valve utilises hygroscopic material that expands in contact with water to close the valve, and contracts when dried to release the gas. The material is a high grade cellulose card (called presspahn) in the form of washers.

Automatic venting devices have used this principle for over 70 years, but Aladdin uses the technology in two different ways. These differences are protected by patent applications:

1. The traditional valves (Tacovent, Caleffi, Durovent etc) use a series of hygroscopic washers that all expand at the same time during operation – their useful life is approximately 2 years. At the end of life they fail open, so the valve leaks. Instead, the Aladdin valve uses the hygroscopic washer to close a 'valve port' and only the first 2 or 3 washers are required to do this job (as the pressure required to close port is very much reduced). The Aladdin valve's operating life is much longer because, as each washer expires, the next 'new' washer takes over. This allows the Aladdin valve to have a 5 year guaranteed operating life. This feature also allows Aladdin valves to operate up to 16 bar minimum (we tested to well over 50 bar).

2. Aladdin valves are unique in having a safety cap that activates at the end of their life which permamently closes the valve. This allows Aladdin to have a life-time leak-free guarantee.

The Aladdin valve has BSRIA testing certificates.