

# Fig. KAV Brass Automatic Air Vents Installation & Maintenance Instructions

# PRODUCT LIFE CYCLE

The life of the air vent is dependent on its application and freedom from misuse.

The properties of the fluid being transported such as pressure and temperature must be taken into account to avoid premature failure.

Other factors to be considered are the electrolytic interaction between dissimilar metal used in the system, dezincification and stress corrosion cracking occurring on chilled water service.

Before commissioning a system, it should be flushed to eliminate debris and chemically cleaned as appropriate to eliminate contamination, all of which will prolong the life of the automatic air vent.

### **OPERATING PRESSURES AND TEMPERATURES**

Maximum non shock pressure and temperature range: 10 bar from -10°C to 110°C.

Water hammer and other shock conditions should be avoided.

Not suitable for fatigue loading, creep conditions, fire testing, fire hazard environment, corrosive service or transporting abrasive solids.

### PRESSURE / TEMPERATURE RATING

These air vents must be installed in a piping system where the normal pressure and temperature do not exceed the above ratings.

If the limits of use specified in these instructions are exceeded or if used on applications for which it was not designed, a potential hazard could result.

## LAYOUT AND SITING

It should be considered at the design stage where the automatic air vent will be located to give access for opening the cap, inspection and maintenance.

Care should be taken regarding orientation of the automatic air vent to enable it to expel air efficiently from the system.

Automatic air vents must be fitted vertically at the highest point of risers, heating or cooling coils or anywhere where air is likely to collect.

#### INSTALLATION

Automatic air vents are precision manufactured items and as such, should not be subjected to misuse such as careless handling, allowing dirt to enter the air vent or check valve through the end port, lack of cleaning the system before operation and excessive force during installation.

All special packaging material must be removed.

It is common practice to apply thread sealing compounds appropriate to the application but excessive use should be avoided, since this increases thread interference and may cause overstressing when fitting the check valve to the riser or equipment.

The wrench must only be located on the hexagonal body of the check valve when fitting.



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The automatic air vent has an 'O' ring seal on the parallel inlet connection thread and can be screwed directly into the check valve, do not over tighten.

## OPERATION

Automatic air vents are self-acting.

Before filling the system open the air release cap by one turn to allow air to be released to atmosphere as the system is being filled.

The automatic air vent will seal automatically when filled with water.

Note: System pressure must be below 2.5 bar to allow the air to discharge automatically.

#### MAINTENANCE

The KIDS automatic air vents are maintenance free and will have a long service life.

If the automatic air vent requires inspection or cleaning, it can be unscrewed from the check valve without draining the system.

The automatic air vent should be at zero pressure and ambient temperature prior to removing from the check valve.

Eye protection and gloves must be worn for this operation.

Clean the automatic air vent using clean water and a brush or water jet.

Check the condition of the 'O' ring on the parallel inlet thread, replace if damaged.

Re-assemble to the check valve, do not over tighten.