

ANTI-LEGIONELLA VALVE

Legionnaire's disease: It is a severe form of pneumonia caused by a bacterium known as legionella. People can get affected by this disease from inhaling the bacteria from water or soil. Legionella grows and multiplies especially in standing water where temperatures are within 20-45°C while the bacteria are dormant below 20°C and do not survive above 60°C.

Challenge: To prevent the development of legionella in water expansion vessels which can be found in most domestic pressurised heating systems where the water remains stagnant for a long time.

Solution: A great solution to prevent the development of this disease is the use of an ANTI-LEGIONELLA VALVE (see *Figure 2*) which is connected to the water expansion vessel as illustrated in *Figure 1*. This valve is designed to divert a portion of the flow into the vessel so that the water content is continually renewed to prevent water stagnation, which can favour Legionella growth (WRAS Approved).



Figure 2: Anti-legionella valve 3/4" (left) και 1 1/4" (right)



Figure 1: Application of the valve

Anti-Legionella Valve specifications:

- It converts a standard single connection expansion vessel into a 'flow through' type as shown in *Figure 3*
- It has a rotatable tee-piece (DZR brass) to allow flexibility upon installation and comes with a wall bracket for easy installation of both the anti-legionella valve and expansion valve
- The body is made of DZR brass, and it has internal O rings made of EPDM material and a ball valve made of hostaform material
- Its working pressure and temperature are between 0.1 - 10bar and 6 - 70°C respectively
- It can be used on any standard vessel with a 3/4" or 1 1/4" connection

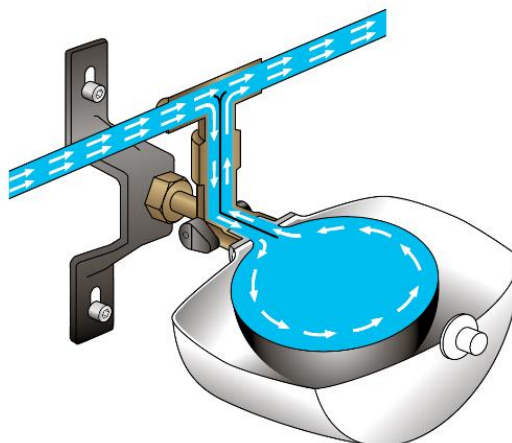


Figure 3: Working principle of anti-legionella valve