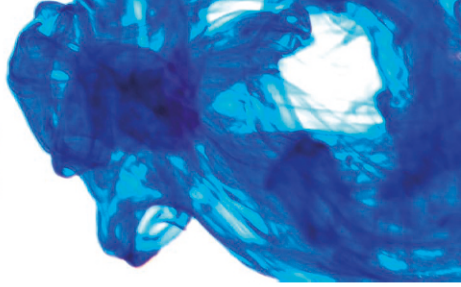
AA FIRST information hub
knowledge is strength



Issue 21 The information hub is designed to provide - mainly technical - information relating to Water Coolers and Boilers, to assist you with your work

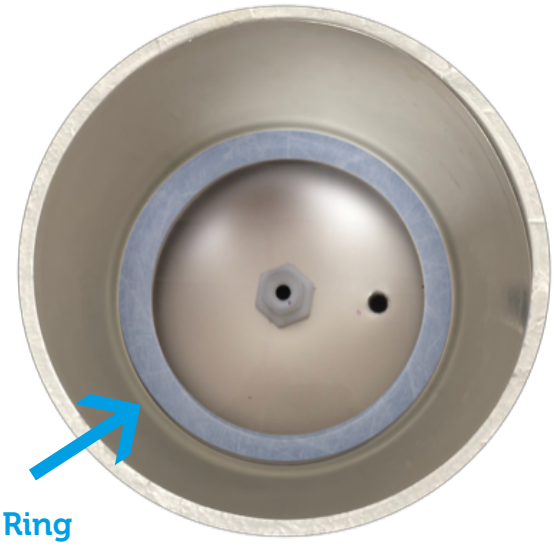
Water Expansion When Freezing

Did you know that water expands by approx. 8.5% when it freezes?

Our Water Coolers are designed to deal with that!

As water is chilled it creates an "ice ring" inside the chiller. This results in an increase in volume, and an increase in pressure.

Inside Ariel View Of A Chiller Tank



Ice Ring

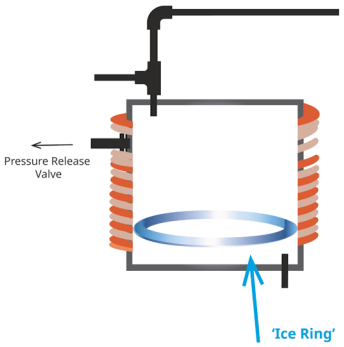
Water Coolers

Our Ambient & Chilled Water Coolers have a factory set thermostat setting - which ensures that under normal working conditions, both the "ice ring" and the resulting increase in pressure are kept at a manageable level.

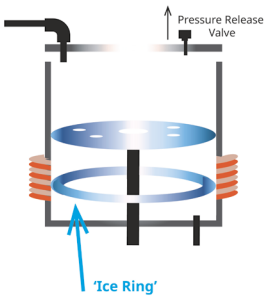
In Open Tank Coolers, such as Bottled Coolers, the increased pressure vents into the open to Air Tank.

In a sealed Direct Chill Tank the increase in pressure is released by allowing small amounts of water/air to vent into a drip tray.

SEALED DIRECT CHILL PRESSURE COOLER SYSTEM

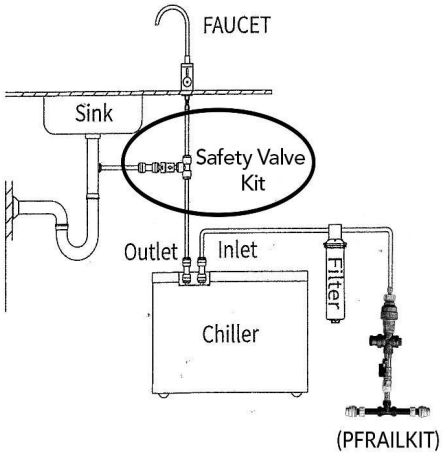


OPEN TANK FED COOLER SYSTEM



Under-Sink Chillers

Such "fail save" mechanism does not exist in Undersink Chillers, which of course have no drip tray. Here we do supply a separate Safety Valve Kit with the Undersink Chiller, which must be included on installation. The SVKIT either vents any excess pressure into a sink drain or a separate vessel.



(PFRAILKIT)

AA FIRST information hub
knowledge is strength