TECHNICAL BULLETIN

Fusible Plug
Pressure Rating

What Pressure will a fusible plug withstand?

All fusible plugs are tested in accordance to UL 207, Section 16. This specification only applies to the test procedure for temperature rating. We do know they will withstand the saturated pressure of a refrigerant to within 20°F of the stamped temperature of the plug at which point creeping of the alloy may occur.

Creep is a word used to define the appearance of fusible alloy extrusion as it protrudes out beyond the body. When the plug is under pressure, the alloy can begin to creep as the temperature approaches the alloy's plastic range. The "creeping" will continue under such conditions until a leak develops.

Hydrostatic pressures up to 10,000 PSIG at ambient temperatures have been maintained in the test lab. However, it is impractical if not impossible, to determine a "creep point" with variations in shell (body) configurations, temperature, pressure, length of exposure, plastic range of the varying alloys, etc. The shorter the plastic range of the fusible alloy, the less likely it is to creep.

In summary, the fusible plug is a reliable safety device whose primary purpose is to protect a refrigeration system against explosion or fire. When installed in accordance with such authority as the ASHRAE Handbook, it will be leakproof during normal operation and discharge without failure within 20°F of the stamped temperature.

- **UL File # SA778, Guide #SEHU (US), Guide #SEHU7 (Canada).**

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