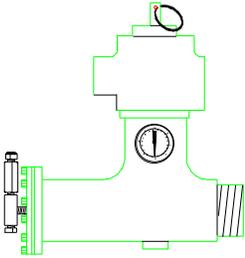
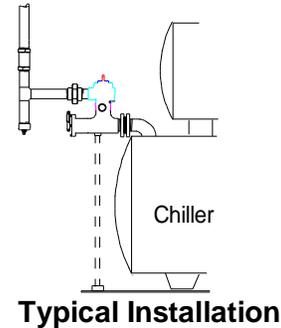


Guide specification for **REDI CONTROLS' RuptureSeal™ Backup Relief Valve Models RS-2 & RS-3.**



**Performance Specifications
For The Rupture Disk Backup Relief Valve:**

The Rupture Disk Backup Relief Valve shall be installed on low pressure centrifugal chiller's utilizing (R-11, R-113, & R-123) to protect against total loss of refrigerant charge, as well as pollution of the atmosphere, in the event of a rupture of the chiller's rupture disk. Valve construction, flow capacity, application and installation shall meet the recommendations of Division I, Section VIII of the 1992 ASME Boiler & Pressure Vessel Code and ASHRAE Standard 15-1992R



Requirements

1. Must not require shutting down chiller to install.
2. Must not require removal of chiller's refrigerant charge to install.
3. Must not require welding on chiller vessel to install.
4. Must be Capable of operating with chiller's existing carbon rupture disk.
5. Must include a tack trap that, in the event of a rupture, will collect all carbon rupture disk fragments, thus preventing them from interfering with valve mechanism. Screens disposed in the valve's flow path for trapping carbon fragments are absolutely unacceptable.
6. Must be capable of serving as primary chiller relief once the chiller's existing rupture disk has burst.
7. Must be Stainless Steel construction -- to prevent rust & corrosion.
8. Total installed weight of valve must not exceed 20 pounds for 2" model or 49 pounds for 3" model.
9. Must be "flow capacity " rated according to appropriate ASME and ASHRAE Guidelines.
10. Manufacturer must make available upon request flow capacity test documentation by an ASME Certified testing laboratory for capacity certification of pressure relief devices. Documentation must include verification that valve operation remains stable (does not chatter) with up to at least 5 psig built-up back pressure.
11. Valve relief set-point calibration must be sealed in a manner (wire and lead seal) to prevent unauthorized tampering with certified calibration.
12. Must be totally serviceable without disturbing the valve's "sealed" set point calibration.

13. Must be direct spring Acting.
14. Must be ‘pop open” action coincident with bursting rupture disk as per foot-note 48 to Section UG-127.3b in Section VIII of the 1992 ASME Boiler & Pressure Vessel Code.
15. Must be unaffected by built-up back pressure, to prevent loss of flow capacity due to lengthy discharge vent line.
16. Must come completely pre-assembled, tested and ready to install.
17. Must have external manually operated lift ring or lever that will allow testing of valve operation while chiller is running, to facilitate periodic safety checks such as those required by insurance underwriters.
18. Must include a double check pressure equalization valve, to prevent inadvertent pressure buildup between the valve and the rupture disk.
19. Must have tell-tale pressure gauge, to indicate potential leaking or rupture of chiller’s existing rupture disk.
20. Must reseal within 3 psi of valve setting.
21. Valve seat O-Ring must be retained by mechanical means.
Bonded or glued valve seat O-Ring not acceptable
22. Must have O-Ring valve seat capable of sealing “bubble tight.”
23. Must include mounting fixture as an integral part of valve.
24. Must provide detailed IOM
25. Must provide pressure port for optional alarm *
26. Must have “lifetime warranty” from manufacturer.
27. * The **RuptureAlarm™** is available from REDI CONTROLS for use on the **RuptureSeal™** back up relief valve. This pre-assembled, ready to install alarm is specially designed to work in conjunction with the **RuptureSeal™** to alert the operator of a possible seeping or ruptured Chiller Rupture Disk. The unit also includes remote alarm enunciation capability. For additional information, contact REDI CONTROLS at **(800) 626-8640** or **(317) 865-4130**.

