Reduced Capacity Safety Relief Valve

FAQs

Type: SR1R

Frequently Asked Questions

1. **What does a safety relief valve do in an industrial refrigeration system?**
   A safety relief valve is a type of pressure relief device that will protect a part of your system in the event of an overpressure situation. These products are designed to hold pressure until a certain threshold is reached. After the threshold is reached the device will relieve pressure by opening and allowing refrigerant to escape.

2. **When will the SR1R be available?**
   The SR1R is available now! Contact your local sales representative or distributor for purchasing information.

3. **How much does it cost?**
   Pricing can be found in the ILP-17 price book. For additional information please contact your local sales representative or distributor.

4. **Will it work with my existing manifold?**
   The SR1R will work with the M1 series of manifolds from Refrigerating Specialties. The SR1R has the same dimensions as the SR1 product and features a 3/4" NPT inlet and a 1" NPT outlet For dimensional information please consult the product bulletin or datasheet.

5. **Why is a reduced capacity safety relief important?**
   The size of relief piping is determined by the flow capacity of the safety relief device(s) connected to it. Safety relief valves are often sized based on the total volume of the vessel their are connected to. The smaller the vessel the smaller the safety relief flow capacity. Sometimes when incorporating small vessels into a system the system designer may find that the need a reduced capacity safety relief to keep the system protected and keep the relief piping as small and cost effective as possible.

6. **What type of approvals does the SR1R carry?**
   The SR1R is compliant with the ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 and ANSI/ASHRAE 15 safety standards for refrigeration systems. The product carries the ASME and NB stamps.

7. **What type of applications would I want to use the SR1R on?**
   Ideal applications for the SR1R are oil pots and surge drums.

8. **How can I tell if the SR1R has relieved?**
   When used in conjunction with a rupture disc the SR1R will provide a means of visual or electronic indication that the device has relieved. Visual indication is accomplished using a tell-tale gauge after the rupture disc but before the SR1R. Electrical indication can be achieved by using a pressure switch or pressure sensor. These solutions will allow for notification that an overpressure event occurred and in the case of the electronic notification precisely when it occurred as well.

9. **Your datasheet states that the SR1R has a 50% blow down to reseat. What does that mean?**
   Blow down to reseat is the percentage of set pressure at which the valve will close after an over pressure situation has occurred. For example if the set pressure is 200 psi and the blow down to reseat is 50% the valve will open at 200 psi and continue to relieve until the system reaches 100 psi (50% of 200 psi).

10. **Your datasheet lists a reseat pressure of 20% below set point. Is that different that the blow down?**
    Reseat pressure and blow down are two different ratings. The 20% below setpoint reseat pressure means that once the SR1R relieves the setpoint can be reduced by as much as 20%.

11. **Can I use the SR1R with liquid refrigerant?**
    The SR1R is for vapor use only and should not be used with liquid refrigerants.

12. **How often do I have to replace the SR1R?**
    The SR1R should be installed and maintained according to the local rules and regulations. Typical regulations in North America call for replacement after an overpressure situation (i.e. if the device relieves) or after a period of 5 years - which ever is sooner.

13. **Where can I find additional information on the SR1R?**
    You can contact your local sales representative or visit us online at www.parker.com/rs or www.ParkerRealSolutions.com

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