# **Safety Relief Valve**

Product Bulletin 72-00 E

### Type: SRH

## **Purpose:**

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Type SRH High Capacity Safety Relief Valves should be used to protect each refrigeration system pressure vessel that can be isolated by valves.

In many localities state or municipal codes govern selection and installation of Relief Valves. Many are patterned after the ASME Boiler and Pressure Vessel Code and the ANSI/ASHRAE 15 Safety Code for Mechanical Refrigeration. Where no compulsory code exist, installation of Relief Valves according to this ANSI/ASHRAE Code is highly recommended.

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ASME Vapor use only

## Contact Information:

Parker Hannifin Corporation **Refrigerating Specialties Division** 2445 South 25th Avenue Broadview, IL 60155-3891

#### phone (708) 681-6300 fax (708) 681-6306

www.parker.com/refspec

## **Product Features:**

- ANSI / ASHRAE 15 Complaint
- Excellent Repeatability
- · Unaffected by Vibration
- All Stainless Steel Internal Parts

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PTFE Seat

- Capacity Rating for Vapor Only
- Pressure Settings 150 to 400 psi
- Suitable for Ammonia, R22, R502, R404A, R717 and other common refrigerants

## ENGINEERING YOUR SUCCESS.

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#### Description

Type SRH High Capacity Safety Relief Valves are designed and constructed to meet the requirements of Section VIII ASME Boiler and Pressure Vessel Code and ANSI/ASHRAE 15 Code requirements and bear the ASME Code Symbol (UV).

Employing proven principles of design, these Safety Relief Valves are highly reliable and dependable. Precision machined moving parts of stainless steel, and a PTFE disc prevent sticking due to corrosion or cold welding and ensure valve opening at the set pressure long after installation. They are not suitable for corrosive ambient atmospheres such as chlorine, etc.



Figure 1: SRH Cross-Section

#### Application

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The Type SRH1 through SRH5 valves are for use with Ammonia and Halocarbon refrigerants in non-corrosive environments. Pressure settings and capacities apply only when the valve is discharging to atmospheric pressure.

#### **Pressure Settings**

Codes require valve settings equal to or less than design working pressure of the vessel protected. The Type SRH Safety Relief Valves are available in six standard settings, from 150 psig to 400 psig in 50 lb. increments. Special settings between 150 psig to 400 psig in 25 lb. increments are also available. To retain the validity of the code symbols, pressure settings and capacity, these valves must be set and sealed at the factory. When required, valves can be returned to the factory for verification of setting, or readjustment to the original setting. No major repairs or reconditioning will be done. Contact factory for details.

#### Selection Data

The Type SRH Safety Relief Valve is intended to prevent the pressure of the vessel from rising more than 10% above the Design Working Pressure (DWP) of the vessel or the pressure setting of the relief device, whichever is the lower pressure.

Whenever conditions permit, it is advisable to have the relief valve pressure setting (which must not exceed the design working pressure of the vessel) at least 25% higher than the normal operating pressure for the refrigerant used.

#### Capacities

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| SRH1R         1/2"<br>FPT         1/2"<br>FPT         150         31         410           200         41         535         50         661           300         60         786         350         69         911           400         79         1037         150         35         463           200         46         605         250         57         747           FPT         3/4"         FPT         350         68         889           350         79         1031         400         89         1173           350         79         1031         400         89         1173           350         79         1031         400         89         1173           360         79         1031         400         89         1173           350         79         1031         400         89         1173           360         79         1031         400         89         1173           374"         1"         FPT         300         68         889           360         20         13         176         250         371         217  | Valve<br>Type | Relief<br>Valve<br>Inlet | Relief<br>Valve<br>Outlet | Pressure<br>Setting<br>psig | Lbs.<br>Per.Min<br>Air | SCFM<br>Alr |
|---|---------------|--------------------------|---------------------------|-----------------------------|------------------------|-------------|
| SRH1R         1/2"<br>FPT         3/4"<br>FPT         200         41         535           38H1R         1/2"<br>FPT         3/4"<br>FPT         250         50         661           300         60         786         350         69         911           400         79         1037         350         69         911           100         35         463         200         46         605           200         46         605         250         57         747           300         68         889         350         79         1031           400         89         1173         250         57         747           300         68         889         350         79         1031           400         89         1173         250         57         747           SRH3         3/4"         1"         FPT         300         68         889           350         79         1031         176         20         13         176           200         13         176         250         17         217         59           360         20         20         230   | SRH1R         |                          |                           | 150                         | 31                     | 410         |
| SRH1R         1/2"<br>FPT         3/4"<br>FPT         250         50         661           300         60         786         350         69         911           400         79         1037         400         79         1037           Autor         79         1037         150         35         463           SRH1         1/2"         3/4"         250         57         747           FPT         3/4"         250         57         747           FPT         3/4"         250         57         747           FPT         1/2"         1"         150         35         463           300         68         889         350         79         1031           400         89         1173         200         46         605           300         68         889         350         79         1031           400         89         1173         200         13         176           300         68         889         350         79         1031           400         20         13         176         217         150         13         176         150  |               |                          |                           | 200                         | 41                     | 535         |
| SRHTH         FPT         FPT         300         60         786           350         69         911           400         79         1037           400         79         1037           400         79         1037           1/2"         3/4"         150         35         463           200         46         605         200         46         605           350         79         1031         400         89         1173           350         79         1031         400         89         1173           400         89         1173         250         57         747           FPT         1"         FPT         350         79         1031           400         89         1173         350         79         1031           400         89         1173         350         79         1031           400         89         1173         200         13         176           350         79         1031         176         350         23         300           400         20         13         176         350         48   |               | 1/2"                     | 3/4"                      | 250                         | 50                     | 661         |
| SRH1         1/2"<br>FPT         3/4"<br>FPT         1/50         35         463           3/4"         150         35         463           200         46         605           200         68         889           350         79         1031           400         89         1173           350         79         1031           400         89         1173           350         57         747           58H2         1/2"         1"           1/2"         1"         150         35           463         200         46         605           350         79         1031           400         89         1173           350         79         1031           400         89         1173           350         79         1031           400         89         1173           50         10         135           200         13         176           350         23         300           400         26         341           50         220         28           350   |               | FPT                      | FPT                       | 300                         | 60                     | 786         |
| SRH1         1/2"         3/4"         150         35         463           1/2"         3/4"         150         35         463           200         46         605           250         57         747           300         68         889           350         79         1031           400         89         1173           400         89         1173           400         89         1173           1/2"         1"         150         35         463           200         46         605         57         747           12"         1"         150         35         463           200         46         605         57         747           58         350         79         1031         10           400         89         1173         250         57         747           SRH3         3/4"         1"         1"         250         17         217           FPT         1"         FPT         300         20         259         350         23         300           SRH3         3/4"         1"  |               |                          |                           | 350                         | 69                     | 911         |
| SRH1         1/2"<br>FPT         3/4"<br>FPT         150         35         463           200         46         605         250         57         747           BPT         FPT         FPT         300         68         889         350         79         1031           400         89         1173         400         89         1173           400         89         1173         150         35         463           200         46         605         200         46         605           200         46         605         200         46         605           200         46         605         79         1031           400         89         1173         400         89         1173           3/4"         1"         FPT         150         10         135           200         13         176         250         17         217           SRH3         3/4"         1"         FPT         150         22         284           200         28         371         250         35         458           3/4"         FPT         FPT         150  |               |                          |                           | 400                         | 79                     | 1037        |
| SRH1         1/2"<br>FPT         3/4"<br>FPT         200         46         605           250         57         747           300         68         889           350         79         1031           400         89         1173           400         89         1173           400         89         1173           400         89         1173           400         89         1173           1/2"         1"         150         35         463           200         46         605         25         57         747           58         79         1031         400         89         1173           400         89         1173         400         89         1173           58         3/4"         1"         150         10         135           3/4"         1"         FPT         300         20         259           350         23         300         400         22         284           200         28         371         250         35         458           50         48         632         463         200 </th <td rowspan="6">SRH1</td> <td></td> <td rowspan="5">3/4"<br/>FPT</td> <td>150</td> <td>35</td> <td>463</td>  | SRH1          |                          | 3/4"<br>FPT               | 150                         | 35                     | 463         |
| SRH1         1/2"<br>FPT         3/4"<br>FPT         250         57         747           SRH2         FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         400         89         1173           3RH2         1/2"         1"         150         35         463           200         46         605         250         57         747           FPT         FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         400         89         1173           3/4"         1"         FPT         500         13         176           200         13         176         250         17         217           SRH3         3/4"         1"         FPT         300         20         259           350         23         300         400         26         341           50         250         35         458         56  |               |                          |                           | 200                         | 46                     | 605         |
| SRH2         FPT         FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         400         89         1173           1/2"         1"         150         35         463           200         46         605         57         747           FPT         FPT         550         57         747           100         68         889         350         79         1031           400         89         1173         300         68         889           3/4"         FPT         FPT         300         68         889           3/4"         1"         FPT         300         13         176           200         13         176         200         13         176           3/4"         1"         FPT         300         20         259         350         23         300           3/4"         1"         FPT         500         21         284         200         22         284         200         20         35         458         350<   |               | 1/2"                     |                           | 250                         | 57                     | 747         |
| SRH2         350         79         1031           400         89         1173           400         89         1173           400         89         1173           1/2"         1"         150         35         463           200         46         605         57         747           FPT         FPT         50         57         747           300         68         889         350         79         1031           400         89         1173         10         135           300         68         1173         100         135           300         20         259         350         23         300           300         20         259         350         23         300           400         26         341         11         250         35         458           FPT         FPT         11"         250         35         458           300         41         545         350         463           3/4"         1"         FPT         300         46         605           3/4"         1"         FPT   |               | FPT                      |                           | 300                         | 68                     | 889         |
| SRH2         1/2"         1/2"         1"         150         35         463           1/2"         1"         150         35         463           200         46         605           250         57         747           FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         10         135         200         13         176           3/4"         1"         FPT         550         17         217         217           SRH3UR         3/4"         1"         FPT         300         20         259           350         23         300         400         26         341           3/4"         1"         FPT         300         41         545           350         48         632         400         55         718           3/4"         1"         FPT         150         35         463           200         46         605         22         284         200         35         463           3/4"         1" <td></td> <td>350</td> <td>79</td> <td>1031</td>   |               |                          |                           | 350                         | 79                     | 1031        |
| SRH2         1/2"<br>FPT         1/2"<br>FPT         1"<br>FPT         150         35         463           200         46         605         250         57         747           300         68         889         350         79         1031           400         89         1173         400         89         1173           3/4"         1"         250         17         217           50         10         135         200         13         176           200         13         176         250         17         217           7         50         23         300         400         26         341           7         FPT         150         22         284         200         28         371           3/4"         1"         FPT         150         25         718         350         458           350         48         632         350         463         200         466         605           350         48         632         350         463         200         466         605         35           SRH3         3/4"         1"         FPT         <  |               |                          |                           | 400                         | 89                     | 1173        |
| SRH2         1/2"<br>FPT         1/2"<br>FPT         1"<br>FPT         200         46         605           250         57         747           300         68         889           350         79         1031           400         89         1173           400         89         1173           3/4"         1"         200         13         176           200         13         176         200         13         176           3/4"         1"         FPT         300         20         259           350         23         300         400         26         341           58         11"         FPT         150         22         284           200         28         371         250         35         458           8         632         400         55         718           350         48         632         400         55         718           364         1"         FPT         150         35         463           200         46         605         35         463         350           374"         1"         FPT </th <th></th> <td></td> <td rowspan="2"></td> <td>150</td> <td>35</td> <td>463</td>   |               |                          |                           | 150                         | 35                     | 463         |
| SRH2         1/2"<br>FPT         1"<br>FPT         250         57         747           FPT         FPT         300         68         889           350         79         1031           400         89         1173           400         89         1173           3/4"         1"         200         13         176           200         13         176         200         13         176           3/4"         1"         FPT         300         20         259           350         23         300         400         26         341           58         340         150         22         284           200         28         371         250         35         458           3/4"         1"         250         35         458           350         48         632         400         55         718           3/4"         1"         FPT         300         46         605           350         48         632         400         55         718           3/4"         1"         FPT         300         68         889 <tr< th=""><th></th><td></td><td>200</td><td>46</td><td>605</td></tr<>  |               |                          |                           | 200                         | 46                     | 605         |
| SRH3UR         FPT         FPT         300         68         889           350         79         1031           400         89         1173           400         89         1173           3/4"         1"         200         13         176           200         13         176         217         217           SRH3UR         FPT         FPT         500         20         259           350         23         300         400         26         341           SRH3R         A4"         FPT         FPT         150         22         284           200         28         371         250         35         458           SRH3R         FPT         FPT         FPT         300         41         545           350         48         632         400         55         718           SRH3         3/4"         1"         FPT         150         35         463           200         46         605         20         57         747           FPT         FPT         FPT         300         68         889           350         7   | SBH2          | 1/2"                     | 1"                        | 250                         | 57                     | 747         |
| SRH3UR         3/4"<br>FPT         1"<br>FPT         1"<br>FPT         150         10         135           3/4"         1"<br>FPT         1"<br>FPT         200         13         176           300         200         13         176           200         13         176           200         13         176           200         13         176           200         23         300           400         26         341           1         150         22         284           200         28         371           250         35         458           300         41         545           350         48         632           400         55         718           350         48         632           400         55         718           350         46         605           200         46         605           200         46         605           200         46         605           350         79         1031           400         89         1173           350         79  |               | FPT                      | FPT                       | 300                         | 68                     | 889         |
| SRH3UR         3/4"         1"         150         10         135           3/4"         1"         200         13         176           200         13         176         217           200         20         259         350         23         300           360         26         341         340         26         341           Autor         26         341         340         200         28         371           374"         1"         FPT         150         22         284           200         28         371         250         35         458           371         250         35         458         350         48         632           400         55         718         350         48         632         400         55         718           3/4"         1"         FPT         FPT         300         68         889         350         718           3/4"         1"         1"         150         35         463         200         46         605           3/4"         1"         1"         150         35         747         35  |               |                          |                           | 350                         | 79                     | 1031        |
| SRH3UR         3/4"<br>FPT         1"<br>FPT         150         10         135           3/4"         1"<br>FPT         200         13         176           200         13         176           200         13         176           200         20         259           350         23         300           400         26         341           3/4"         1"         150         22         284           200         28         371         250         35         458           3/4"         1"         FPT         300         41         545           350         48         632         400         55         718           3/4"         1"         FPT         150         35         463           200         46         605         20         463         605           3/4"         1"         FPT         300         68         889           3/4"         1"         1"         250         57         747           8         1"         FPT         300         68         889           350         79         1031         400 </th <th>ļ</th> <td></td> <td></td> <td>400</td> <td>89</td> <td>1173</td>   | ļ             |                          |                           | 400                         | 89                     | 1173        |
| SRH3UR         3/4"<br>FPT         1"<br>FPT         200         13         176           SRH3UR         3/4"<br>FPT         1"<br>FPT         250         17         217           300         20         259         350         23         300           400         26         341         300         400         26         341           3/4"         1"         150         22         284         200         28         371           3/4"         1"         250         35         458         350         448         632           300         41         545         350         48         632         400         55         718           3/4"         1"         FPT         150         35         463         200         46         605           3/4"         1"         FPT         200         46         605         35         463           200         46         605         35         463         200         46         605           350         79         1031         400         89         1173         359         200         36         469           350         61 <th></th> <td></td> <td></td> <td>150</td> <td>10</td> <td>135</td>  |               |                          |                           | 150                         | 10                     | 135         |
| SRH3UR         3/4"<br>FPT         1"<br>FPT         250         17         217           SRH3UR         FPT         FPT         300         20         259           350         23         300         400         26         341           3/4"         1"         150         22         284           200         28         371         250         35         458           SRH3R         FPT         FPT         250         35         458           3/4"         1"         250         35         458           300         41         545         350         48         632           400         55         718         350         463         200         46         605           3/4"         1"         FPT         250         57         747         350         200         46         605           350         79         1031         400         89         1173         1400         89         1173           SRH4R         1"         FPT         1-1/4"         250         44         579           SRH4R         1"         FPT         150         27         359 </th <th></th> <td></td> <td></td> <td>200</td> <td>13</td> <td>176</td>   |               |                          |                           | 200                         | 13                     | 176         |
| SRH3R         FPT         FPT         300         20         259           350         23         300         400         26         341           3/4"         1"         150         22         284           200         28         371         200         28         371           SRH3R         3/4"         1"         250         35         458           300         41         545         350         48         632           400         55         718         350         463         632           400         55         718         200         46         605           3/4"         1"         FPT         250         57         747           SRH3         3/4"         1"         FPT         300         68         889           3/4"         1"         FPT         150         27         359           200 <th>SBH3UB</th> <td>3/4"</td> <td>1"</td> <td>250</td> <td>17</td> <td>217</td>  | SBH3UB        | 3/4"                     | 1"                        | 250                         | 17                     | 217         |
| SRH3R         3/4"         1"         350         23         300           3400         26         341         341         341         341           3/4"         1"         150         22         284           200         28         371         355         458           300         41         545         350         48         632           400         55         718         350         48         632           400         55         718         350         463         200         46         605           3/4"         1"         FPT         150         35         463         200         46         605           3/4"         1"         FPT         57         747         747           FPT         FPT         FPT         300         68         889           350         79         1031         400         89         1173           SRH4R         1"         FPT         FPT         300         52         689           350         61         799         400         69         909  |               | FPT                      | FPT                       | 300                         | 20                     | 259         |
| SRH3R         3/4"         1"         150         22         284           3/4"         1"         250         35         458           200         28         371         250         35         458           3/4"         FPT         FPT         300         41         545           350         48         632         400         55         718           3/4"         1"         150         35         463           200         46         605         200         46         605           3/4"         1"         250         57         747           FPT         FPT         300         68         889           350         79         1031         400         89         1173           SRH4R         1"         FPT         1-1/4"         250         44         579           SRH4R         1"         FPT         150         27         359           2000         36         469         250         44         579           FPT         FPT         300         52         689         350         61         799         400         69         9   |               |                          |                           | 350                         | 23                     | 300         |
| SRH3R         3/4"<br>FPT         1"<br>FPT         1"<br>FPT         150         22         284           200         28         371         200         28         371           250         35         458         300         41         545           350         48         632         400         55         718           3/4"         1"         150         35         463           200         46         605         200         46         605           3/4"         1"         250         57         747           FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         150         27         359           200         36         469         200         36         469           21"         1-1/4"         FPT         250         44         579           800         52         689         350         61         799           400         69         909         400         69         909  |               |                          |                           | 400                         | 26                     | 341         |
| SRH3R         3/4"<br>FPT         1"<br>FPT         200         28         371           SRH3R         3/4"<br>FPT         1"<br>FPT         250         35         458           300         41         545         350         48         632           400         55         718         150         35         463           3/4"         1"         150         35         463           200         46         605         200         46         605           3/4"         1"         FPT         300         68         889           3/4"         FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         150         27         359           200         36         469         200         36         469           21"         FPT         FPT         300         52         689           350         61         799         400         69         909   | SRH3R         |                          |                           | 150                         | 22                     | 284         |
| SRH3R         3/4"<br>FPT         1"<br>FPT         250         35         458           SPT         FPT         300         41         545           350         48         632           400         55         718           400         55         718           3/4"         1"         200         46         605           200         46         605         200         46         605           3/4"         1"         FPT         250         57         747           SRH3         3/4"         FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         150         27         359           200         36         469         200         36         469           1"         1-1/4"         250         44         579           SRH4R         1"         FPT         300         52         689           350         61         799         400         69         909   |               |                          |                           | 200                         | 28                     | 371         |
| FPT         FPT         300         41         545           350         48         632         400         55         718           400         55         718         200         46         605           3/4"         1"         250         57         747           SRH3         3/4"         FPT         300         68         889           350         79         1031         400         89         1173           SRH4R         1"         FPT         1-1/4"         250         36         469           1"         1-1/4"         250         44         579         300         52         689           350         61         799         400         69         909         400         69         909  |               | 3/4"                     | 1"                        | 250                         | 35                     | 458         |
| SRH3         3/4"         1"         350         48         632           350         400         55         718           3/4"         1"         150         35         463           200         46         605         250         57         747           FPT         FPT         300         68         889         350         79         1031           400         89         1173         400         89         1173           SRH4R         1"         1-1/4"         150         27         359           200         36         469         469         469           300         52         689         350         61         799           400         69         909         400         69         909  |               | FPT                      | FPT FPT                   | 300                         | 41                     | 545         |
| SRH3         3/4"         1"         150         35         718           3/4"         1"         150         35         463           200         46         605           250         57         747           300         68         889           350         79         1031           400         89         1173           400         89         1173           400         89         1173           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           300         52         689           350         61         799           400         69         909   |               |                          |                           | 350                         | 48                     | 632         |
| SRH3         3/4"         1"         150         35         463           3/4"         1"         200         46         605           250         57         747           300         68         889           350         79         1031           400         89         1173           400         89         1173           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           300         52         689           350         61         799           400         69         909   |               |                          |                           | 400                         | 55                     | 718         |
| SRH3         3/4"<br>FPT         1"<br>FPT         200         46         605           3/4"         1"         250         57         747           SRH3         FPT         FPT         300         68         889           350         79         1031           400         89         1173           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           200         36         469           350         61         799           400         69         909  |               |                          |                           | 150                         | 35                     | 463         |
| SRH3         3/4"         1"         250         57         7/47           FPT         FPT         FPT         300         68         889           350         79         1031         400         89         1173           400         89         1173         200         36         469           1"         1-1/4"         250         44         579           FPT         FPT         300         52         689           350         61         799         400         69         909  |               | 0.43                     |                           | 200                         | 46                     | 605         |
| Inable         Inable< | SRH3          | 3/4″                     | 1″                        | 250                         | 57                     | /4/         |
| SRH4R         1"<br>FPT         1-1/4"<br>FPT         1-1/4"<br>FPT         150<br>200         27<br>36         359<br>469           300         52         689         350         61         799           400         89         1173         300         52         689           350         61         799         309         350         61         799   |               | FPI                      | FPI                       | 300                         | 68                     | 889         |
| SRH4R         1"<br>FPT         1-1/4"<br>FPT         150         27         359           100         36         469         36         469           100         250         44         579           300         52         689           350         61         799           400         69         909  |               |                          |                           | 350                         | 79                     | 1031        |
| SRH4R         1"         1-1/4"         200         36         469           1"         1-1/4"         250         44         579           300         52         689           350         61         799           400         69         909  |               |                          |                           | 400                         | 89                     | 11/3        |
| SRH4R         1"<br>FPT         1-1/4"<br>FPT         200         36         469           300         52         689         350         61         799           400         69         909         909         909         909   | SRH4R         |                          |                           | 100                         | 27                     | 359         |
| SRH4R         I <thi< th="">         I         <thi< th=""> <thi< th=""></thi<></thi<></thi<>   |               | 1"                       | 1 1/4"                    | 200                         | 30                     | 409         |
| 350         52         603           350         61         799           400         69         909  |               |                          | FDT                       | 300                         | 52                     | 680         |
| 400 69 909  |               |                          |                           | 350                         | 61                     | 700         |
|   |               |                          |                           | 400                         | 69                     | 900         |
|   | SRH4          | 1"<br>FPT                | 1-1/4"<br>FPT             | 150                         | 61                     | 708         |
| 200 79 10/2   |               |                          |                           | 200                         | 79                     | 1042        |
| 1" 1-1/4" 250 100 1311  |               |                          |                           | 250                         | 100                    | 1311        |
| SRH4 FPT FPT 300 117 1530   |               |                          |                           | 300                         | 117                    | 1530        |
| 350 135 1775  |               |                          |                           | 350                         | 135                    | 1775        |
| 400   |               |                          |                           | 400                         | _                      | -           |
| 150 73 963  | SRH5          |                          |                           | 150                         | 73                     | 963         |
| 200 96 1258   |               |                          | 1-1/2"<br>FPT             | 200                         | 96                     | 1258        |
| 1-1/4" 1-1/2" 250 118 1553  |               | 1-1/4"                   |                           | 250                         | 118                    | 1553        |
| SRH5 FPT FPT 300 141 1848   |               | FPT                      |                           | 300                         | 141                    | 1848        |
| 350 163 2142  |               |                          |                           | 350                         | 163                    | 2142        |
| 400 – –   |               |                          |                           | 400                         | _                      | -           |

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#### **Dimensional Information**



Figure 2: SRH Dimensional Cross-Section

Pressure limiting devices, such as high pressure cut-outs on positive displacement compressor systems, must stop the action of the pressure imposing element at no higher than 90% of the pressure setting for the pressure relief device.

For non-positive displacement compressors, the pressure limiting device, such as a high pressure cut-out, may be set at the DWP of the high side; providing, the low side is protected by a properly sized pressure relief device set to relieve pressure at low side DWP and there are no stop valves in the system that isolate the high side from the low side. Dimensions: Inches (mm)

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| Valve  | A             | В             | с             | D          | F          |
|--------|---------------|---------------|---------------|------------|------------|
| SRH1   | 1.562<br>(40) | 2.75<br>(70)  | 5.05<br>(128) | 3/4" NPT   | 1/2" NPT   |
| SRH1R  |               |               |               |            |            |
| SRH2   |               |               |               | 1" NPT     | 3/4" NPT   |
| SRH3   |               |               |               |            |            |
| SRH3R  |               |               |               |            |            |
| SRH3UR |               |               |               |            |            |
| SRH4   |               | 4.11<br>(104) | 7.4<br>(188)  | 1-1/4" NPT | 1" NPT     |
| SRH4R  | 2.25          |               |               |            |            |
| SRH5   | (01)          |               |               | 1-1/2" NPT | 1-1/4" NPT |

Discharge piping from relief devices must not exceed specified lengths indicated in ANSI/ASHRAE 15 with discharge to atmosphere.

In order to calculate the minimum required discharge capacity of a relief device, please reference IIAR 2 for R717 or ANSI/ ASHRAE 15 for all other refrigerants.

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### Safe Operation (See Bulletin RSBCV)

People doing any work on a refrigeration system must be qualified and completely familiar with the system and the Refrigerating Specialties Division valves involved, or all other precautions will be meaningless. This includes reading and understanding pertinent Refrigerating Specialties Division Product Bulletins and Safety Bulletin RSB prior to installation or servicing work.

Where cold refrigerant liquid lines are used, it is necessary that certain precautions be taken to avoid damage which could result from liquid expansion. Temperature increase in a piping section full of solid liquid will cause high pressure due to the expanding liquid which can possibly rupture a gasket, pipe or valve. All hand valves isolating such sections should be marked, warning against accidental closing, and must not be closed until the liquid is removed. Check valves must never be installed upstream of solenoid valves, or regulators with electric shut-off, nor should hand valves upstream of solenoid valves or downstream of check valves be closed until the liquid has been removed.

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It is advisable to properly install relief devices in any section where liquid expansion could take place. Avoid all piping or control arrangements which might produce thermal or pressure shock.

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For the protection of people and products, all refrigerant must be removed from the section to be worked on before a valve, strainer, or other device is opened or removed. Flanges with ODS connections are not suitable for ammonia service.

#### Warranty

All Refrigerating Specialties products are under warranty against defects in workmanship and materials for a period of one year from date of shipment from factory. This warranty is in force only when products are properly installed, field assembled, maintained, and operated in use and service as specifically stated in Refrigerating Specialties Catalogs or Bulletins for normal refrigeration applications, unless otherwise approved in writing by the Refrigerating Specialties Division. Defective products, or parts thereof returned to the factory with transportation charges prepaid and found to be defective by factory inspection, will be replaced or repaired at Refrigerating Specialties option, free of charge, F.O.B. factory. Warranty does not cover products which have been altered, or repaired in the field, damaged in transit, or have suffered accidents, misuse, or abuse. Products disabled by dirt or other foreign substances will not be considered defective.

The express warranty set forth above constitutes the only warranty applicable to Refrigerating Specialties products, and is in lieu of all other warranties, expressed or implied, written including any warranty of merchantability, or fitness for a particular purpose, In no event is Refrigerating Specialties responsible for any consequential damages of any nature whatsoever. No employee, agent, dealer or other person is authorized to give any warranties on behalf of Refrigerating Specialties, any other liability in connection with any of its products.

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