

SPIR STAR relief values are made to the highest quality standards and thus achieve high safety and a long service life even under difficult operating conditions.

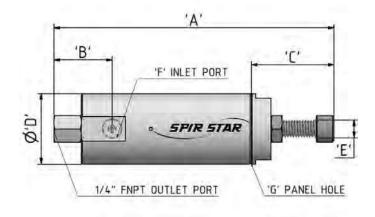
The valves can be used with both gaseous and liquid media.

All relief valves are manually adjustable.

| Material:                 | Body: 316 Stainless Steel |
|---------------------------|---------------------------|
| Max. Working<br>Pressure: | 1.380 bar // 20.000 psi   |
| Temperature:              | -45°C bis +150°C          |

IN: 2x High-Pressure Female; OUT: 1x NPT Female

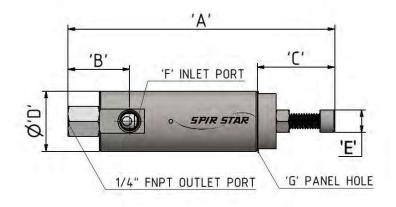




| Part Number | Thre   | ead    | Thread      | Tub    | e Thread | Scre | w-in Threa | d | Orifice |   | Repair |            | Suita | able |
|-------------|--------|--------|-------------|--------|----------|------|------------|---|---------|---|--------|------------|-------|------|
|             | Descri | ption  | Description |        |          |      |            |   |         |   | Kit    |            | Tub   | oing |
|             |        |        |             |        |          |      |            |   |         |   |        |            |       |      |
| SS-20RV-FA  | HF     | 4      | NF4         | I/4"x2 | 8UNF LH  | 9/16 | 6"x18UNF   |   | -       |   |        | TU-HP4-60K |       |      |
| Part Number | Unit   |        | Dimensions  |        |          |      |            |   |         |   |        |            |       |      |
|             |        | А      | В           | С      | DI       | D2   | E          | F | G       | н | I      | J          | к     | L    |
| SS-20RV-FA  | mm     | 191,80 | 54,10       | 42,70  | 50,80    | -    | 14,20      | - | 41,40   | - | -      | -          | -     | -    |
|             | inch   | 7,55   | 2,13        | I,68   | 2,00     | -    | 0,56       | - | I,63    | - | -      | -          | -     | -    |

IN: 2x NPT IG; OUT: 1x NPT IG





| Part Number | Thre<br>Descri |        | Thread<br>Description | Tube  | e Thread | Scre | w-in Threa | d | Orifice |   |     |   |   |   | Suita<br>Tub |  |
|-------------|----------------|--------|-----------------------|-------|----------|------|------------|---|---------|---|-----|---|---|---|--------------|--|
| SS-IORV-FA  | NF             | 4      | NF4                   |       |          |      | I/4"       |   |         | - |     |   |   |   |              |  |
| Part Number | Unit           |        | Dimensions            |       |          |      |            |   |         |   |     |   |   |   |              |  |
|             |                | А      | В                     | С     | DI       | D2   | E          | F | G       | н | I I | J | к | L |              |  |
| SS-IORV-FA  | mm             | 132,60 | 39,60                 | 26,90 | 38,10    | -    | 14,20      | - | 35,10   | - | -   | - | - | - |              |  |
|             | inch           | 5,22   | I,56                  | 1,06  | I,50     | -    | 0,56       | - | I,38    | - | -   | - | - | - |              |  |



SPIR STAR Double Block and Bleed valves are available on special requests with the following specifications.

| Thread Types:          | High-Pressure, Medium-Pressure und NPT   |
|------------------------|--|
| Valve Types:           | Needle x Needle<br>Ball x Needle x Ball  |
| Material:              | Body: 316 Stainless Steel<br>Stem: 17-4PH<br>Sealing: O-Ring with PEEK Backup Ring |
| Max. working pressure: | 1.380 bar // 20.000 psi  |
| Temperature:           | -28°C bis +315°C   |



## Manifold



In order to offer maximum safety even when space is very limited, SPIR STAR can also supply block valves and manifolds from its product range upon request.

The reduction of potential leakage and of the number of screwed connections to a minimum are the highlights of this type of valves. In addition, the time needed for installation is significantly reduced.

| Thread Types:             | High Pressure, Medium Pressure and NPT |
|---------------------------|--|
| Material:                 | Body: 316 Edelstahl                    |
| Max. Working<br>Pressure: | 4.140 bar // 60.000 psi                |
| Temperature:              | -17°C bis +315°C                       |
| Length:                   | Max. 1143mm                            |





# Tubing



The high-pressure tubing made by SPIR STAR, which can be used in pressure ranges of up to 4,140 bar / 60,000 psi, has a standard length of 6 m. It is seamless-drawn from stainless steel, thanks to which it achieves its high quality and safety. Besides the standard lengths, SPIR STAR also offers the tubing cut to shorter lengths. The tubing can also be provided with a straight thread and extl. cone, if required.

| Standard Length:          | 6m                             |
|---------------------------|--------------------------------|
| Tubing Types:             | High Pressure, Medium Pressure |
| Material:                 | 316 Stainless Steel            |
| Max. Working<br>Pressure: | 4.140 bar // 60.000 psi        |
| Temperature:              | -252°C bis +649°C              |

| Part Number | Size  | max. working pressure |        |       | ID    | Wall<br>Thickness | Weight |
|-------------|-------|-----------------------|--------|-------|-------|-------------------|--------|
| Tube        | Inch  | Bar                   | PSI    | mm    | mm    | mm                | kg/m   |
| TU-MP4-20K  | I/4"  | I.380                 | 20.000 | 6.35  | 2.77  | 1.79              | 0.21   |
| TU-HP4-60K  | 1/4"  | 4.140                 | 60.000 | 6.35  | 2.11  | 2.12              | 0.23   |
| TU-MP6-20K  | 3/8"  | 1.380                 | 20.000 | 9.53  | 5.16  | 2.18              | 0.4    |
| TU-HP6-60K  | 3/8"  | 4.140                 | 60.000 | 9.53  | 3.18  | 3.18              | 0.51   |
| TU-MP9-20K  | 9/16" | 1.380                 | 20.000 | 14.29 | 7.92  | 3.18              | 0.89   |
| TU-HP9-60K  | 9/16" | 4.140                 | 60.000 | 14.29 | 4.78  | 4.76              | 1.14   |
| TU-MPI2-20K | 3/4"  | 1.380                 | 20.000 | 19.05 | 11.13 | 3.96              | 1.5    |
| TU-MP16-20K | "     | 1.380                 | 20.000 | 25.4  | 14.27 | 5.56              | 2.77   |

| Tolerances   |            |            |            |            |  |  |  |  |  |  |
|--------------|------------|------------|------------|------------|--|--|--|--|--|--|
| Part Number  | max.<br>OD | min.<br>OD | max.<br>ID | min.<br>ID |  |  |  |  |  |  |
| Tube         | mm         | mm         | mm         | mm         |  |  |  |  |  |  |
| TU-MP4-20K   | 6.30       | 6.17       | 2.77       | 2.64       |  |  |  |  |  |  |
| TU-HP4-60K   | 6.30       | 6.17       | 2.11       | 2.01       |  |  |  |  |  |  |
| TU-MP6-20K   | 9.40       | 9.27       | 5.16       | 5.03       |  |  |  |  |  |  |
| TU-HP6-60K   | 9.40       | 9.27       | 3.18       | 3.07       |  |  |  |  |  |  |
| TU-MP9-20K   | 14.15      | 14.02      | 7.92       | 7.80       |  |  |  |  |  |  |
| TU-HP9-60K   | 14.15      | 14.02      | 4.75       | 4.62       |  |  |  |  |  |  |
| TU-MPI 2-20K | 18.92      | 18.80      | 11.13      | 10.97      |  |  |  |  |  |  |
| TU-MPI6-20K  | 25.27      | 25.15      | 14.27      | 14.15      |  |  |  |  |  |  |

