ball
valves
The **standard Legris ball valve** provides a reliable means of opening and closing fluid systems. It requires a simple quarter turn of the handle to operate the two-way version, or a 180° turn for the three-way version. In the closed position, the pressure of the fluid presses the ball against the seal, further ensuring the integrity of the seal. In principle, the higher the pressure, the better the seal.

**Reliability:**
- the ball is sealed on both sides by graphite impregnated rilsan seals which are supported by perbunan compensating “O” rings. This ensures that the seal remains in contact with the ball at all times thus extending the life of the ball valve by preventing leakage should seal wear occur.
- the stem is firmly secured within a square insert on the ball and is sealed by an “O” ring.

In order to meet industry’s requirements, Legris offers three other series of ball valves in addition to its standard range:
- **light series**, for low pressure applications
- **fluoropolymer series**, for maximum working temperature
- **stainless steel series**, for use with corrosive fluids and aggressive environments

---

### technical specifications

<table>
<thead>
<tr>
<th>working fluids</th>
<th>see application table on pages R20 to R23</th>
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<tr>
<td>working pressure</td>
<td>290 to 580 psi according to the model</td>
</tr>
<tr>
<td>working temperature</td>
<td>-4° to 175°F</td>
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<tr>
<td>maximum tightening torque of ball valves, standard range</td>
<td>thread</td>
</tr>
<tr>
<td>in. lb</td>
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</tr>
<tr>
<td></td>
<td>thread</td>
</tr>
<tr>
<td>in lb.</td>
<td>4.40 to 6.20</td>
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principal advantages

standard ball valves

wide range

- various porting configurations: in-line, right angled, 2-way, 3-way
- additional features: vented, panel mounting, lockable, compression connection...
- large range of bore sizes from 4 to 50mm
- threaded connections from G1/8 to G2

high performance

- full sealing due to compensating “O” rings
- smooth operation due to low friction coefficient of chemically nickel-plated brass
- excellent resistance to scaling due to ball seal configuration

long life

- **Legris ball valves** provide many thousands of trouble free operations due to the “O” rings compensating for seal wear.

additional models to meet industry’s requirements

- **semi-standard** ball valves, for special applications
- **light series** ball valves, for low pressure applications
- **fluoropolymer series** ball valves, for maximum working temperature
- **stainless steel series** ball valves, for corrosive fluids and aggressive environments
ball valves
**the complete range of ball valves**

### general purpose ball valves

<table>
<thead>
<tr>
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<td>R6</td>
</tr>
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<td>0492</td>
<td>R6</td>
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<td>0491</td>
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<td>R6</td>
</tr>
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<td>R7</td>
</tr>
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### vented ball valves

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<td>R15</td>
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<td>7915/7914</td>
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### lockable ball valves

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### universal series

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<td>0497</td>
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</tr>
<tr>
<td>0496</td>
<td>R21</td>
</tr>
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</table>
This economy ball valve is designed for use where there is a requirement for medium pressure. For industrial fluids – air, water and oil.

**Technical Specifications**

- **Working Pressure**: 150 psi
- **Working Temperature**: to 200°F
- **Materials of Construction**:
  - Body: nickel-plated brass
  - Ball: brass UNI 5705-65
  - Stem: brass UNI 5705-65
  - Handle: nylon +15% glass filled
  - Seal/stem seals: PTFE

**Light Series Ball Valves**

Light series ball valves allow the passage of many fluids and are suited to high pressures and temperatures. Their materials of construction are the same as for the standard range.

**Technical Specifications**

- **Maximum Working Pressure**: 175 psi
- **Maximum Temperature**: 175°F

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**4982 double female — NPT thread**

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<thead>
<tr>
<th>C</th>
<th>NPT</th>
<th>Orifice</th>
<th>L</th>
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<tr>
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**Silicon Free**

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**0492 double female — BSPP thread**

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**0491 male and female — BSPP thread**

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**0490 double male — BSPP thread**

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These valves are designed for use where there is a requirement for medium pressure and when the fluid carried requires fluoropolymer seals. It is full-bore and is suitable for many applications, being both high quality and economical.

**4962 double female — NPT thread**

<table>
<thead>
<tr>
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<td>6.89</td>
<td>3.54</td>
<td>2.64</td>
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**technical specifications**
- working pressure: 600 psi
- working temperature: to 320°F
- materials of construction:
  - body: brass UNI 5705-65
  - ball: brass UNI 5705-65
  - stem: brass UNI 5705-65
  - handle: plated steel
  - seal/stem seals: PTFE

**4902 double female — BSPP thread**

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<th>E (mm)</th>
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<tr>
<td>G1&quot;1/2</td>
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<td>22</td>
<td>66</td>
<td>95</td>
<td>113</td>
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</tbody>
</table>

**technical specifications**
- working temperature: -4° to 300°F
- materials of construction:
  - body: sand blasted and nickel plated
  - ball: nickel plated and chromed brass
  - stem: nickel-plated brass
  - handle: blue plastic coated steel
  - ball seals and stem seals: fluoropolymer PTFE

**Identification**
Part numbers have been chosen by a method of mnemonics. Each valve is identified by:
- its series
- the diameter of passage through the valve
- the thread code

**Example**

```
4962  60  18
```
In certain situations, there is a requirement for stopping fluid circulation and venting the circuit. Therefore Legris offers 2 types of in-line vented ball valves:

- **with threaded exhaust**, to allow discharge of downstream medium.
- **with pin-hole vent**, for applications with no special discharge requirement.

Fluid flow direction is indicated by an arrow on the valve body.
0489 double female vented ball valve — NPT thread

<table>
<thead>
<tr>
<th>C</th>
<th>F</th>
<th>F1</th>
<th>H</th>
<th>H1</th>
<th>H2</th>
<th>L</th>
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maximum working pressure: 580 psi

0489 double female vented ball valve — BSPP thread

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<th>H</th>
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</table>

maximum working pressure: 580 psi

0449 double female ball valve, panel mountable — BSPP thread

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maximum working pressure: 290 psi

0469 double female vented ball valve — BSPP thread

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</table>

maximum working pressure: 580 psi
**Legris lockable ball valves** have been developed in order to prevent potentially dangerous consequences caused by unintended operation. Lockable in different positions, this range meets international safety requirements, such as ISO 4414.

Lockable ball valves feature a plate fixed to the valve body and a plate attached to the valve stem. When the plates are padlocked together, the valve handle cannot be moved.

The valves are lockable:
- **in both open and closed position**, by one padlock: models 0432 and 0439
- **only in the closed position** by up to three padlocks: models 0437 and 0438.

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**0432 in-line double female — BSPP thread**

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</table>

Maximum service pressure: 580 psi

Handle is non-removable

---

**0438 female 3 way lockable ball valve sand blasted nickel-plated body — BSPP thread**

<table>
<thead>
<tr>
<th>C</th>
<th>E</th>
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<th>F1</th>
<th>H</th>
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<th>L1</th>
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Maximum working pressure: 290 psi

These valves are lockable in the closed position only.

Right angle ported ball allows flow:
- Port 1 to port 2 of from port 2 to port 3

Valve open: 1
Valve closed: 3

Supply: 2
Vent: 2

Removable handle: where the handle is obstructed in its movement it can be refitted opposite the original position.
lockable ball valves

0499  double female lockable vented ball valve — NPT thread

These ball valves are OSHA approved.

0439  double female with vent — BSPP thread

Both fixed and moveable plates are zinc-plated steel.

0437  in-line double female vented lockable ball valve — BSPP thread

Locking plates are zinc-plated steel.
Stainless steel series ball valves are designed for use with corrosive fluids and in aggressive environments. Full bore, their 3-piece construction allows the valve to be disassembled laterally, to facilitate maintenance. They are suitable for higher pressure and temperature applications.

- **materials of construction:**
  - body, ball, ports, stem: stainless steel AISI 316
  - handle, lock washer, stop pin: stainless steel AISI 304
  - nuts, packing washer: stainless steel AISI 303
  - screw: stainless steel AISI 305
  - ball seal, stem seal, anti-friction washer: PTFE
  - "O" ring: FKM

**4832** 3 piece double female with lateral dismantling — BSPP thread

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**compact stainless steel ball valves**

Designed for use with many aggressive and corrosive fluids at pressures not exceeding 290 psi.

- **materials of construction:**
  - body, ball, ports, stem: stainless steel 18/10
  - handle: nickel-plated brass
  - "O" ring, stem seal, ball seal: PTFE

**0465** double female — BSPP thread

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<th>F (mm)</th>
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<th>H (mm)</th>
<th>L (mm)</th>
<th>øD (mm)</th>
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<td>62 .32</td>
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</table>
Stainless steel series ball valves are designed for use with corrosive fluids and in aggressive environments. Full bore and of one piece construction in stainless steel AISI 316, they are suited to higher pressure and high temperature applications. Therefore they can be used for a wide range of industrial applications.

- **Materials of construction:**
  - Body, ball, ports, stem: stainless steel AISI 316
  - Handle, lock washer, stop pin: stainless steel AISI 304
  - Nuts, gland seal: stainless steel AISI 303
  - Ball seal, stem seal, anti-friction washer: PTFE
  - “O” ring: viton

### Pressure and Temperature Resistance of Stainless Steel Series Valves 4813 and 4810

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<td>29.98</td>
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### 4813 Double Female — NPT Thread

### 4810 Double Female — BSPP Thread
check valves – stainless steel

Operation: a stainless steel valve blocks the fluid passage, when the pressure differential is lower than 3.6 psi.
Connection is by use of an allen key, upstream of the circuit.

<table>
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<tr>
<th>Working pressure</th>
<th>7 to 580 psi</th>
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<tr>
<td>Working temperature</td>
<td>-4° to +360°F</td>
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<table>
<thead>
<tr>
<th>Model</th>
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<tr>
<td>1/4</td>
<td>0.70 scfm</td>
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4895 unidirectional, double-female – NPT

4890 unidirectional, double-female – BSPP

4891 unidirectional, male/female – BSPP

4892 unidirectional, female/male – BSPP

On request, we can provide you with male/female models with NPT threads and other types of seals (nitrile, EPDM, FDA).
**mini ball valves**

**7913 3/2, with vent, with push-to-connect ports**

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<th>OD in</th>
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<th>H</th>
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**7915 3/2, with vent, with male NPT thread and push-to-connect ports**

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**7914 3/2, with vent, with male BSP parallel thread and push-to-connect ports**

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**7910 2/2, with push-to-connect ports**

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**7911 2/2, with male BSP parallel thread and push-to-connect ports**

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<td>G1/8</td>
<td>7911 06 10</td>
<td>13</td>
<td>37</td>
<td>14</td>
<td>22</td>
<td>62</td>
<td>37</td>
</tr>
<tr>
<td>8</td>
<td>G1/4</td>
<td>7911 08 13</td>
<td>16</td>
<td>37</td>
<td>17.5</td>
<td>22</td>
<td>61</td>
<td>35</td>
</tr>
<tr>
<td>10</td>
<td>G3/8</td>
<td>7911 10 17</td>
<td>20</td>
<td>43</td>
<td>22</td>
<td>30</td>
<td>74</td>
<td>41</td>
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<tr>
<td>12</td>
<td>G1/2</td>
<td>7911 12 21</td>
<td>24</td>
<td>43</td>
<td>26</td>
<td>30</td>
<td>75</td>
<td>42</td>
</tr>
</tbody>
</table>

To join the mini ball valves together, use the clips on pg B17. For more information on the mini ball valves, refer to pages B24 - B25.
Based on its successful standard range, Legris has developed a range of semi-standard ball valves in order to satisfy specific customer applications.

Six versions cover virtually all requirements for different types of fluids. Technical specifications are shown in the chart below.

suffixes:

A color coded band on the handle identifies each semi-standard version.

<table>
<thead>
<tr>
<th>semi-standards</th>
<th>identification</th>
<th>body</th>
<th>handle</th>
<th>ball</th>
<th>stem seal and compensating “O” ring</th>
<th>ball seal</th>
<th>examples of applications (refer to the usage table for working conditions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Part number suffix</td>
<td>color band on handle</td>
<td>nickel-plated brass</td>
<td>chemically nickel-plated brass</td>
<td>nickel-plated brass</td>
<td>chemically nickel-plated brass</td>
<td>ethylene propylene</td>
</tr>
<tr>
<td>20</td>
<td>402</td>
<td>13</td>
<td>21</td>
<td>22</td>
<td>for hydrocarbons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for slightly aggressive fluids and high temperatures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for aggressive liquids or high temperatures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for slightly aggressive fluids and/or not very aggressive environments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for oxygen gas circuits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for water and steam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* degreased
** grease compatible with oxygen

example of numbering systems for semi-standard ball valves

0402 13 21 22

type of ball valve
diameter of passage
thread code
reference number of semi-standard valve
### 0402 double female — BSPP thread

![Image](image1.png)

- **Sand blasted nickel-plated brass body**
- **Maximum working pressure:** 580 psi

### 0446 double female panel mounted — BSPP thread

![Image](image2.png)

- **Sand blasted nickel-plated brass body**
- **Maximum working pressure:** 290 psi
  for model G 1/8, maximum panel thickness = 3 mm (.118 in)

### 0401 male female — BSPP thread

![Image](image3.png)

- **Sand blasted nickel-plated brass body**
- **Maximum working pressure:** 580 psi

### 0400 double male — BSPP thread

![Image](image4.png)

- **Sand blasted nickel-plated brass body**
- **Maximum working pressure:** 580 psi

### Standard In-line Ball Valves

<table>
<thead>
<tr>
<th>C</th>
<th>H1</th>
<th>J</th>
<th>L1</th>
<th>M</th>
<th>T</th>
<th>E (mm)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4</td>
<td>400 04 04 10</td>
<td>14 35 29 14 45 25 48</td>
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<td></td>
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<tr>
<td>0401</td>
<td>7</td>
<td>0401 07 10</td>
<td>19 38 31 9 53 28 48</td>
<td>.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0402</td>
<td>10</td>
<td>0402 10 17</td>
<td>24 45 43 59 31 69</td>
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<td></td>
<td></td>
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<tr>
<td>0403</td>
<td>13</td>
<td>0403 13 21</td>
<td>27 47 44 27 66 34 69</td>
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<td></td>
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<tr>
<td>0404</td>
<td>16</td>
<td>0404 16 27</td>
<td>38 63 54 39 79 39 108</td>
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<td></td>
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<table>
<thead>
<tr>
<th>C</th>
<th>H1</th>
<th>J</th>
<th>L1</th>
<th>M</th>
<th>T</th>
<th>E1 (mm)</th>
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</thead>
<tbody>
<tr>
<td>0400</td>
<td>7</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>15</td>
<td>18</td>
</tr>
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</table>

**Length of female threads (E)** and male BSPP threads (E1)

<table>
<thead>
<tr>
<th>E</th>
<th>E1</th>
</tr>
</thead>
<tbody>
<tr>
<td>0402 - 0446 - 0401 and 0400</td>
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</tr>
</tbody>
</table>
**0472 double female — BSPP thread**

<table>
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<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>kg</th>
</tr>
</thead>
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<tr>
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<td>0472</td>
<td>04</td>
<td>10</td>
<td>14</td>
<td>35</td>
<td>29</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>G1/8</td>
<td>6</td>
<td>0472</td>
<td>06</td>
<td>10</td>
<td>19</td>
<td>38</td>
<td>31</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>G1/4</td>
<td>6</td>
<td>0472</td>
<td>06</td>
<td>13</td>
<td>19</td>
<td>38</td>
<td>31</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>G3/8</td>
<td>9</td>
<td>0472</td>
<td>09</td>
<td>17</td>
<td>24</td>
<td>45</td>
<td>43</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>G1/2</td>
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<td>0472</td>
<td>12</td>
<td>21</td>
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</tr>
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<td>0472</td>
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<td>27</td>
<td>38</td>
<td>59</td>
<td>51</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td>G1&quot;</td>
<td>23</td>
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<td>63</td>
<td>55</td>
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</table>

Maximum working pressure: 290 psi

---

**0462 double female with vent — BSPP thread**

<table>
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<tr>
<th>C</th>
<th>F</th>
<th>H</th>
<th>H1</th>
<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1/8</td>
<td>6</td>
<td>0462</td>
<td>06</td>
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<td>19</td>
<td>38</td>
<td>31</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>G1/4</td>
<td>6</td>
<td>0462</td>
<td>06</td>
<td>13</td>
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<td>24</td>
<td>22</td>
</tr>
<tr>
<td>G3/8</td>
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<td>45</td>
<td>43</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>G1/2</td>
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<td>0462</td>
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<td>21</td>
<td>27</td>
<td>47</td>
<td>44</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>G3/4</td>
<td>18</td>
<td>0462</td>
<td>18</td>
<td>27</td>
<td>38</td>
<td>59</td>
<td>51</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td>G1&quot;</td>
<td>23</td>
<td>0462</td>
<td>23</td>
<td>34</td>
<td>46</td>
<td>63</td>
<td>55</td>
<td>47</td>
<td>48</td>
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</table>

Maximum working pressure: 290 psi

---

**0471 male and female — BSPP thread**

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<th>H</th>
<th>H1</th>
<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4</td>
<td>0471</td>
<td>04</td>
<td>10</td>
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<td>0471</td>
<td>06</td>
<td>10</td>
<td>19</td>
<td>38</td>
<td>31</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>G1/4</td>
<td>6</td>
<td>0471</td>
<td>06</td>
<td>13</td>
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<td>G1/2</td>
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<td>G3/4</td>
<td>18</td>
<td>0471</td>
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<td>59</td>
<td>51</td>
<td>37</td>
<td>39</td>
</tr>
<tr>
<td>G1&quot;</td>
<td>23</td>
<td>0471</td>
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<td>46</td>
<td>63</td>
<td>55</td>
<td>44</td>
<td>48</td>
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</table>

Maximum working pressure: 290 psi

---

**0461 male and female with vent — BSPP thread**

<table>
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<th>H</th>
<th>H1</th>
<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1/8</td>
<td>6</td>
<td>0461</td>
<td>06</td>
<td>10</td>
<td>19</td>
<td>38</td>
<td>31</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>G1/4</td>
<td>6</td>
<td>0461</td>
<td>06</td>
<td>13</td>
<td>19</td>
<td>38</td>
<td>31</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
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<td>17</td>
<td>24</td>
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<tr>
<td>G1/2</td>
<td>12</td>
<td>0461</td>
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<td>47</td>
<td>44</td>
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</tr>
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<td>G3/4</td>
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<td>59</td>
<td>51</td>
<td>37</td>
<td>39</td>
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</table>

Maximum working pressure: 290 psi

---

<table>
<thead>
<tr>
<th>Thread length (E) and BSP parallel</th>
<th>male thread (E1) for 0472 - 0462 - 0471 and 0461</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
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</tr>
<tr>
<td>E (mm)</td>
<td>8</td>
</tr>
<tr>
<td>E1 (mm)</td>
<td>7</td>
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</tbody>
</table>
### 0482 female right angled porting — BSPP thread

<table>
<thead>
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<th>H1</th>
<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>T</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1/8</td>
<td>4</td>
<td>0482 04 10</td>
<td>14</td>
<td>35</td>
<td>29</td>
<td>18</td>
<td>14</td>
<td>44</td>
<td>25</td>
<td>48</td>
</tr>
<tr>
<td>G1/4</td>
<td>6</td>
<td>0482 06 13</td>
<td>19</td>
<td>38</td>
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<td>24</td>
<td>22</td>
<td>53</td>
<td>28</td>
<td>48</td>
</tr>
<tr>
<td>G3/8</td>
<td>9</td>
<td>0482 09 17</td>
<td>24</td>
<td>45</td>
<td>43</td>
<td>27</td>
<td>25</td>
<td>59</td>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>G1/2</td>
<td>12</td>
<td>0482 12 21</td>
<td>27</td>
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<td>40</td>
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<td>80</td>
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<td>108</td>
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<td>0482 23 34</td>
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<td>63</td>
<td>55</td>
<td>47</td>
<td>48</td>
<td>94</td>
<td>47</td>
<td>108</td>
</tr>
</tbody>
</table>

Maximum working pressure: 290 psi

*G1/8 version: maximum panel thickness = 3 mm (.118 in)*

---

### 0448 panel mountable female right angled porting — BSPP thread

<table>
<thead>
<tr>
<th>C</th>
<th>B</th>
<th>H</th>
<th>H1</th>
<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>T</th>
<th>kg</th>
</tr>
</thead>
<tbody>
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<td>0448 06 13</td>
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<td>22</td>
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</tr>
<tr>
<td>G3/8</td>
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<td>0448 09 17</td>
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<td>21</td>
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<tr>
<td>G1/2</td>
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<td>23</td>
<td>33</td>
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<td>29</td>
<td>67</td>
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</tbody>
</table>

Maximum working pressure: 290 psi

---

### 0452 panel mountable female equal plane porting — BSPP thread

<table>
<thead>
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<th>H1</th>
<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>T</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1/8</td>
<td>4</td>
<td>0452 04 10</td>
<td>14</td>
<td>23</td>
<td>39</td>
<td>10</td>
<td>8</td>
<td>16</td>
<td>18</td>
<td>44</td>
</tr>
<tr>
<td>G1/4</td>
<td>6</td>
<td>0452 06 13</td>
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<td>24</td>
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<td>11</td>
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</tr>
</tbody>
</table>

Maximum working pressure: 290 psi

---

### 0483 female right angled porting without closed position — BSPP thread

<table>
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<th>H1</th>
<th>H2</th>
<th>J</th>
<th>L</th>
<th>L1</th>
<th>M</th>
<th>T</th>
<th>kg</th>
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</thead>
<tbody>
<tr>
<td>G1/8</td>
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<td>0483 04 10</td>
<td>14</td>
<td>35</td>
<td>29</td>
<td>18</td>
<td>14</td>
<td>44</td>
<td>25</td>
<td>48</td>
</tr>
<tr>
<td>G1/4</td>
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<td>0483 09 17</td>
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<tr>
<td>G1/2</td>
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Maximum working pressure: 290 psi

---

**Length of internal BSPP thread (E)**

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<th>G1/4</th>
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standard ball valves for screw fixing

### 6402  double female — BSPP thread

**sand blasted body nickel-plated brass**

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<th>G3/8</th>
<th>G1/2</th>
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Maximum working pressure: 580 psi

### 6401  male and female — BSPP thread

**sand blasted body nickel-plated brass**

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<th>G1/2</th>
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<td>41</td>
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</table>

Maximum working pressure: 580 psi

### Different methods of mounting

- Screw fixed mounting on a metal bulkhead with handle above the bulkhead.
- Screw fixed mounting on a metal bulkhead with the complete valve below the bulkhead.
- Tapped fixing mounting onto a metal plate.
- Wood screw fixed mounting onto a wooden panel.

### Standard in-line valves with tube couplings

#### 0411  with two couplings fitted for use with steel tube — metric

**Sand blasted nickel-plated brass body**

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<th>F</th>
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<th>H</th>
<th>H1</th>
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<th>L1</th>
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<td>45</td>
<td>43</td>
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</table>

Maximum working pressure: 580 psi

#### 0414  with two couplings fitted with double taper rings — metric

**Sand blasted nickel-plated brass body**

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<th>H</th>
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<th>L</th>
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<th>M</th>
<th>T</th>
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<td>24</td>
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</table>

Maximum working pressure: 580 psi
lenticular shut-off valves

The internal component used to shut-off the flow of Legris lenticular shut-off valves is a segment of a sphere. Therefore, these valves are usable with abrasive fluids (including solid particles). Lenticular valves can only accommodate fluid flow in one direction. The fluid direction is shown by an arrow on the valve body. The main advantages of this range are low operating torque even with high fluid pressure due to small friction coefficient of lenticule on the ball seal, perfect sealing, small overall dimensions and long life.

4602 double female — BSPP thread

Technical specifications:
- Maximum working pressure: 20 psi
- Working temperature: -4° to 175°F
- Compatible fluids: compressed air, industrial gas, water, cutting oil, mineral oil, fuel, inert gases, solid particles...
- Lenticule: stainless steel
- Seals: nitrile

Light series ball valves are usable for the passage of many fluids at low pressure and temperatures. Their materials of construction are the same as for the standard series.

0497 double female with square stem — BSPP thread

0496 male and female with square stem — BSPP thread
Legris ball valves – application table

### Standard and Semi-Standard Ranges


For others part numbers please refer to the corresponding page of the catalog for working pressures. Fluids and temperatures are as shown below.

To find the maximum pressure of the valves below, with a 32mm passage, divide by 2.

#### How to find the fluid, look under:
1. First letter of the first word
2. First letter of the second word
3. In the synonym column

For the fluids, please consult us.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>SYNONYMS / USES</th>
<th>max. pressure psi</th>
<th>temperature in °F</th>
<th>standard min.</th>
<th>standard max.</th>
<th>semi-standard min.</th>
<th>semi-standard max.</th>
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<tbody>
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<td>Boi. pt</td>
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Note: because of the many specific environmental factors which might affect corrosion rate such as temperature and concentration, we would suggest that the chart be used as a rough guide to material selection and final acceptability be established by actual test under specific conditions.
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<tr>
<th>PRODUCT</th>
<th>SYNONYMS / USES</th>
<th>max. pressure psi</th>
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<td>FUEL</td>
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<td>FUEL OIL</td>
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<td>GLYCERIN</td>
<td>Glycerol Or Propanetriol</td>
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<td>Ethylene Glycol</td>
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<td>GRAPHITE (IN SUSPENSION WITH WATER,OIL,FAT)</td>
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<td>HELIUM (GAS)</td>
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<td>-4</td>
<td>140</td>
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<td>HIGH OCTANE PETROL</td>
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<td>HYDRAULIC OIL</td>
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<td>HYDROCARBONS - AROMATIC</td>
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<td>Completely Degreased Valve</td>
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<td>HYDROGEN PEROXID</td>
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<td>INK</td>
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<td>ISO-BUTANE</td>
<td>Methyl, Propane</td>
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<td>ISO-OCTANE</td>
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<td>LUBRICATING OIL</td>
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</tbody>
</table>

Note: because of the many specific environmental factors which might affect corrosion rate such as temperature and concentration, we would suggest that the chart be used as a rough guide to material selection and final acceptability be established by actual test under specific conditions.
<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>SYNONYMS / USES</th>
<th>max. pressure psi</th>
<th>temperature in °F</th>
<th>standard</th>
<th>semi-standard</th>
</tr>
</thead>
<tbody>
<tr>
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<td>max.</td>
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<td>Methanol 1</td>
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<td>Boi. pt</td>
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<td>METHYL ALCOHOL</td>
<td>Methanol</td>
<td>280</td>
<td>-4</td>
<td>Boi. pt</td>
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<tr>
<td>METHYL ALCOHOL (SOLVENT)</td>
<td>Methanol</td>
<td>280</td>
<td>-4</td>
<td>Boi. pt</td>
<td></td>
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<tr>
<td>MINERAL OIL</td>
<td>565</td>
<td>-4</td>
<td>190</td>
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<td>MINERAL PETROLEUM OIL</td>
<td>Up To 320°F</td>
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<td>NATURAL (VEGETABLE, BEES, CARNAUCA, CHINA, LIGNITE) WAXES</td>
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<td>NATURAL GAS</td>
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<td>NEON GAS NE</td>
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<td>ORDINARY WATER</td>
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<td>OXYGEN (AMBIENT TEMPERATURE)</td>
<td>Degreased</td>
<td>280</td>
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<td>PAINT AND RELEVANT SOLVENTS</td>
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<td>PARAFFIN</td>
<td>Ozokerite</td>
<td>280</td>
<td>-4</td>
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<td>-4</td>
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<td>PENTANE (LIQUID HYDROCARBON)</td>
<td>280</td>
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<tr>
<td>PENTANOLS 1 AND 2</td>
<td>Amylic Alcohol Or Methyl Butanol</td>
<td>280</td>
<td>-4</td>
<td>Boi. pt</td>
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<td>PETROLEUM</td>
<td>280</td>
<td>-4</td>
<td>105</td>
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<td>PETROLEUM FAT</td>
<td>565</td>
<td>-4</td>
<td>190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PETROLEUM OIL AND EMULSION WATER</td>
<td>565</td>
<td>-4</td>
<td>190</td>
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<tr>
<td>PHENOL (ALCOHOLIC OR AQUEOUS SOLUTION)</td>
<td>Phenic Or Carbonic Acid</td>
<td>280</td>
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<td>140</td>
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<td>PROpane</td>
<td>280</td>
<td>-4</td>
<td>140</td>
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<tr>
<td>PROPANEOLS 1 AND 2</td>
<td>Propy Alcohol And Isopropyl</td>
<td>280</td>
<td>-4</td>
<td>Boi. pt</td>
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<tr>
<td>PROPENE OR PROPYLENE</td>
<td>Various Preparations - Synthetic</td>
<td>280</td>
<td>-4</td>
<td>140</td>
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<tr>
<td>PROPYL ALCOHOL</td>
<td>Propanol</td>
<td>280</td>
<td>-4</td>
<td>Boi. pt</td>
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<tr>
<td>SAPONIFYING LIQUIDS</td>
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<td>85</td>
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<tr>
<td>SEA WATER</td>
<td>565</td>
<td>-4</td>
<td>190</td>
<td></td>
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<tr>
<td>SEA WATER - HIGH TEMPERATURE</td>
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<td>-4</td>
<td>300</td>
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<tr>
<td>SOAP</td>
<td>Liquid, Paste, Solutions</td>
<td>280</td>
<td>-4</td>
<td>105</td>
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<td>SOAP (LIQUID OR PASTE)</td>
<td>565</td>
<td>-4</td>
<td>210</td>
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<tr>
<td>SODIUM CARBONATE (WITH WATER)</td>
<td>Carbonated Water</td>
<td>280</td>
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<td>STARCH - GELS OR PASTE</td>
<td>Carbonated Water</td>
<td>565</td>
<td>50</td>
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<tr>
<td>(GLUE, COSMETICS) C6H10O5</td>
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<td>STEAM AT 150°C MAXI</td>
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<tr>
<td>SYNTHETIC OIL</td>
<td>Methyl-Benzene (Solvent,Synthetic)</td>
<td>280</td>
<td>-4</td>
<td>140</td>
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<tr>
<td>TOLUENE</td>
<td>Methyl-Benzene (Solvent,Synthetic)</td>
<td>280</td>
<td>-4</td>
<td>140</td>
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</tr>
</tbody>
</table>

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<th>temperature in °F</th>
<th>standard</th>
<th>semi-standard</th>
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<tbody>
<tr>
<td>TURPENTINE</td>
<td>Turps</td>
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<td>VARNISH AND PAINT</td>
<td>And Relevant Solvent</td>
<td>280</td>
<td>-4</td>
<td>140</td>
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<td>VASELINE</td>
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<td>565</td>
<td>-4</td>
<td>140</td>
<td>●</td>
</tr>
<tr>
<td>VASELINE OIL</td>
<td></td>
<td>565</td>
<td>-4</td>
<td>190</td>
<td>●</td>
</tr>
<tr>
<td>WATER - HIGH TEMPERATURE</td>
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<td>280</td>
<td></td>
<td>300</td>
<td>●</td>
</tr>
<tr>
<td>WATER WITH CARBONATED GAS</td>
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<td>565</td>
<td></td>
<td>190</td>
<td>●</td>
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<tr>
<td>WHITE SPIRIT</td>
<td>Mix Of Methyl</td>
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<td>-4</td>
<td>105</td>
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<td>XENON (GAS) XE</td>
<td>And Ethyl Alcohol And Acetone</td>
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<td>140</td>
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<tr>
<td>XYLENE</td>
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<td>280</td>
<td>-4</td>
<td>140</td>
<td>●</td>
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</tbody>
</table>

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