**TD16**

**Thermodynamic Steam Trap**

**Description**
The TD16 thermodynamic steam trap is specifically designed for low capacity condensate loads associated with steam mains drainage and tracing applications up to 16 bar g. Its all stainless steel construction makes it corrosion resistant and very robust.

**Standards**
The product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

**Certification**
This product is available with material certification to EN 10204 2.2.

**Note:** All certification/inspection requirements must be stated at the time of order placement.

**Sizes and pipe connections**
½", ¾" and 1" screwed BSP (BS 21 parallel) or NPT.

**Optional extras**
- **Insulating cover** - To prevent the trap being unduly influenced by excessive heat loss such as when subjected to low outside temperatures, wind, rain, etc.
- **Integral blowdown** - To remove debris from the strainer, see TI-P153-01 for further details.

**Pressure/temperature limits**

```
<table>
<thead>
<tr>
<th>Pressure bar g</th>
<th>Temperature °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>200</td>
</tr>
<tr>
<td>10</td>
<td>300</td>
</tr>
</tbody>
</table>
```

Steam saturation curve

**Body design conditions**
- PN25
- PMA Maximum allowable pressure: 25 bar g @ 300°C
- TMA Maximum allowable temperature: 300°C @ 25 bar g
- Minimum allowable temperature: 0°C
- PMO Maximum operating pressure: 16 bar g
- ΔPMN Minimum differential pressure for correct operation: 0.2 bar

**PMOB**
Maximum operating backpressure should not exceed 80% of the inlet pressure under any conditions otherwise the trap may not shut off.

- TMO Maximum operating temperature: 300°C @ 16 bar g
- Minimum operating temperature: 0°C

**Note:** For lower operating temperatures consult Spirax Sarco.

Design for a maximum cold hydraulic test pressure of 38 bar g

**Materials**

<table>
<thead>
<tr>
<th>No.</th>
<th>Part</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>Stainless steel ASTM A743 Gr. CA 40 F</td>
</tr>
<tr>
<td>2</td>
<td>Cap</td>
<td>Stainless steel AISI 416</td>
</tr>
<tr>
<td>3</td>
<td>Disc</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>4</td>
<td>Strainer screen</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>5</td>
<td>Strainer cap</td>
<td>Stainless steel AISI 416</td>
</tr>
<tr>
<td>6</td>
<td>Strainer cap gasket</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>7</td>
<td>Insulating cover (optional)</td>
<td>Aluminium</td>
</tr>
</tbody>
</table>

Local regulations may restrict the use of this product to below the conditions quoted.

*In the interests of development and improvement of the product, we reserve the right to change the specification.*

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TD16 Thermodynamic Steam Trap

**Dimensions / weights (approximate) in mm and kg**

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>E</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>½&quot;</td>
<td>41</td>
<td>78</td>
<td>55</td>
<td>85</td>
<td>20</td>
<td>52</td>
<td>57</td>
<td>38</td>
<td>0.75</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>44</td>
<td>85</td>
<td>57</td>
<td>100</td>
<td>20</td>
<td>54</td>
<td>57</td>
<td>38</td>
<td>0.95</td>
</tr>
<tr>
<td>1&quot;</td>
<td>48</td>
<td>95</td>
<td>60</td>
<td>100</td>
<td>20</td>
<td>58</td>
<td>57</td>
<td>38</td>
<td>1.50</td>
</tr>
</tbody>
</table>

**Capacities**

- **Condensate kg/h** vs. **Differential pressure bar (x 100 = kPa)**

**Spare parts**

The spare parts available are shown in heavy outline. Parts drawn in broken line are not supplied as spares.

**Available spares**

- Disc (packet of 3) 3
- Strainer screen and gasket 4, 6
- Strainer cap gasket 6
- Insulating cover 7

**How to order spares**

Always order spares by using the description given in the column headed ‘Available spares’ and state the size and type of trap.

**Example:** 1 - Strainer screen and gasket for a Spirax Sarco ½" TD16 thermodynamic steam trap.

**Safety information, installation and maintenance**

For full details see the Installation and Maintenance Instructions (IM-P151-05) supplied with the product.

**Installation note:**

The trap should preferably be installed in the horizontal plane, (top cap upper most) with a small drop leg preceding it. Suitable isolation valves must be installed to allow for safe maintenance and trap replacement.

**Disposal**

The product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

**How to order**

**Example:** 1 off Spirax Sarco ½" TD16 thermodynamic steam trap having screwed NPT connections.

**Recommended tightening torques**

<table>
<thead>
<tr>
<th>Item</th>
<th>or</th>
<th>N m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>36 A/F</td>
<td>135 - 150</td>
</tr>
<tr>
<td>5</td>
<td>32 A/F</td>
<td>M28 170 - 190</td>
</tr>
</tbody>
</table>