Bydrain
Frost Protection Liquid Expansion Trap

Description
The Spirax Sarco bydrain frost protection liquid expansion trap is made of stainless steel. It has been specifically designed for protecting water systems from frost damage. This fixed temperature discharge trap continuously monitors the water temperature in the pipes; the trap is firmly closed at 7°C, but as the temperature of the water cools to 2°C the trap opens, discharging any water in the pipe.

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

Certification
This product is available with certification to EN 10204 3.1.B. Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections
½" and ¾" screwed BSP or NPT

Limiting conditions
Body design conditions PN50, Class 300 to ANSI B 16.34
PMA - Maximum allowable pressure 41.4 bar g
TMA - Maximum allowable temperature 450°C
PMO - Maximum operating pressure 10 bar g
TMO - Maximum operating temperature 70°C
Minimum operating pressure for satisfactory operation is 0.1 bar g
ΔPMX - The backpressure for correct operation must not exceed 90% of the upstream pressure.

Designed for a maximum cold hydraulic test pressure of 62 bar g
Note: The trap seat is completely open at a water circuit temperature of 2°C and closed at 7°C.

Materials
No. Part Material
1 Body Stainless steel AISI 316L
2 Thermostat Brass
3 Valve head PTFE
   Internal parts Stainless steel

Dimensions / weights (approximate) in mm and kg

<table>
<thead>
<tr>
<th>Size</th>
<th>Connections</th>
<th>A</th>
<th>B</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>½&quot;</td>
<td>BSP, NPT</td>
<td>42.4</td>
<td>110</td>
<td>0.65</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>BSP, NPT</td>
<td>42.4</td>
<td>115</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Capacities

Safety information, installation and maintenance
For full details see the Installation and Maintenance Instructions (IM-P670-01) supplied with the product.

How to order
Example: 1 off Spirax Sarco ½" bydrain frost protection liquid expansion trap with screwed NPT end connections.

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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