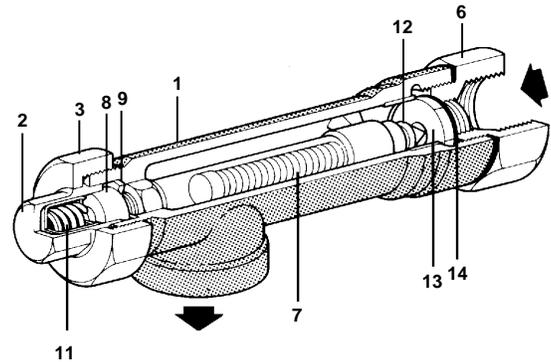


spirax sarco®

Thermoton Liquid Expansion Steam Traps

Types "C" Thermotons can be field adjusted to hold back condensate until it has cooled to between 75°F and 212°F. (Four 50°F adjustment ranges are available.) Thermotons can therefore function as both steam traps and very simple temperature regulators.

| Model ↔ | CL-6 | CH-6 |
|---------------------|---|----------|
| PMO | 125 psig | 300 psig |
| Sizes | 3/4" | |
| Connections | NPT | |
| Construction | Cast Iron Body Brass & Stainless Steel Internals | |
| Options | BSP connections | |



Limiting Operating Conditions

Max. Operating Pressure (PMO) CL: 125 psig (9 barg)
CH: 300 psig (21 barg)

Max. Operating Temperature Maximum setting: 212°F (100°C)

Pressure Shell Design Conditions

PMA C: 300 psig/up to 450°F 21 barg/up to 232°C
Max. allowable pressure

TMA C: 450°F/0-300 psig 232°C/0-21 barg
Max. allowable temperature

Temperature Ranges

| Code | Adjustment Range | Types |
|------|------------------|-------|
| W | 170° to 212°F | CL-6W |
| | 76° to 100°C | CH-6W |
| B | 145° to 195°F | CL-6B |
| | 63° to 91°C | CH-6B |
| G | 110° to 160°F | CL-6G |
| | 43° to 71°C | CH-6G |
| Y | 75° to 125°F | CL-6Y |
| | 24° to 52°C | CH-6Y |

Construction Materials

| No. | Part | Material | |
|-----|---------------------|-------------------------|----------------|
| 1 | Body Type C | Cast Iron | ASTM A126 CL B |
| 2 | Adjustment Head | Brass | ASTM B124 |
| 3 | Adjustment Nut | Cast Iron | ASTM A126 CL B |
| 6 | Inlet Nut Type C | Steel | AISI 1117 |
| 7 | Element | Brass & Stainless Steel | |
| 8 | Guide Nut | Brass | ASTM B16 |
| 9 | Guide Washer | Brass | ASTM B36 |
| 10 | Adjustment End Plug | Brass | ASTM B62 |
| 11 | Return Spring | Stainless Steel | AISI 302 |
| 12 | Valve Head | Stainless Steel | AISI 303 |
| 13 | Valve Seat | Stainless Steel | AISI303 |
| 14 | Seat Gasket Type C | Stainless Steel | AISI 302 |

Typical Applications

Steam trapping applications, such as outdoor storage tanks and non-critical tracing lines, where extreme sub-cooling is desirable to conserve energy. Automatic drainage of steam traps and process equipment in which residual condensate may freeze if the steam supply is interrupted.

Capacities

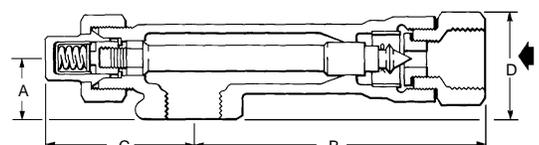
| Type | Orifice | Maximum Operating Pressure | Inlet Pressure psig (barg) | | | | | | | | | | | | |
|-------|---------|----------------------------|----------------------------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| | | | 5 | 10 | 25 | 40 | 50 | 75 | 100 | 125 | 150 | 200 | 250 | 300 | |
| Valve | | Pressure | .34 | .68 | 1.72 | 2.76 | 3.45 | 5.17 | 6.89 | 8.62 | 10.3 | 13.8 | 17.2 | 20.7 | |
| Type | Orifice | psig | barg | Pounds of condensate per hour* | | | | | | | | | | | |
| CL-6 | 3/8" | 125 | 8.6 | 445 | 630 | 1000 | 1260 | 1400 | 1730 | 2000 | 2240 | — | — | — | |
| CH-6 | 5/16" | 300 | 20.7 | 310 | 435 | 690 | 870 | 975 | 1200 | 1380 | 1540 | 1700 | 1950 | 2180 | 2400 |

* Capacities for 10°F/5.5°C drop below opening temperature

Dimensions (nominal) in inches and millimeters

| Size & Type | A | B | C | D | E | F | Weight |
|-------------|-----|-----|-----|-----|---|---|--------|
| 3/4" | 1.5 | 4.6 | 3.7 | 2.7 | — | — | 4.5 lb |
| CL-6/CH-6 | 38 | 118 | 94 | 68 | — | — | 2.0 kg |

Type CL-6, CH-6



Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only. In the interests of development and improvement of the product, we reserve the right to change the specification.

TIS 2.201 US 03.02

Thermoton Liquid Expansion Steam Traps

Sample Specification

Liquid expansion steam traps shall contain a solidly liquid-filled thermostatic element, and shall be field-adjustable to discharge condensate at a fixed temperature below 212°F.

Installation

Thermotons function both as steam trap and simple temperature regulator. Where over temperature due to element failure will cause risk to people or process a failsafe backup safety control should be fitted. The Type C Thermotons should normally be installed with the outlet above the trap. When used to provide freeze protection, install with outlet downwards (as shown above) to be self draining. Discharge temperature change is approximately 25°F per full turn of the adjustment nut. Allow 1/2 hour between adjustments.

Maintenance

This product can be maintained without disturbing the piping connections. Complete isolation of the trap from both supply and return line is required before any servicing is performed. The trap should be disassembled periodically for inspection and cleaning of the valve head and seat, and operation of the element set. Worn or damaged parts should be replaced using a complete repair kit. For spare parts, see TIS 2.202.

Complete installation and maintenance instructions are given in IMI 550-D27, which accompanies the product.

Spare Parts

Types C

Part No.

| | | |
|----|-----------------------------|----------------|
| 1 | Element Set (Specify Range) | 1A, 1B, 1C, 1D |
| 2 | Body Assembly | 2A, 2B, 2C |
| 2C | Inlet Nut Gasket | 2C |
| 3 | Relief Spring | 3A |
| 4 | Adjustment Head | 4A, 4B, 4C |
| 5 | Lock Nut | 5A |

