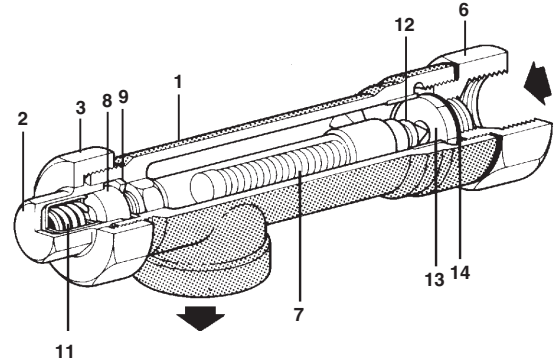


# spirax/sarco

## 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
<b>PMO</b>	125 psig	300 psig
<b>Sizes</b>	3/4"	
<b>Connections</b>	NPT	
<b>Construction</b>	Cast Iron Body Brass & Stainless Steel Internals	
<b>Options</b>	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	AISI 303
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

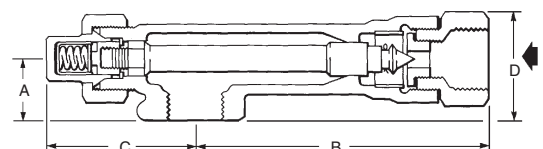
Type	Orifice	psig barg	Maximum Operating Pressure		Inlet Pressure psig (barg)													
			5	10	25	40	50	75	100	125	150	200	250	300				
CL-6	3/8"	125 8.6	.34	.68	1.72	2.76	3.45	5.17	6.89	8.62	10.3	13.8	17.2	20.7				
CH-6	5/16"	300 20.7	310	435	690	870	975	1200	1380	1540	1700	1950	2180	2400				

\* 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.

TI-2-201-US 12.06

# 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. Complete installation and maintenance instructions are given in IMI 2.201, 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

