



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

TI-P180-13  
ST Issue 3

## BT6HC Hygienic Sanitary Balanced Pressure Steam Trap for High Capacity and CIP/SIP Applications

### Description

The Spirax Sarco BT6HC is a high capacity thermostatic steam trap designed to remove condensate from hygienic and sanitary steam systems with minimal backing up. Applications include sterile steam barriers, process vessels and CIP/SIP systems. Manufactured in 316L stainless steel with a crevice free body, it is self-draining and operates close to steam temperature. Traps are individually packaged with protective end caps and sealed in a polythene bag.

### Surface finish

All internal wetted surfaces have a finish of 0.8 µm (32 micro-inch Ra). External surfaces (excluding the clamp) have a surface finish of 1.2 µm (47 micro-inch Ra). Surface finish of 0.4 µm (16 micro-inch Ra) can be supplied on request by electro-polishing.

### Options

Electro-polishing of internal surfaces to 0.4 µm (16 micro-inch Ra).  
Fixed bleed to ensure fail open operation.  
Special connections to suit most piping systems.

### Standards

The BT6HC fully complies with the ASME BPE, where applicable. It also complies with the requirements of the European Pressure Equipment Directive 97/23/EC. All wetted parts of this trap are manufactured from FDA/3-A approved materials.

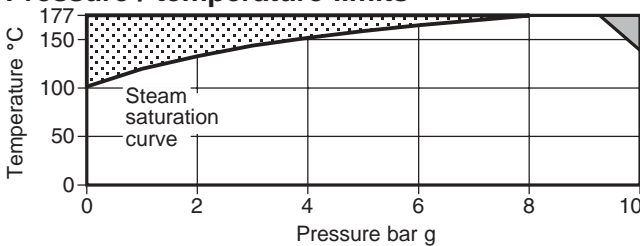
### Certification

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

Suitable for installation with both 1" or 1½" sanitary clamp compatible hygienic connections.

### Pressure / temperature limits



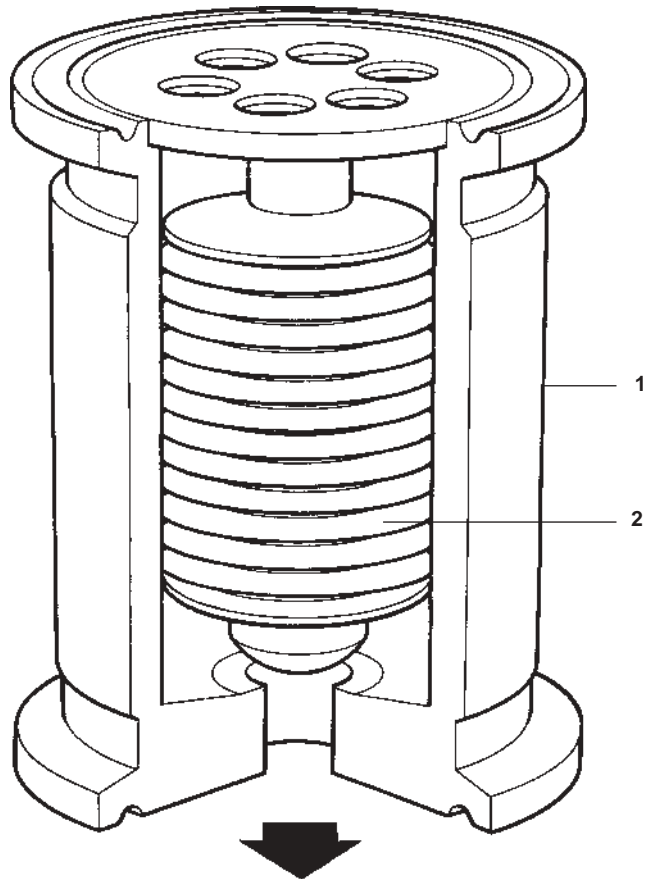
- The product **must not** be used in this region.
- The product should not be used in this region as damage to the internals may occur.

**Note:** For hygienic/sanitary clamp ends the maximum pressure / temperature may be restricted by the gasket or sanitary clamp used. Please consult Spirax Sarco.

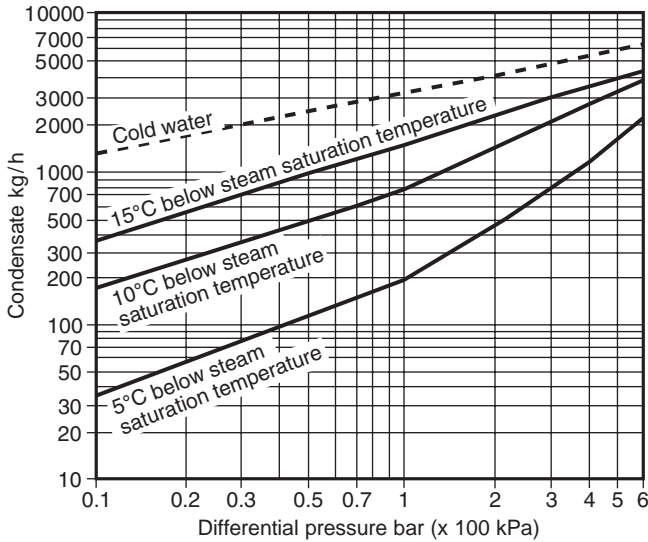
Body design conditions	PN10
PMA Maximum allowable pressure @ 140°C	10 bar g
TMA Maximum allowable temperature @ 9.2 bar g	177°C
Minimum allowable temperature	-254°C
PMO Maximum operating pressure for saturated steam service	6 bar g
TMO Maximum operating temperature	165°C @ 6 bar g
Minimum operating temperature	0°C
Designed for a maximum cold hydraulic test pressure of 15 bar g	

### Materials

No.	Part	Material
1	Body	Stainless steel ASTM A 276315L
2	Element assembly	Stainless steel ASTM A 276315L



## Capacities

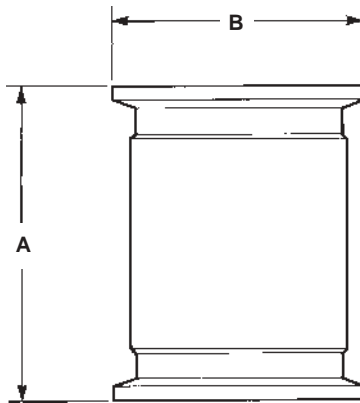


Cold water capacity - - - - Hot water capacity ————

The graph above shows the flow capacity of the BT6HC at varying degrees of subcooling from the initial trap opening temperature of approximately 3°C below saturated steam temperature. For example, at 3 bar g the BT6HC will discharge 800 kg/h with 5°C of subcooling. At 10°C subcooling, the capacity will increase to 2 000 kg/h.

## Dimensions/weight (approximate) in mm and kg

Size	A	B	Weight
1" and 1½"	65	51	0.41



## Spare parts

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

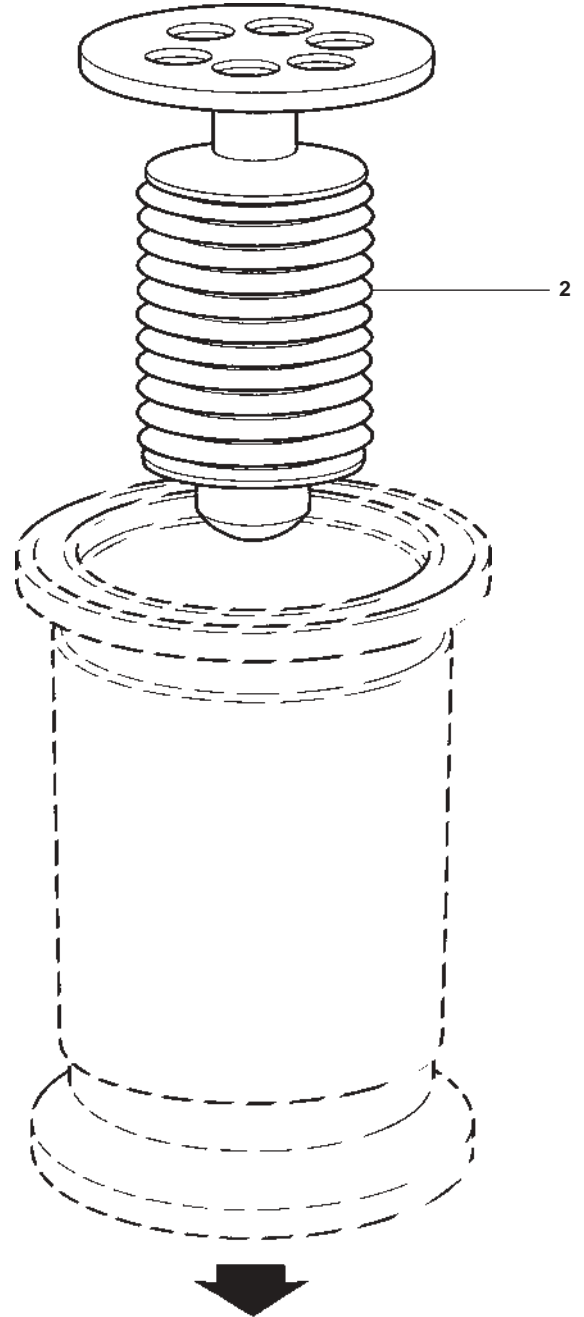
### Available spare

Element assembly for BT6HC	2
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### How to order spares

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

**Example:** 1 - Element assembly for a Spirax Sarco ½" BT6HC balanced pressure steam trap



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P180-12) supplied with this product.

### Operation note:

During CIP operations the trap will be fully open to allow maximum flow of the cleaning fluid. On steam start-up the trap will remain open until all air and incondensibles are purged from the system. Under normal operating conditions the operation of the trap will depend on the steam pressure, capacity and location.

Typically the trap will begin to open at approximately 3°C below steam saturation temperature at the trap inlet.

**Note:** The BT6HC must be allowed to cool to ambient temperature, prior to CIP operation.

### Installation note

The trap is designed to be installed in vertical lines with the flow downwards so that it can be completely self-draining. Installation in horizontal pipework is not recommended. Check flow direction arrow for correct orientation. Sanitary clamp fittings and gaskets are supplied by the installer.

Do not expose the element to superheat conditions as over expansion may result. **Note:** Dispose of the sealed element in a safe manner.

## How to order

**Example:** 1 off Spirax Sarco 1½" BT6HC hygienic sanitary balanced pressure steam trap. Suitable for high capacity and CIP applications up to 6.0 bar g. Connection to be sanitary clamp. Internal surface finish to be 0.8 µm. Material certification to be EN 10204 3.1.B for pressure containing parts.