

# spirax sarco

## BT6B

# Horizontal Sanitary Balanced Pressure Thermostatic Steam Trap

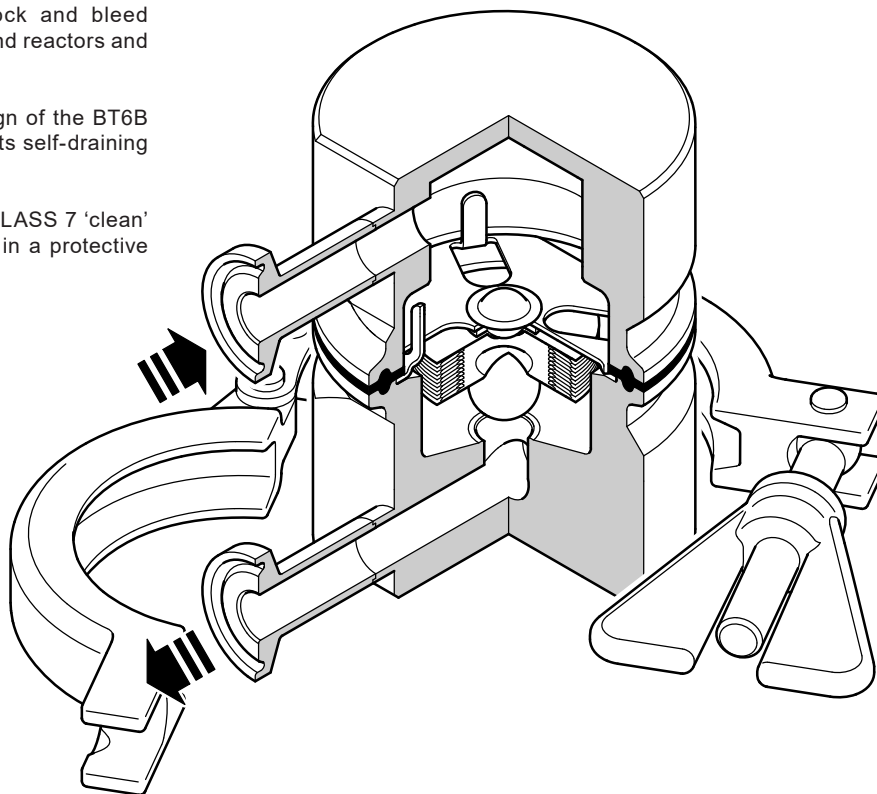
## Description

The Spirax Sarco BT6B Horizontal Sanitary balanced pressure steam trap is designed to remove condensate from clean and pure steam applications with minimal condensate retention.

Applications include sterile steam barriers, block and bleed installations, mains drainage, CIP/SIP of vessels and reactors and process lines.

Manufactured in 316L, the crevice free body design of the BT6B Horizontal incorporates an angled seat to ensure its self-draining and operates close to steam temperature.

Each trap is individually packaged within an ISO CLASS 7 'clean' environment with protective end caps and sealed in a protective plastic bag.



## Body surface finish (measured to ISO-4287-1997 and ISO 4288-1997)

Internal surfaces to have a finish of 0.5  $\mu\text{m}$  Ra, (20 micro-inch Ra).

External surfaces to have a finish of 1.2  $\mu\text{m}$  Ra, (48 micro-inch Ra).

## Options

Fixed bleed to ensure 'FAIL OPEN' operation.

## Standards

The BT6B Horizontal has been designed and built in general accordance with ASME BPE. The unit also complies with the requirements of the Pressure Equipment Directive (PED) and UKCA safety regulations. The seal part is Compliant with:

- FDA CFR Title 21. Paragraph 177. 1550.
- USP Class VI Biological Reactivity Cytotoxicity Testing In-Vitro <87> & In-Vivo <88> extracted at 121 °C for 1 hour.
- ADI Free (Animal Derived Ingredients) for materials used, manufacturing processes involved in producing the part.

## Certification

This product is available with the following certification:

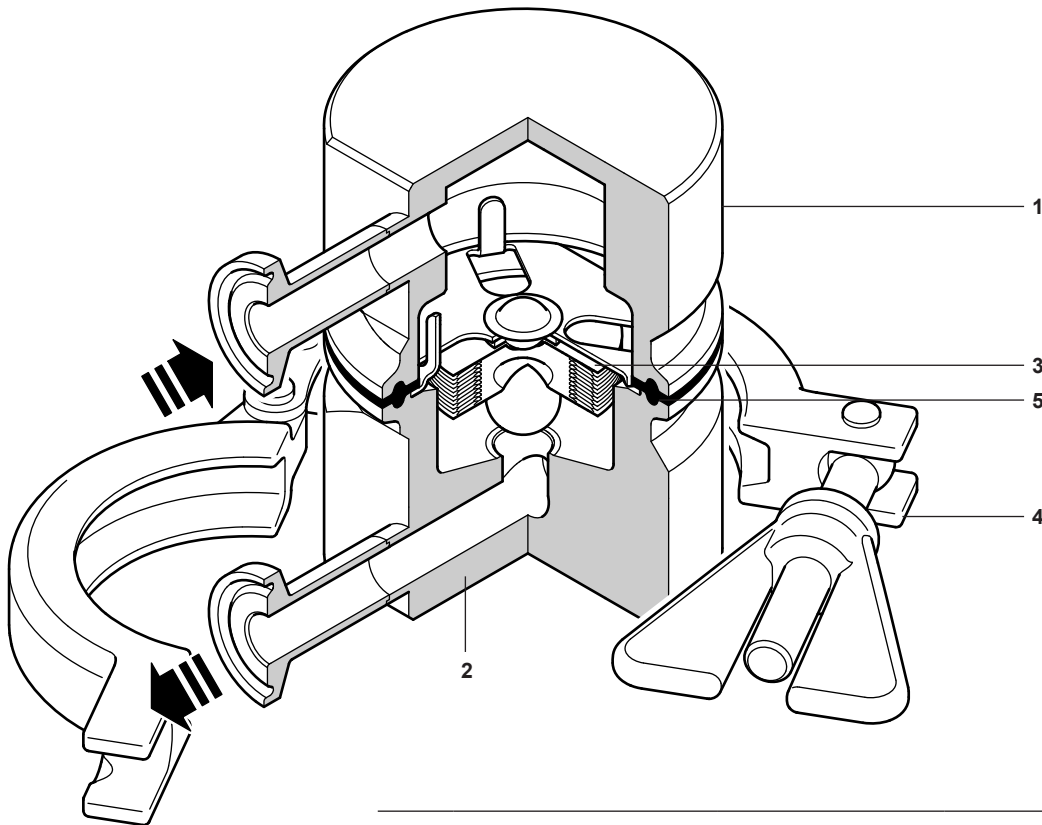
- EN 10204 3.1 material certificates (pressure containing parts).
- EN 10204 3.1 material certificates (wetted parts, including element fill) subject to additional cost.
- Typical Internal surface finish certificates.
- Specific internal surface finish certificates available at point of order request, and may be subject to additional cost.
- Certificate of compliance (trap & element fill) for FDA and ADI free.
- TSE/BSE Free Statement.
- Certificate of compliance EC1935:2004 Food Contact Materials.
- Declaration of conformity BS EN ISO 14644-1:2015 Class 7 Clean Room.

**Note:** All certification/inspection requirements must be stated at the time of order placement, and may be subject to additional cost.

## Sizes and pipe connections – BT6B Horizontal

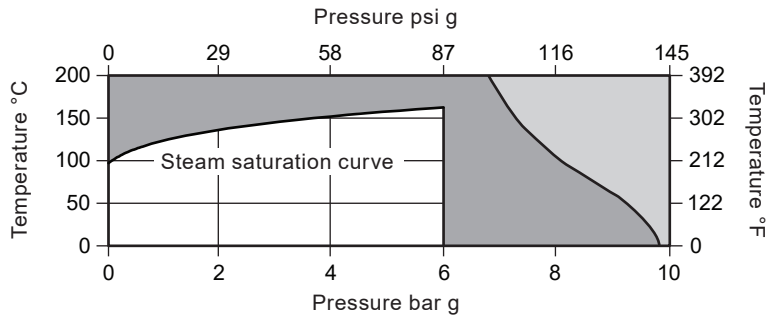
½" sanitary clamp ends to ASME BPE Type A.

## Materials



No.	Part	Material	
1	Body (inlet)	Stainless steel	ASTM A 276 316L (1.4404)
2	Body (outlet)	Stainless steel	ASTM A276 316L (1.4404)
3	Capsule element	Stainless steel	AISI 316L (1.4404)
4	Body clamp	Stainless steel	AISI 316
5	Seal	Tuf - steel	PTFE + AISI 316L (1.4404)

## Pressure/temperature limits (ISO 6552) – BT6B Horizontal

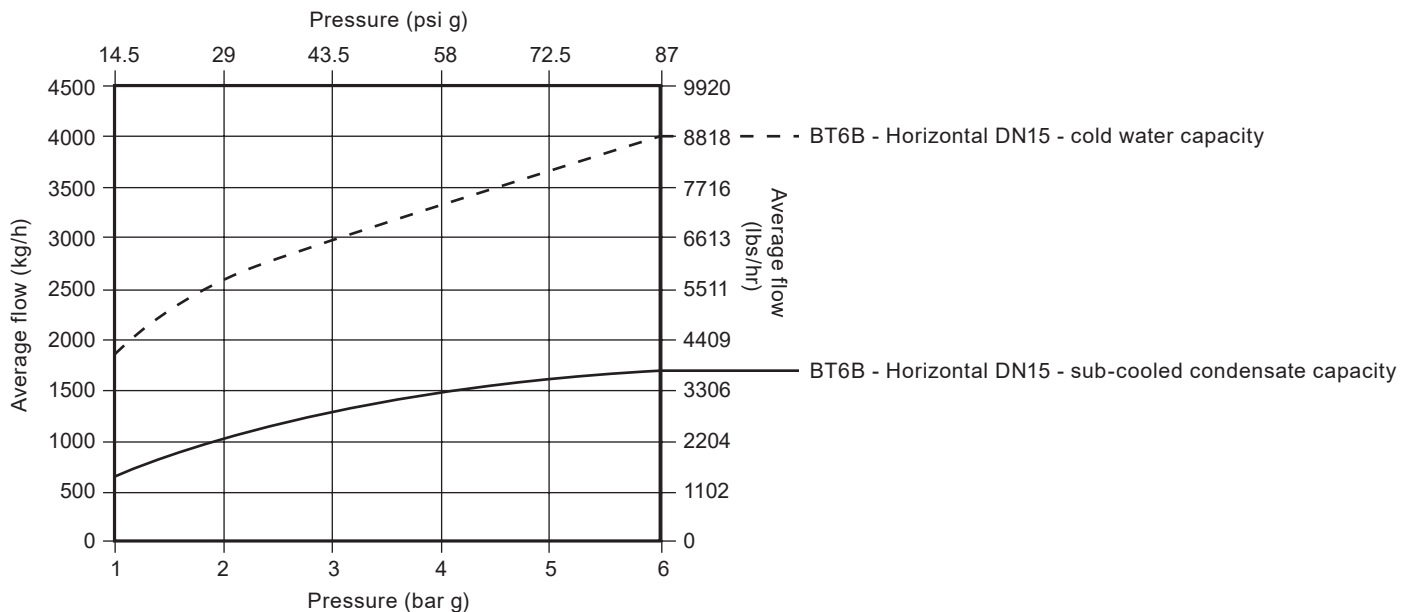


- The product **must not** be used in this region.
- The product should not be used in this region or beyond its operating range as damage to the internals may occur.

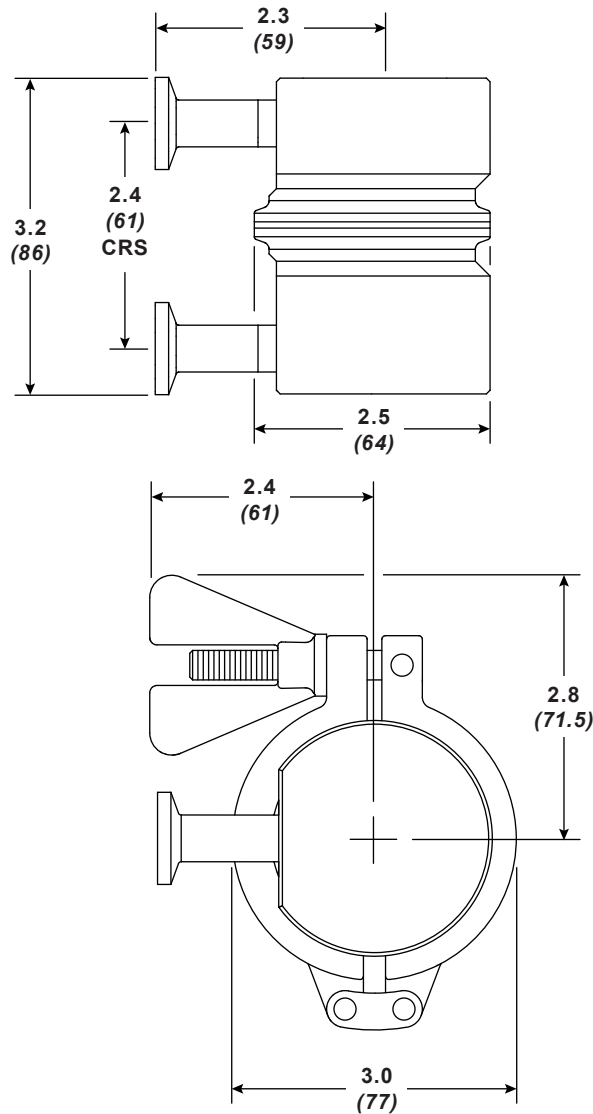
**Note:** For hygienic/sanitary clamp ends the maximum pressure /temperature may be restricted by the gasket or sanitary clamp used. Please consult Spirax Sarco.

	Body design conditions		PN10
<b>Ambient operating conditions</b>	Maximum ambient temperature		TBC
	Minimum ambient temperature	452 °F	(-254 °C)
	Suitable for use		Indoor only
<b>System operating conditions</b>	PMA Maximum allowable pressure	140.6 psi g @ 100.4 °F	(9.7 bar g @ 38 °C)
	TMA Maximum allowable temperature	339.8 °F @ 102.9 psi g	(171 °C @ 7.1 bar g)
	PMO Maximum operating pressure for saturated steam service	87 psi g	(6 bar g)
	TMO Maximum operating temperature	329 °F @ 87 psi g	(165 °C @ 6 bar g)
	Minimum operating temperature	32 °F	(0 °C)
	Designed for a maximum cold hydraulic test pressure of	217.5 psi g	(15 bar g)

## Capacities (in accordance with ISO 7842)



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



**Weight**  
(approximate)

2.0 lbs  
(0.95 kg)

**Orifice size**

The BT6B-Horizontal Sanitary Balanced Pressure Steam Trap has a 0.37" (9.4 mm) diameter orifice.

**Safety information, installation and maintenance**

For full details see the Installation and Maintenance Instructions (IM-P180-50) supplied with the product.

**Installation note**

The trap is designed to be fitted in horizontal lines with the flow predominantly downwards so that it can be completely self-draining. The length of horizontal pipe should be kept to a minimum to avoid pooling of condensate or collection of debris. Check flow arrow for correct orientation. Fittings, clamps and gaskets for pipe end connections are not supplied.

Do not expose the element to superheat conditions as over expansion may result.

Note: Handle all components carefully to avoid damage to surfaces.

**How to order**

Example: 1 off Spirax Sarco ½" BT6B Horizontal sanitary balanced pressure thermostatic steam trap. Connection to be sanitary clamp. Suitable for pressures up to 87 psi g (6.0 bar g).

Internal surface finish to be electro-polished to 0.8 µm.

Material certification to be EN 10204 3.1 for pressure containing parts.

## Spare parts

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

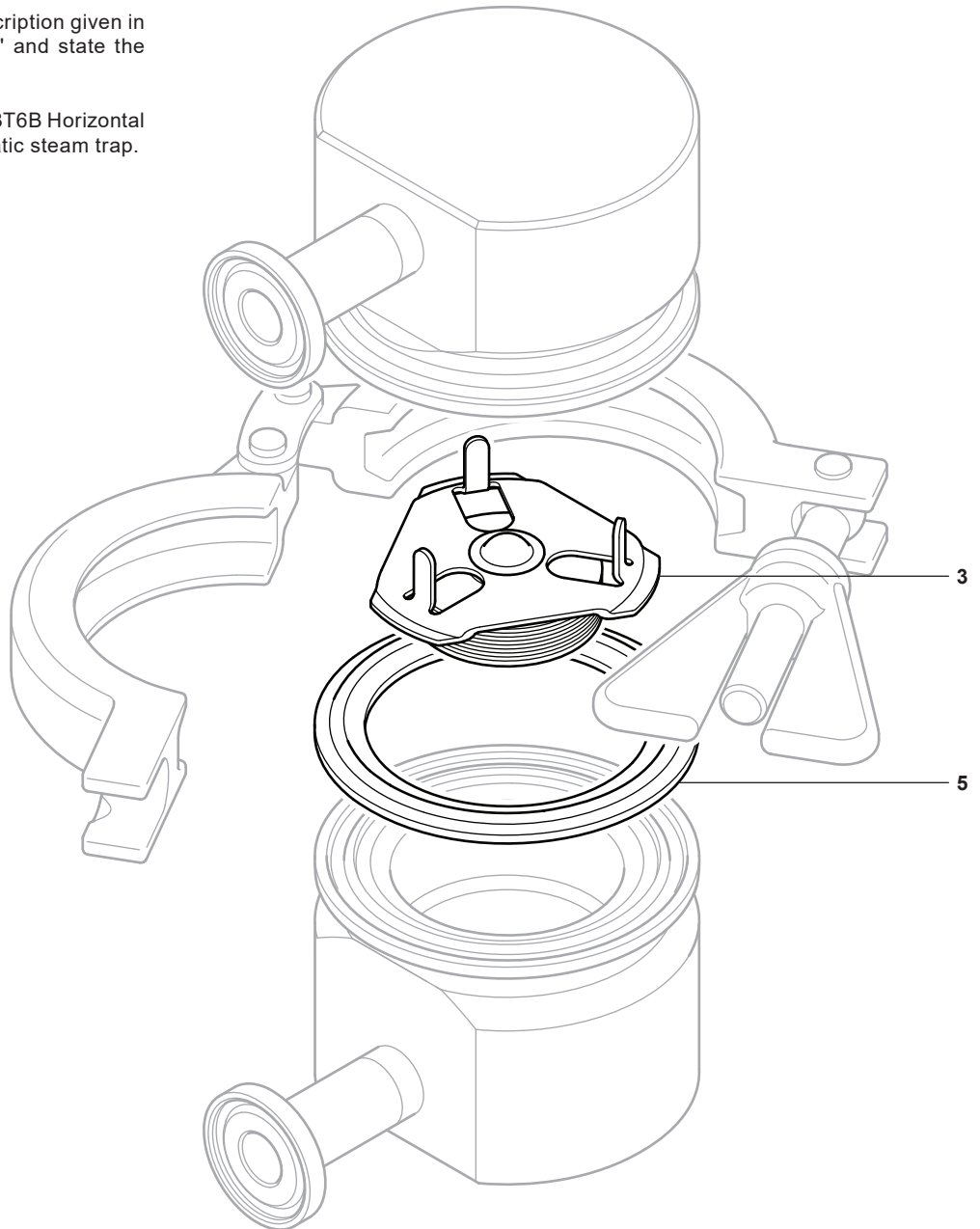
### Available spares

Element assembly	3
Gasket (set of 3)	5

### 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 - Element assembly for a BT6B Horizontal sanitary balanced pressure thermostatic steam trap.



## Disposal

Please visit the Spirax Sarco product compliance web pages <https://www.spiraxsarco.com/product-compliance> for up to date information on any substances of concern that may be contained within this product. Where no additional information is provided on the Spirax Sarco product compliance web page, this product may be safely recycled and/or disposed providing due care is taken. Always check your local recycling and disposal regulations.