



TI-P181-01
CMGT Issue 10

BTD52L and BTD52L Food+ Thermodynamic Steam Trap

Description

The BTD52L is manufactured from 316L stainless steel specifically for mains drainage applications in clean steam systems.

BTD52L Food+

Designed, manufactured and approved for Steam and Condensate applications. This product complies with EC1935:2004 Food Contact Materials. It also complies with regulation EC2023:2006 on good manufacturing practice for materials and articles intended to come into contact with food. A list of the materials that could come directly or indirectly into contact with foodstuffs can be found in the Declaration of Compliance available for this product.

Standards

These products fully comply with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

Certification

- This product is available with certification to EN 10204 3.1.

Note: All certification/inspection requirements must be stated at the time of order placement

- The BTD52L Food+ is available with an EC1935:2004 Declaration of Compliance.

Note: All certification/inspection requirements must be stated at the time of order placement

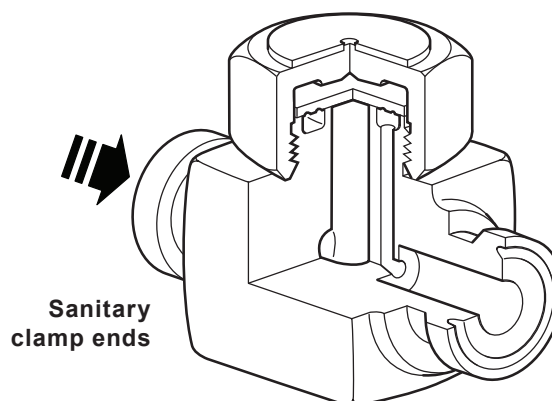
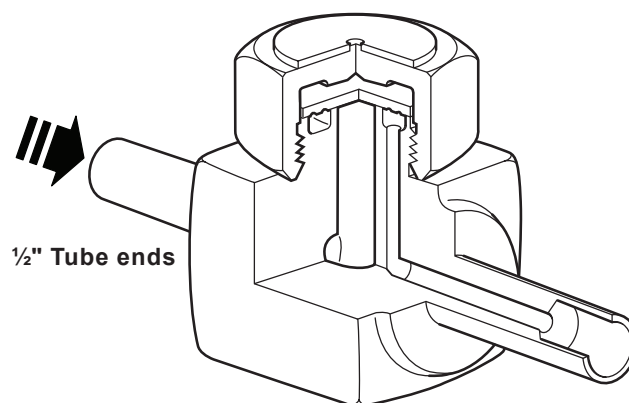
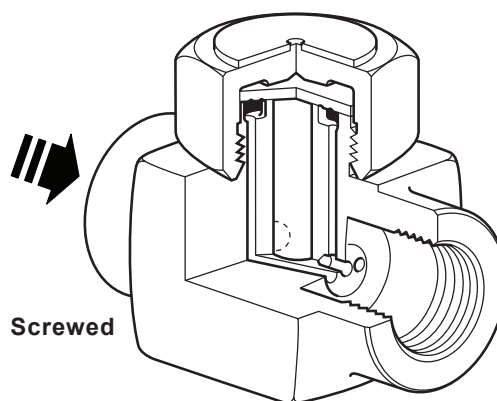
BTD52L Food+ ½" range available with a food contact regulation Declaration of Compliance

Designed, manufactured and approved for Steam and Condensate applications, the BTD52L Food+ product complies with:

- (EC)1935:2004 Materials and Articles Intended to come into Contact with Food
- (EC)2023:2006 Good Manufacturing Practice for Materials and Articles Intended to come into Contact with Food
- (EU)10/2011 Plastic Materials and Articles Intended to come into Contact with Food
- FDA Code of Federal Regulations - title 21 - Food and Drugs

Optional extras

An insulating cover is available at extra cost to prevent the trap being unduly influenced by excessive heat loss when subjected to low ambient temperature, wind and rain etc.



Sizes and pipe connections

BTD52L Food+ is available with ½" Sanitary Clamps and ½" BSP.

¼", ⅜", ½" screwed BSP or NPT.

½" O/D x 16 swg (0.065") wall thickness tube end.

DN 11850 (Series 1) tube ends

12 mm O/D x 1.0 mm wall thickness (DN10) / (⅜")

18 mm O/D x 1.0 mm wall thickness (DN15) / (½")

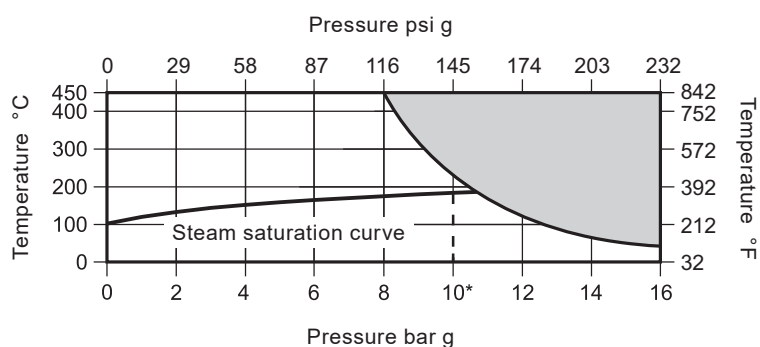
ISO 1127 (Series 1) tube ends

17.2 mm O/D x 1.6 mm wall thickness (DN10) / (⅜")

21.3 mm O/D x 1.6 mm wall thickness (DN15) / (½")

½" Sanitary clamp compatible connections (DN15)

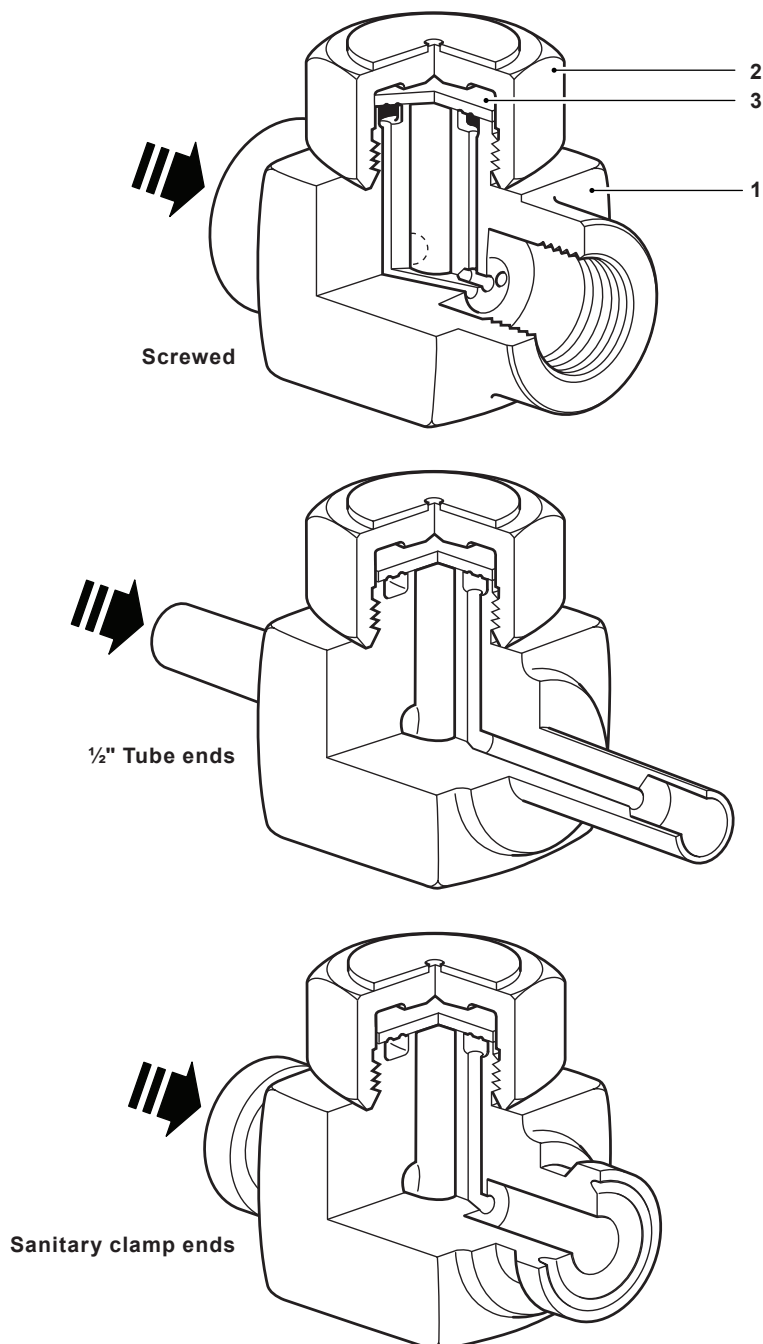
Pressure / temperature limits



The product **must not** be used in this region.

Body design conditions			PN16
PMA	Maximum allowable pressure	16 bar g @ 50 °C	232 psi g @ 122 °F
TMA	Maximum allowable temperature	450 °C @ 8 bar g	842 °F @ 116 psi g
Minimum allowable temperature		0 °C	32 °F
PMO *	Maximum operating pressure recommended for steam service	10 bar g @ 220 °C	145 psi g @ 428 °F
TMO	Maximum operating temperature	450 °C @ 8 bar g	842 °F @ 116 psi g
Minimum operating temperature		0 °C	32 °F
Note: For lower operating temperatures consult Spirax Sarco			
PMOB Maximum operating backpressure should not exceed 80% of the upstream pressure			
Minimum operating differential pressure for satisfactory operation		0.25 bar g	3.63 psi g
Designed for a maximum cold hydraulic test pressure of:		24 bar g	348 psi g

Materials



No.	Part	Material	
1	Body	Austenitic stainless steel	AISI 316L
2	Cap	Austenitic stainless steel	AISI 316L
3	Disc	Austenitic stainless steel	AISI 316L
4 **	Insulating cover (optional extra)	Aluminium	

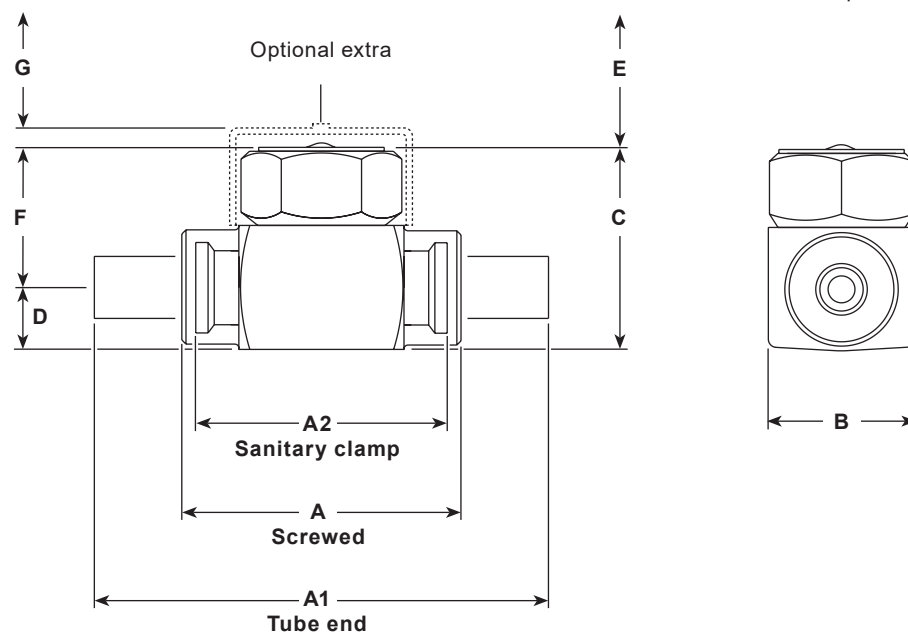
**** Note:** For clarity item 4 is shown page 5.

Note: The BT52L Food+ version comes with a Laser Marked cap, not a nameplate.

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

Withdrawal distance for insulating cover

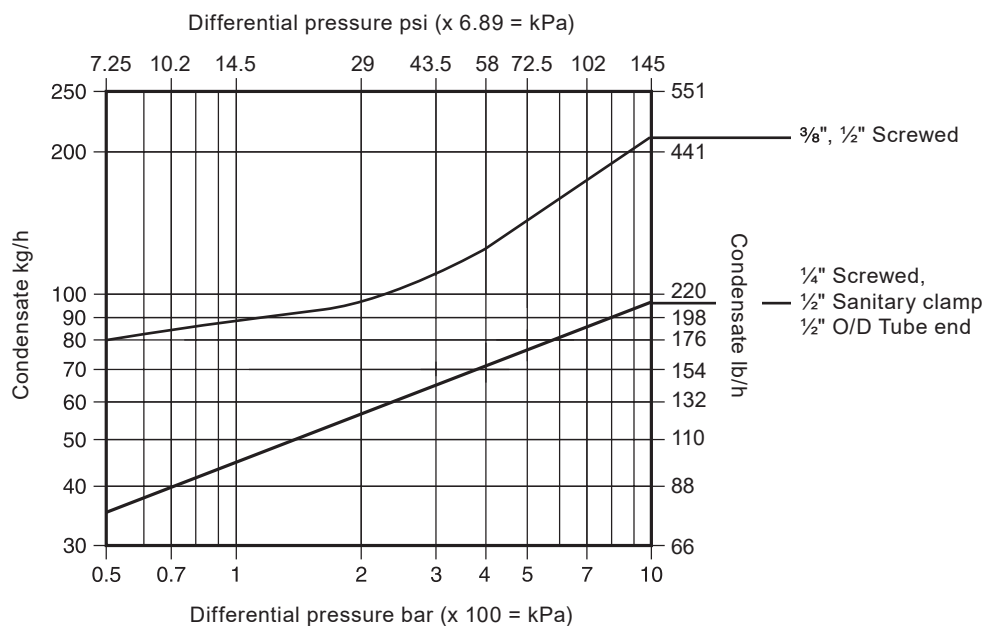
Withdrawal distance for cap



Size		Dimensions								
		A	A1	A2	B	C	D	E	F	G
All sizes	Sanitary clamp BSP or NPT	65 (2.56)		65 (2.56)	36 (1.42)	53 (2.09)	15 (0.59)	40 (1.57)	38 (1.50)	38 (1.50)
	Tube ends		123 (4.84)			51 (2.01)	14 (0.55)		37 (1.46)	

Size		Weights		
		Screwed	Tube Ends	Sanitary clamp
All sizes	Sanitary clamp BSP or NPT	0.45 (0.99)		0.55 (1.21)
	Tube ends		0.45 (0.99)	

Capacities



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P181-03) supplied with the product.

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. For freeze proof installation, or where horizontal fitting is not possible, the BT52L may be installed vertically, but the service life may be affected. Suitable isolation valves must be installed to allow for safe maintenance and trap replacement.

When the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow.

Disposal

The product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

How to order

Example: 1 off Spirax Sarco BT52L thermodynamic steam trap in 316L stainless steel with tube ends 17.2 mm O/D x 1.6 mm wall thickness (ISO 1127, Series 1).

Spare parts

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

Available spares

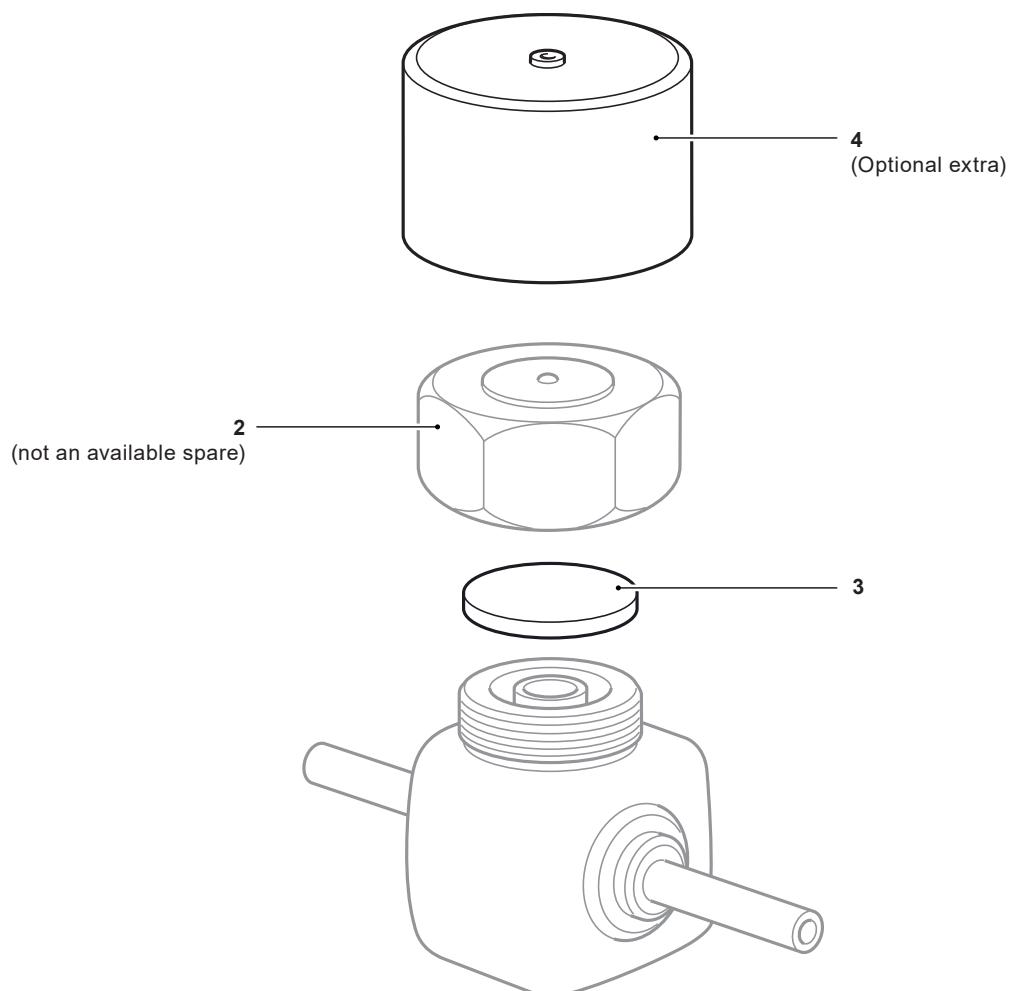
Disc	3
Insulating cover	4

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 - Disc for a ½" BSP Spirax Sarco BTD52L thermodynamic steam trap.



Recommended tightening torques

Warning: When torquing or untorquing the cap, some support should be given to the body of the trap to prevent over stressing and/or distortion of the end connections and system pipework.

Item	 or mm	N m	ft lbf
2	36 A/F	115 - 130	85 - 96