



Cert. No. LRQ 0963008

ISO 9001

spirax sarco

TD120

TI-P150-01
ST Issue 7

High Pressure Thermodynamic Steam Trap

Description

The TD120 is a maintainable high pressure thermodynamic steam trap with integral strainer, which can be supplied in 1/2", 3/4" and 1" sizes with socket weld, butt weld or flanged connections. It has low capacity specifically designed for superheated mains drainage applications up to 250 bar g.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

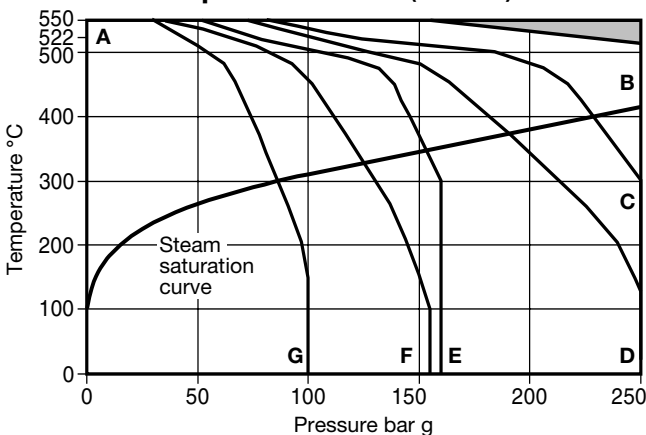
Certification

This product is available with certification to EN 10204 3.2.
Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

1/2", 3/4" and 1" Butt weld ends to suit Schedule 160 pipe.
1/2", 3/4" and 1" Socket weld ends to ANSI B 16.11 Class 6000.
DN15 and DN25 standard integral flange DIN 2549 PN250.
DN15, DN20 and DN25 standard integral flanges: ANSI 600, ANSI 900, ANSI 1500, DIN 2547 PN100 and DIN 2548 PN160.

Pressure/temperature limits (ISO 6552)

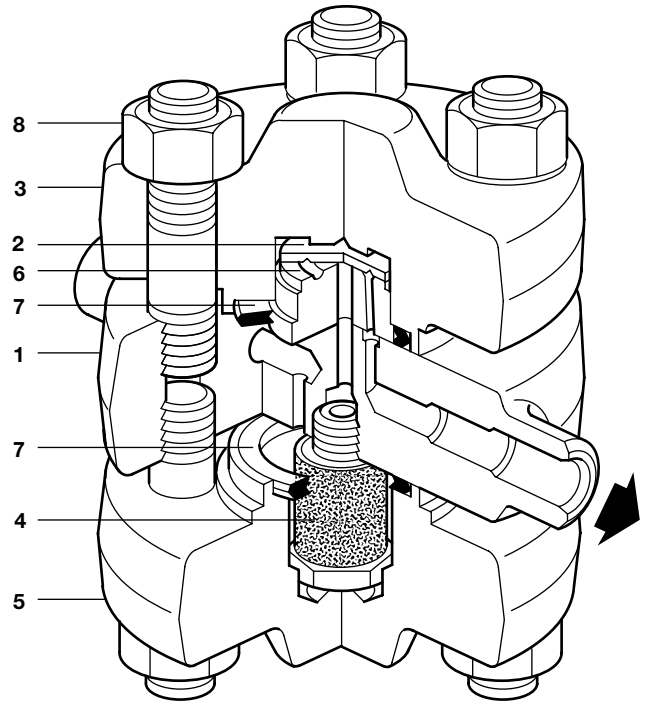


The product **must not** be used in this region.

- A - B Socket weld and butt weld ends.
- A - C Flanged to DIN 2549 PN250.
- A - D Flanged to ANSI 1500.
- A - E Flanged to DIN 2548 PN160.
- A - F Flanged to ANSI 900.
- A - G Flanged to ANSI 600 and DIN 2547 PN100.

Note: If the product is used at pressures above 170 bar g then a reduction in working life may be experienced.

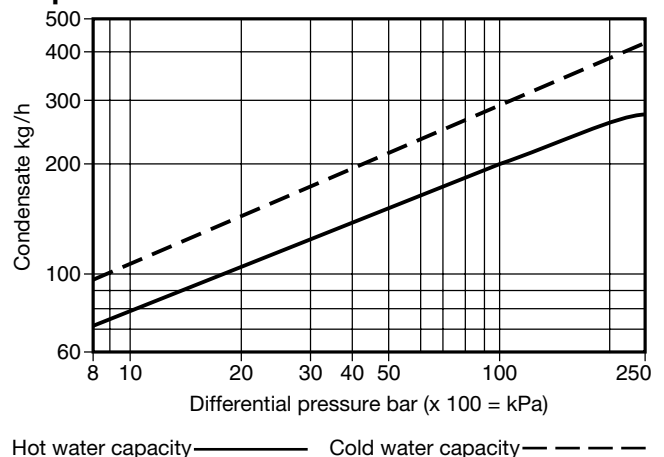
Body design conditions	PN250
PMA Maximum allowable pressure	250 bar g @ 522°C
TMA Maximum allowable temperature	550°C @ 153 bar g
Minimum allowable temperature	-29°C
PMO Maximum operating pressure for saturated steam service	250 bar g
TMO Maximum operating temperature	550°C @ 153 bar g
Minimum operating temperature	0°C
Note: For lower operating temperatures consult Spirax Sarco.	
PMOB Maximum operating backpressure should not exceed 50% of the upstream pressure	
Minimum operating differential pressure	8 bar g
Designed for a maximum cold hydraulic test pressure of	375 bar g



Materials

No.	Part	Material	
1	Body	Alloy steel	ASTM A182 F22
2	Disc	Steel	BS 4659 Gr. BD2
3	Top cover	Alloy steel	ASTM A182 F22
4	Strainer screen assembly	Stainless steel	BS 970 304 S15/Sintered stainless
5	Bottom cover	Alloy steel	ASTM A182 F22
6	Seat	Steel	BS 4659 Gr. BD2
7	Cover gasket	Spirally wound stainless steel with exfoliated graphite filler	
8	Cover studs	Steel	ASTM A193 Gr. B16
	Cover nuts	Steel	ASTM A194 Gr.4

Capacities

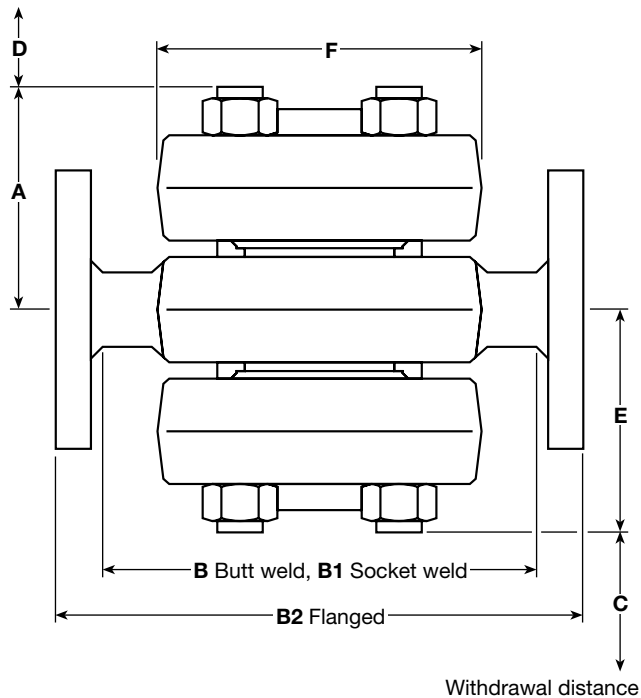


Dimensions/weights (approximate) in mm and kg

Butt weld and socket weld

Size	A	B	B1	C	D	E	F	Weight
½"	78	158	156	55	55	78	117	10.5
¾"	80	158	156	55	55	80	117	10.5
1"	80	158	170	55	55	80	117	10.5

Withdrawal distance



Flanged PN100, PN160 and ANSI 600

Size	A	B2	C	D	E	F	Weight
DN15	80	210	55	55	80	117	17.8

Flanged PN250* and ANSI 1500/ANSI 900

Size	A	B2	C	D	E	F	Weight
DN15*	80	240	55	55	80	117	17.8
DN20	80	240	55	55	80	117	18.7
DN25*	80	260	55	55	80	117	21.7

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P150-07) supplied with the product.

Installation note:

The TD120 is designed for installation with the name-plate on top. For ease and maintenance, consideration should be given to fitting isolation valves upstream and downstream of the steam trap.

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 ½" TD120 high pressure thermodynamic steam trap having an alloy steel body with butt weld connections. It will incorporate a stainless steel strainer and give a tight shut-off for pressures up to 250 bar g.

Spare parts

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

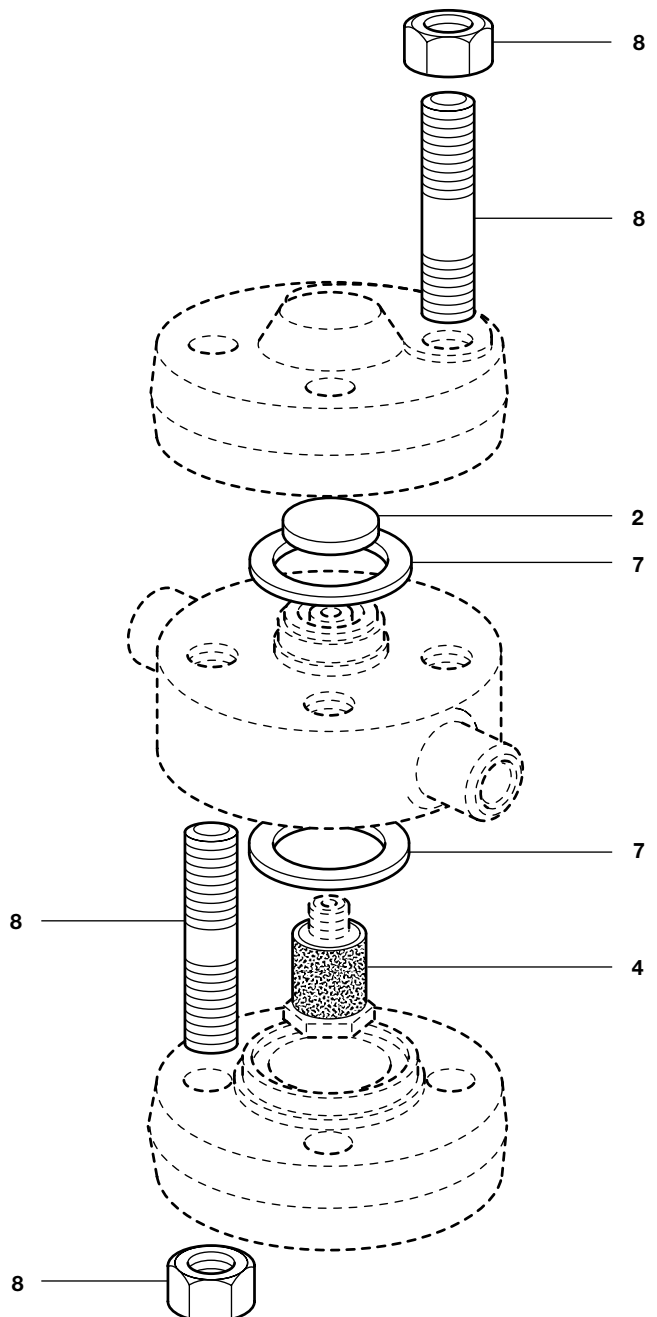
Available spares

Set of internals	2, 7 (2 off), 4
Screen	4, 7
Set of cover gaskets	7 (2 off)
Set of cover studs and nuts	8 (8 off)



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 - Set of internals for a Spirax Sarco ½" TD120 high pressure thermodynamic steam trap.



Recommended tightening torques

Item	Part	 or  mm	N m
4		22 A/F	25 - 35
8	Nut	23 A/F	160 - 180
	Stud	M16	85 - 90