

spirax/sarco®

Thermo-Dynamic® Steam Trap TD120

The **Thermo-Dynamic® steam trap** cycles periodically to discharge condensate very near to steam temperature. It is unaffected by waterhammer or superheat.

Model ⇄	TD 120
PMO	3,625 psig
Sizes	1/2", 3/4" & 1"
Connections	SW to ANSI B 16.11 Class 6000
Construction	Forged Alloy Steel
Options	Buttweld and ANSI 1500 RF connections

LIMITING OPERATING CONDITIONS

Max. Operating Pressure (PMO) 3,625 psig (250 barg)

Max. Operating Temperature 972°F (522°C) at 3,625 psig (250 barg)
1022°F (550°C) at operating pressures below 2,218 psig (153 barg)

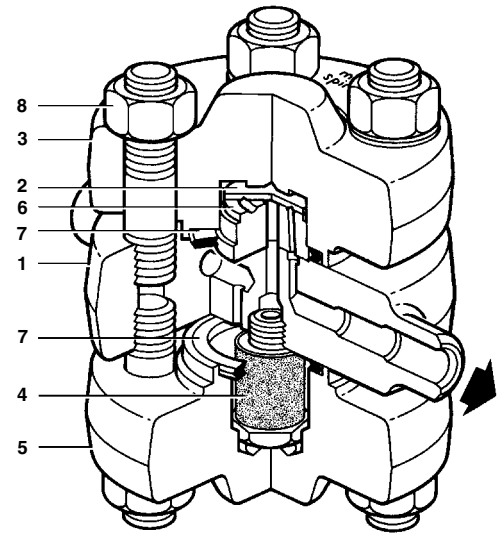
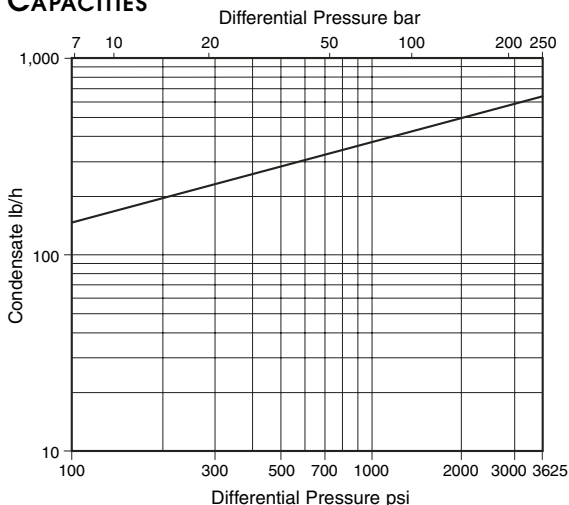
*Minimum pressure for satisfactory operation is 116 psi, 8 bar.
Maximum back pressure should not exceed 50% of the inlet pressure under any conditions of operation, otherwise the trap may not shut.*

PRESSURE SHELL DESIGN CONDITIONS

PMA 3,625 psig/up to 972°F 250 barg/up to 522°C
Max. allowable pressure 2,218 psig/1022°F 153 barg/550°C

TMA 1022°F/0-2,218 psig 550°C/0-153 barg
Max. allowable temperature
Cold Hydraulic Test Pressure 5437 psig 375 barg

CAPACITIES



TYPICAL APPLICATIONS

High pressure steam main drainage.

CONSTRUCTION MATERIALS

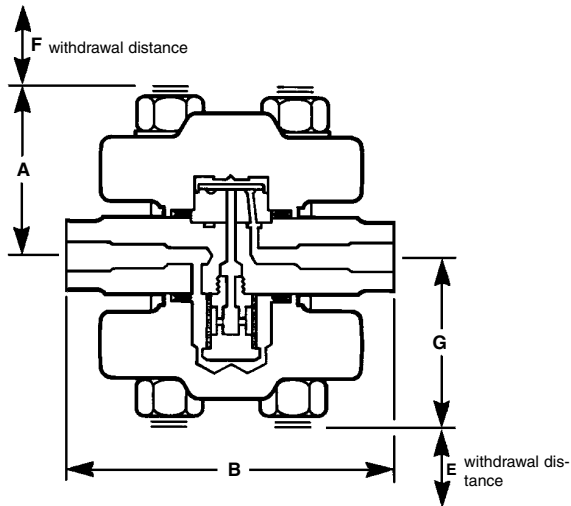
No.	Part	Material	
1	Body	Forged Alloy Steel	ASTM A182 F22
2	Disc	Steel	ASTM A681 D-2
3	Top Cover	Forged Alloy Steel	ASTM A182 F22
4	Strainer Screen Assy.	Sintered Stainless Steel	AISI 304
5	Bottom Cover	Forged Alloy Steel	ASTM A182 F22
6	Seat	Steel	ASTM A681 D-2
7	Cover Gasket	Spirally-wound Gasket Stainless Steel Graphite	
8	Cover Studs Cover Nuts	Alloy Steel Alloy Steel M16 x 70 mm	ASTM A193 B16 ASTM A194 Gr4

Note: Item 6 (seat) is vacuum brazed into item 1 (body)

*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-2-510-US 03.99

Thermo-Dynamic® Steam Trap TD120



DIMENSIONS (NOMINAL) IN INCHES AND MILLIMETERS

Size DN	A	B	E	F	G	Weight
1/2" 15	3.1 78	6.2 158	2.2 55	2.0 50	3.1 78	23.1 lb 10.5 kg
3/4" 20	3.2 80	6.2 158	2.2 55	2.0 50	3.2 80	23.1 lb 10.5 kg
1" 25	3.2 80	6.2 158	2.2 55	2.0 50	3.2 80	23.1 lb 10.5 kg

SAMPLE SPECIFICATION

Thermo-Dynamic® steam trap with socket weld connections to ANSI B16.11 Class 6000. Constructed of alloy steel, suitable for operation from 116 to 3,625 psig and containing integral strainer.

INSTALLATION

Install in a horizontal pipeline with the nameplate on top. After 24 hours in service, the cover nuts should be checked for tightness. Full-port isolating valves should be installed upstream and downstream of the trap.

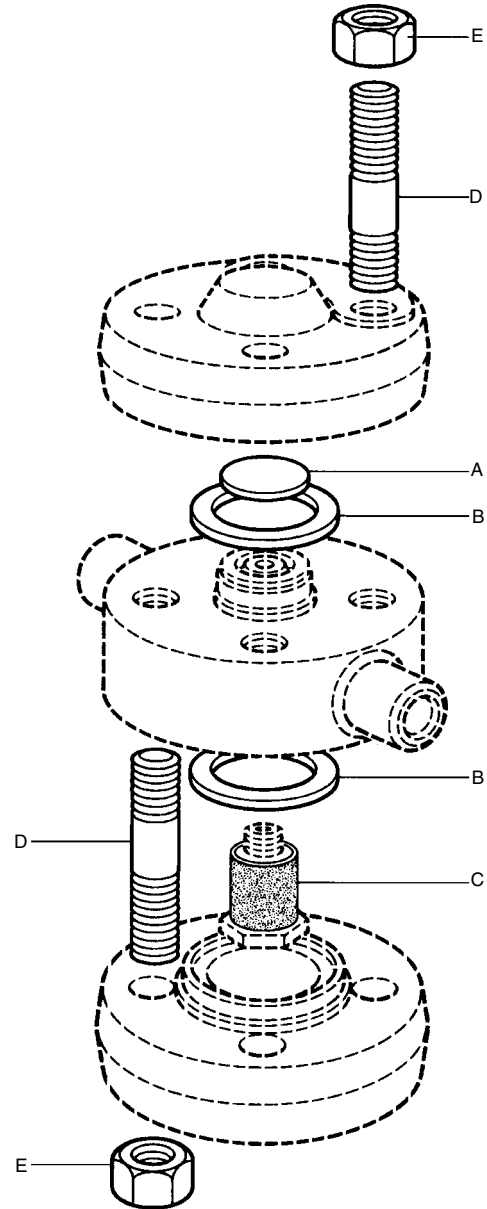
MAINTENANCE

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 disc and seat.

Complete installation and maintenance instructions are given in IMI 2.508.

SPARE PARTS



Set of Internals	A, B, C
Screen Assembly	C
Set of Cover Gaskets	B
Set of Cover Studs & Nuts (8)	D, E

Available spare parts are shown in heavy outline. Parts drawn in broken line are not supplied as spares.
The seat cannot be removed.