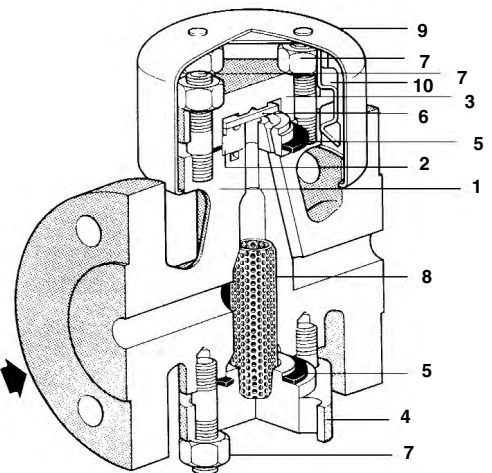


spirax sarco®

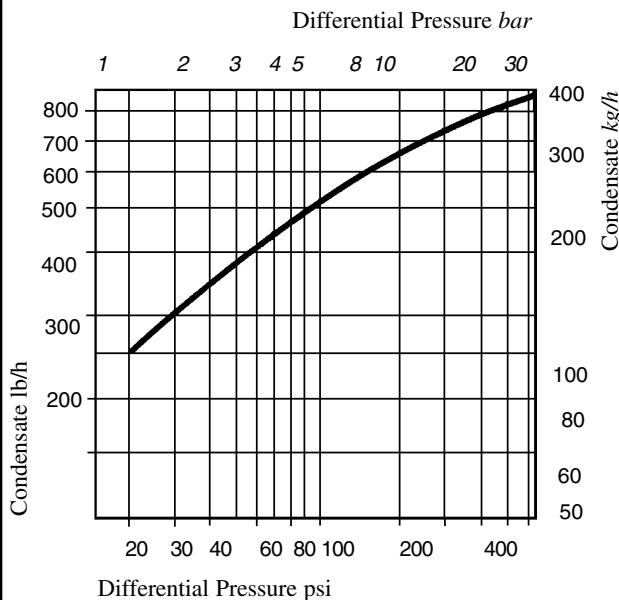
Thermo-Dynamic® Steam Trap TD45

The **Thermo-Dynamic® steam trap** cycles periodically to discharge condensate very near to steam temperature. It is unaffected by waterhammer or superheat. An insulating cap minimizes the effect of ambient conditions.

Model ⇄	TD45
PMO	650 psig
Sizes	1/2", 3/4"
Connections	ANSI 600 RF
Construction	stainless steel chromium steel
Options	ANSI 300 RF



CAPACITIES



TYPICAL APPLICATIONS

Steam main drainage, small process equipment, superheated steam applications.

LIMITING OPERATING CONDITIONS

Max. Operating Pressure (PMO) 650 psig (45 barg)

Max. Operating Temperature 842°F (450°C) at all operating pressures

*Minimum pressure for satisfactory operation is 20 psi, 1.4 bar.
Maximum back pressure should not exceed 80% of the inlet pressure under any conditions of operation, otherwise the trap may not shut.*

PRESSURE SHELL DESIGN CONDITIONS

PMA Max. allowable pressure 914 psig/up to 248°F 63 barg/up to 120°C

750 psig/750°F 52 barg/399°C

652 psig/842°F 45 barg/450°C

TMA Max. allowable temperature 842°F/0-652 psig 450°C/0-45 barg

CONSTRUCTION MATERIALS

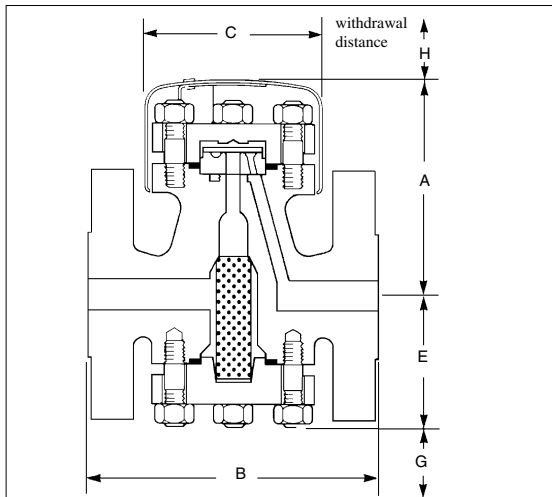
No.	Part	Material	
1*	Body	Stainless Steel	ASTM A743 CF16
Fa			
2*	Seat	Chromium Steel	BS 4659 Gr BD2
3	Top Cover	Stainless Steel	ASTM A743 CF16 Fa
4	Bottom Cover	Stainless Steel	ASTM A743 CF16 Fa
5	Cover Gasket	Metaflex Type E	
		Stainless Steel w/ Graphite Fill	
6	Disc	Chromium Steel	BS 4659 Gr BD2
7	Cover Studs	Steel	BS 1506 621B (B7A)
	Cover Nuts	Steel M10 x 35 mm	BS 1506 162 (2H)
8	Strainer Screen	Stainless Steel 3/64 Perf	AISI 304
9	Insulcap (standard)	Stainless Steel	AISI 304
10	Clip	Stainless Steel	AISI 302

* Note: item 2 (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-2-508-US 03.94

Thermo-Dynamic® Steam Trap TD45



DIMENSIONS (NOMINAL) IN INCHES AND MILLIMETERS

Size	ANSI 600						Weight
	A	B	C	E	G	H	
1/2"	4.4	5.9	3.6	2.7	2.0	2.0	13.0 lb
	122	150	91	69	51	52	5.9 kg
3/4"	4.4	5.9	3.6	2.7	2.0	2.0	16.0 lb
	122	150	91	69	51	52	7.2 kg

SAMPLE SPECIFICATION

Spirax Sarco TD45 thermodynamic steam trap, available in sizes 1/2" and 3/4", flanged ANSI 600 with stainless steel body/chromium steel seat and disc. Trap is suitable for operation between 20 and 650 psig, contains integral strainer and insulating cover.

INSTALLATION

The trap will operate in any position, but the preferred installation is in a horizontal pipe. Full-port isolating valves should be installed upstream and downstream of the trap.

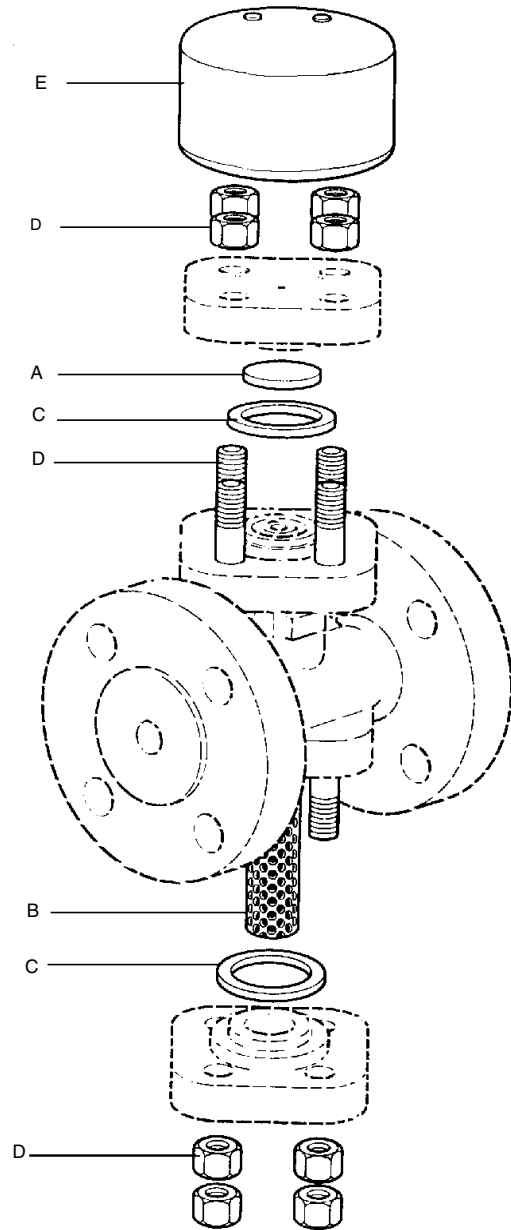
MAINTENANCE

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 cleaning of the strainer screen and inspection and cleaning of the disc and seat.

Complete installation and maintenance instructions are given in the IMI Sheet, which accompanies the product.

SPARE PARTS



Disc (pct of 3)	A
Strainer Screen	B
Cover Gaskets (2 required)	C
Cover Studs & Nuts (Set of 8)	D
Insulcap	E

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