

TD16H Thermodynamic Steam Trap

Description

The TD16H thermodynamic steam trap specifically designed for applications up to 16 bar g. It is designed with high capacity for applications such as mains drainage, tracing and small process plant.

Limiting conditions

Maximum design conditions

PMO - Maximum operating pressure 16 bar g

TMO - Maximum operating temperature 400°C

Minimum pressure for satisfactory operation 0.2 bar g

Maximum back pressure should not exceed 80% of the inlet pressure under any conditions of operation otherwise the trap may not shut.

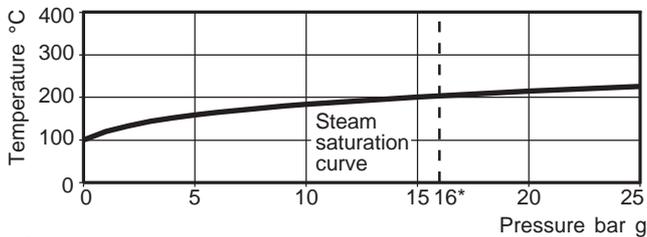
Maximum body design conditions PN25

PMA - Maximum allowable pressure 25 bar g

TMA - Maximum allowable temperature 400°C

Maximum cold hydraulic test pressure 38 bar g

Operating range

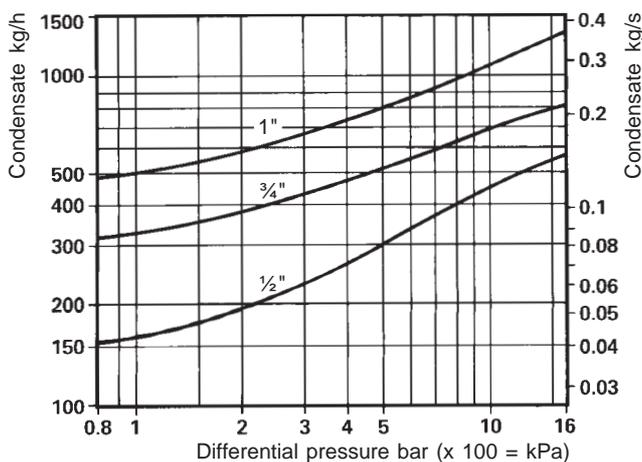


*Recommended maximum operating pressure

Pipe connections

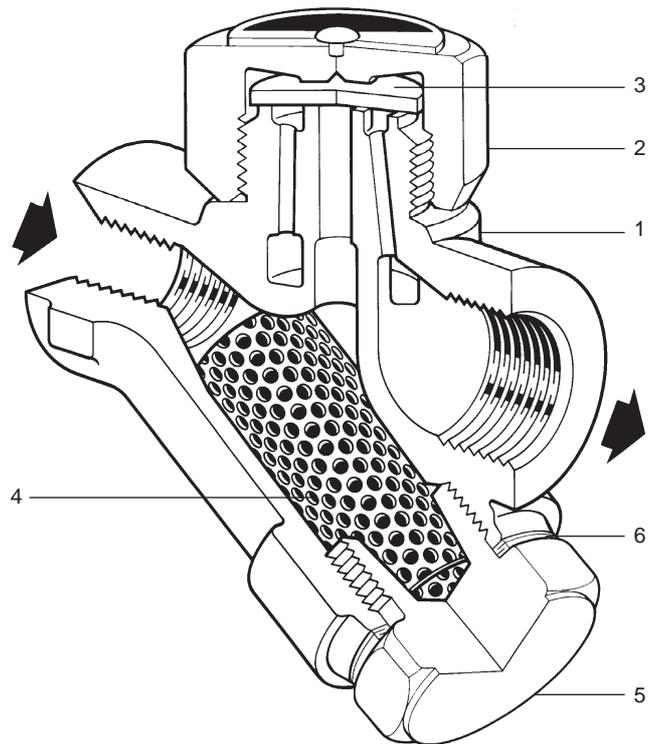
½", ¾" and 1" screwed BSP (BS21 parallel) or NPT

Capacities



Materials

No	Part	Material
1	Body	Stainless steel ASTM A743 CA40F
2	Cap	Stainless steel AISI 416
3	Disc	Stainless steel BS 1449 420 S45
4	Strainer screen	Stainless steel BS 1449 304 S16
5	Strainer cap	Stainless steel AISI 416
6	Strainer cap gasket	Stainless steel BS 1449 304 S16
7	Insulating cover (optional)	Aluminium



Dimensions (approximate in millimeters)

Size	A	B	E	G	H	J	K	L	Weight
½"	41	78	55	85	20	52	57	38	0.8 kg
¾"	44	90	60	100	20	52	57	38	1.0 kg
1"	48	95	65	100	25	58	57	38	1.6 kg

Optional extras

Insulating cover:- An insulating cover to prevent the trap being unduly influenced by excessive heat loss such as being subjected to low ambient temperatures, wind, rain etc.

Integral blowdown valve:- see TI-P153-01, also, the strainer cap can be drilled, tapped and plugged ¼" BSP.

Installation

Preferably fitted in a horizontal pipe but can be fitted in other positions.

How to specify

1 - ½" TD16H Spirax Sarco steam trap screwed BSP

Spare parts

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

AVAILABLE SPARE

Disc (packet of 3)	3
Strainer screen and gasket	4,6
Strainer cap gasket (packet of 3)	6
Insulating cover	7

How to order

Always order spares by using the description given in the column headed AVAILABLE SPARE and stating the size and type of trap.

Example: 1 - Strainer screen and gasket for ½" Spirax Sarco TD16H Thermodynamic Steam Trap.

Maintenance

Before undertaking any maintenance on the trap it must be isolated from both supply line and return line and any pressure allowed to safely normalise to atmosphere. The trap should then be allowed to cool.

How to service

Remove insulating cover if fitted and unscrew cap using spanner. Do not use stilsons or wrench of similar type which may cause distortion of the cap. If the disc and body seating faces are only slightly worn they can be refaced individually on a flat surface such as a surface plate. A figure of eight motion and a little grinding compound such as Carborundum Co's Compound I.F. gives the best results. If the wear is too great to be rectified by simple lapping, the seating faces on the body must be ground flat and then lapped and the disc replaced by a new one. The total amount of metal removed in this way should not exceed 0.25 mm. Alternatively, customers may prefer to take advantage of our reconditioned trap scheme which allows this work to be done to original production standards. When reassembling, the disc is normally placed in position with the grooved side in contact with body seating face. Screw on cap, no gasket is required but a suitable high temperature anti-seize grease should be applied to the threads.

To clean or replace strainer

Unscrew strainer cap using spanner, withdraw screen and clean, or if damaged replace with new one.

To reassemble, insert screen into cap, then screw cap into place. A fine smear of 'Molybdenum Disulphide' grease should be applied to the first few threads. Care should be taken to ensure that the gasket and gasket faces are clean. Tighten cap to the recommended torque.

Recommended tightening torques

Item	 or  mm	N m
2	½" and ¾"	180 - 200
	1"	250 - 275
5	32 M28	170 - 190

