

TI-P068-17 ST Issue 3

TD 32F Thermodynamic Steam Trap

Description

The TD 32F is a medium pressure flanged thermodynamic steam trap with integral strainer screen suitable for mains drainage.

Sizes and pipe connections DN 15LC, 15, 20 and 25 Standard flange:- BS 4504 PN 40, BS 1560 Class 150 and 300

Limiting conditions

Maximum body design conditions PN 40 PMA — Max. allowable pressure 40 bar g TMA — Max. allowable temperature 400°C Cold hydraulic test 60 bar g

Operating range



The product must not be used in this region

* PMO — Max. operating pressure (recommended) Note: Minimum operating pressure for satisfactory operation is 0.25 bar g PMOB — Max. operating back pressure is 80% of upstream pressure

Capacities



Materials

No	Part	Material		
1	Body	Stainless	s Steel	
		DIN 1	17445 G-X2	20 Cr14 Ws 1.4027
2	Сар	Stainless	s Steel	AISI 416
3	Disc	Stainless	s Steel	BS 1449 420 S45
4	Strainer Screen	Stainless	s Steel	ASTM A240 316L
5	Strainer Cap	Stainless	s Steel	AISI 416
6	Strainer Cap Gasket	Stainless	Steel	BS 1449 304 S16
7	Insulating Cover	Aluminiu	m	
	(optional extra. Not DN	l 25)		
8	Flanges	Steel	DIN 17243	3 C22.8 Ws 1.0460



How to specify

DN 15 Spirax Sarco TD 32F Steam Trap flanged BS 4504 PN40.

Dimensions (approximate) in millimetres

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Size - DN	Α	В	С	D	Е	F	G	Н	Weight
15 LC	150	55	41	40	80	57	38	55	2.3 kg
15	150	55	41	40	80	57	38	55	2.4 kg
20	150	60	47	40	95	57	38	61	3.1 kg
25	160	65	53	40	100	_	_	_	4.2 kg

Installation

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

Optional extras

Insulating cover:- to prevent the trap being unduly influenced by excessive heat loss such as when subjected to low outside temperatures, wind, rain etc. (Not available for DN 25) Note: The internal blowdown valve is not available for the TD 32F

Spare parts

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

AVAILABLE SPARE	ITEM
Disc (Pkt of 3)	3
Strainer Screen and Gasket	4, 6
Strainer Cap Gasket (Pkt of 3)	6
Insulating Cover (Not available for DN 25)	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 for DN 15 Spirax Sarco TD 32F 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 Stillsons or a 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 by lapping individually on a flat surface such as a surface plate. A figure of eight motion and a little grinding compound such as the Carborundum Co's Compound I.F. gives the best results.

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.

When re-assembling, 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 re-assemble, 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	DN	or the mm	Nm
2	15LC 15 20 25	36 36 41 55	135-150 180-200 180-200 250-275
5		32	170-190



Withdrawal distance for Strainer



spirax /sarco