

## TD42

# Thermodynamic Steam Trap

### Description

The TD42 is a maintainable thermodynamic steam trap.

The TD42LC is specifically designed for relatively small condensate load and is, therefore, ideal for mains drainage applications.

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

### Certification

This product is available with a manufacturer's Typical Test Report.

**Note:** All certification/inspection requirements must be stated at the time of order placement.

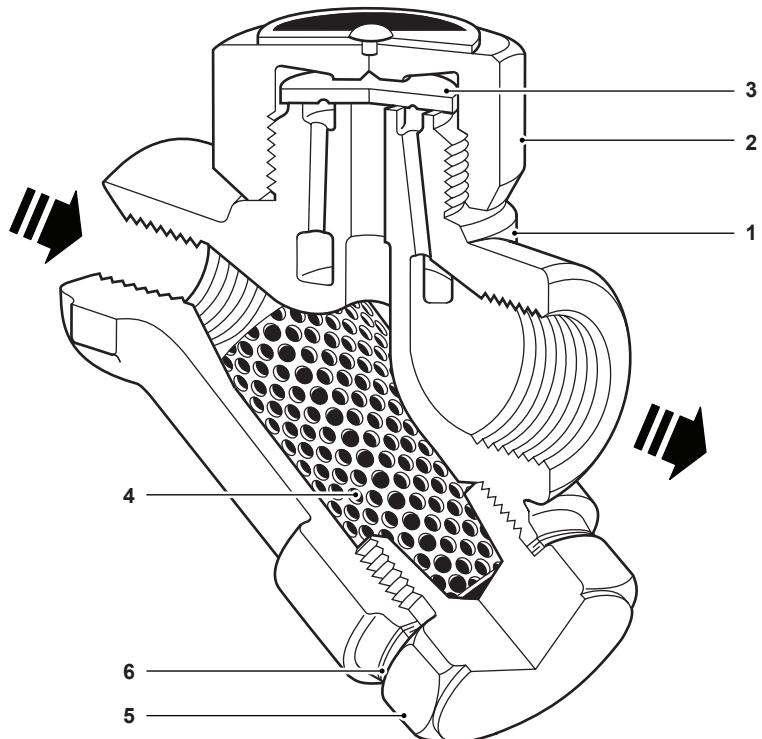
### Sizes and pipe connections

$\frac{3}{8}$ ",  $\frac{1}{2}$ " LC - Low Capacity,  $\frac{1}{2}$ " and  $\frac{3}{4}$ " screwed BSP T Rp (ISO 7-1) or NPT.

### 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.

**Integral blowdown valve:** a BDV1 or BDV2 can be fitted to the strainer cap, alternatively the strainer cap can be drilled, tapped and plugged  $\frac{3}{8}$ " BSP T Rp (ISO 7-1) or NPT.

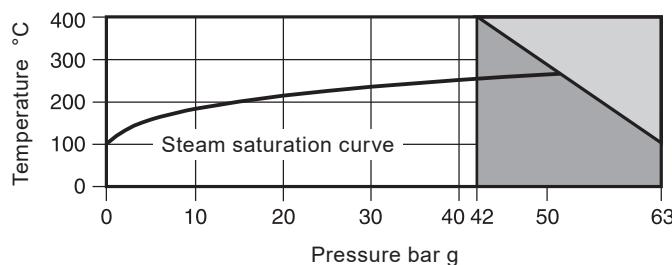


### Materials

No.	Part	Material
1	Body	Stainless steel ASTM A743 Gr. CA 40
2	Cap	Stainless steel AISI 416
3	Disc	Stainless steel BS 1449 420 S45
4	Strainer screen	Stainless steel BS 1449 304 S16

No.	Part	Material
5	Strainer cap	Stainless steel AISI 416
6	Strainer cap gasket	Stainless steel BS 1449 304 S16
7	Insulating cover (optional extra)	Aluminium

## Pressure/temperature limits

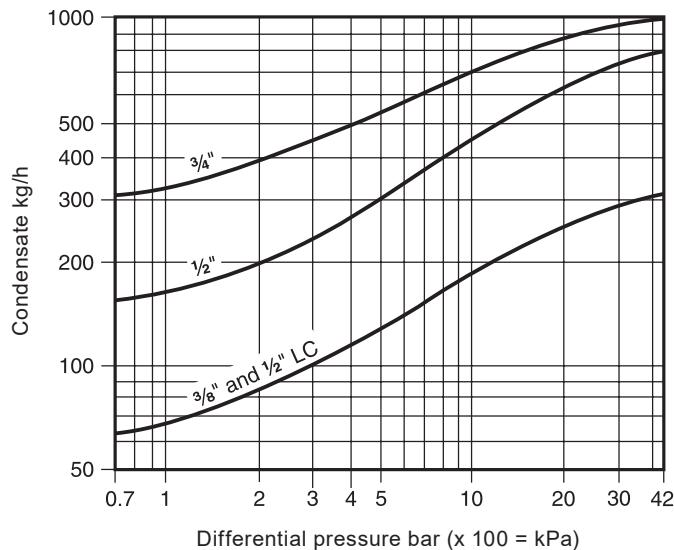


The product **must not** be used in this region.

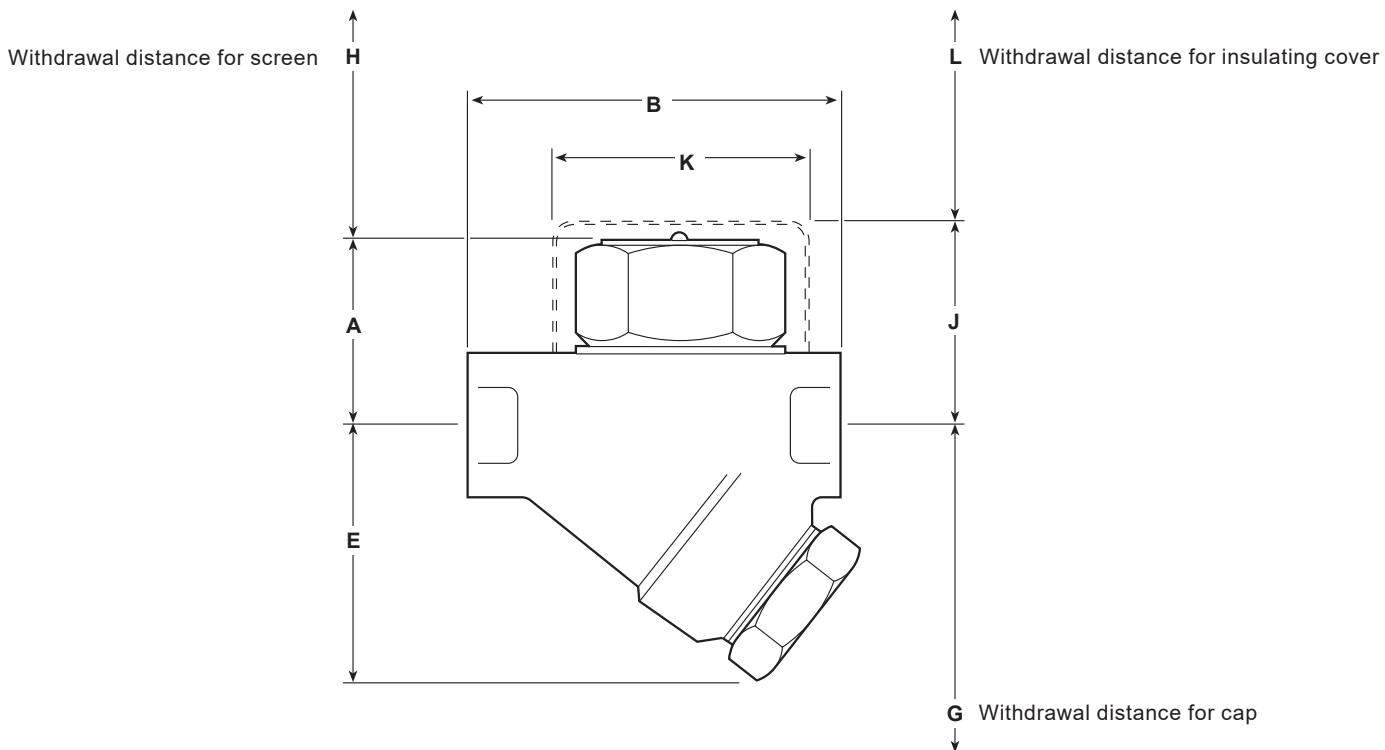
For optimum product performance the PMO should not exceed 42 bar g.

Body design conditions	PN63
PMA Maximum allowable pressure	63 bar g @ 100 °C
TMA Maximum allowable temperature	400 °C @ 42 bar g
Minimum allowable temperature	0 °C
PMO Maximum operating pressure	42 bar g recommended
TMO Maximum operating temperature	400 °C @ 42 bar g
Minimum operating temperature	0 °C
<b>Note:</b> For lower operating temperatures consult Spirax Sarco	
PMOB Maximum backpressure should not exceed 80% of the inlet pressure under any conditions of operation otherwise the trap may not shut-off.	
Minimum operating differential pressure for satisfactory operation	0.25 bar g
Product is safe for use under full vacuum conditions	
Designed for a maximum cold hydraulic test pressure of:	95 bar g

## Capacities



## Dimensions/weights (approximate) in mm and kg



Size	A	B	E	G	H	J	K	L	Weight
3/8"	41	78	55	85	41	57	57	38	0.75
1/2"LC	41	78	55	85	41	57	57	38	0.75
1/2"	41	78	55	85	41	57	57	38	0.80
3/4"	47	90	60	100	41	63	57	38	1.00

## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P068-24) supplied with the product.

### Installation note

The TD42 is designed for installation with the capsule in a horizontal plane with the cover at the top. It is recommended that a non-return valve is fitted when discharging condensate into return lines where backpressure is experienced. It is also recommended that a diffuser is fitted when discharging to atmosphere. 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 1/2" Spirax Sarco TD42 thermodynamic steam trap having screwed BSP T Rp (ISO 7-1) connections.

## Spare parts

The spare parts available are shown in solid outline. Parts drawn in a grey line are not supplied as spares.

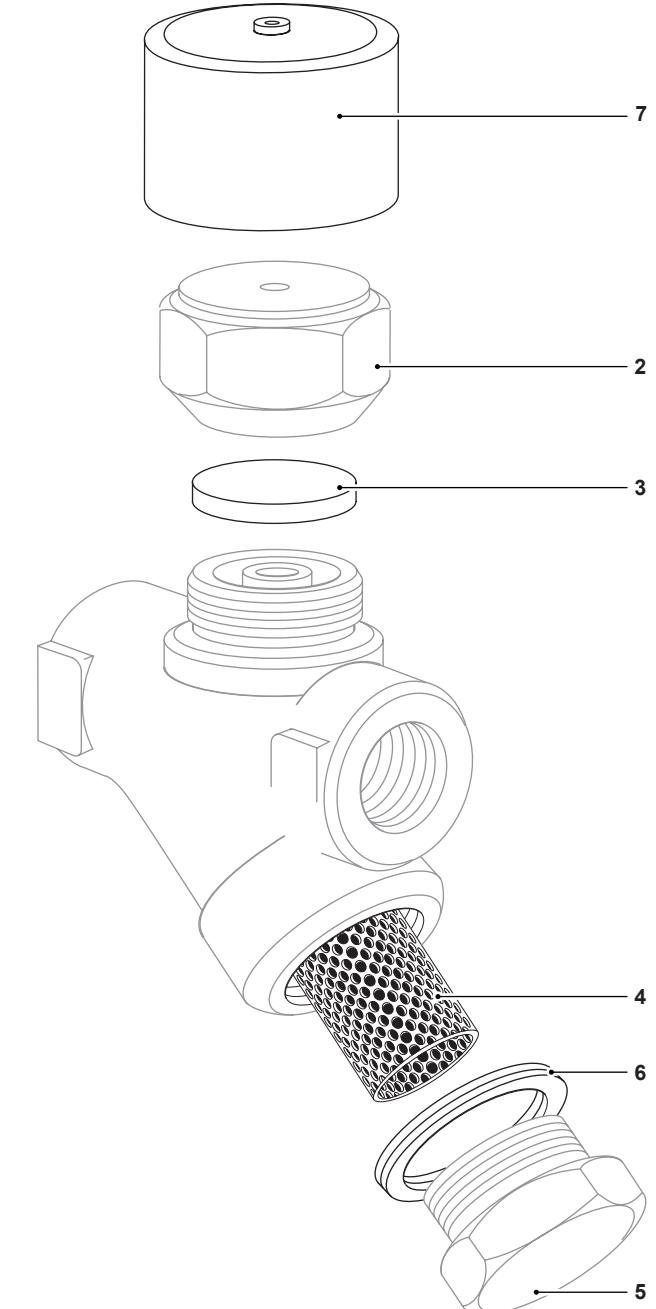
### Available spares

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

### 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 - Strainer screen and gasket for a Spirax Sarco ½" LC TD42 thermodynamic steam trap.



### Recommended tightening torques

Item	Part	or mm	N m
2	(TD42LC)	36	135 - 150
	(TD42)	41	180 - 200
5		32 M28	170 - 190