



Cert. No. LRQ 0963008

ISO 9001

# spirax/sarco

TI-P068-22  
ST Issue 5

## 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 97/23/EC.

### 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

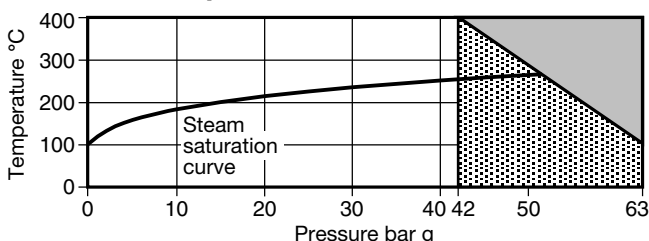
3/8", 1/2" LC - Low Capacity, 1/2" and 3/4" screwed BSP or NPT.

### 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 3/8" BSP or NPT.

### Pressure/temperature limits



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

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

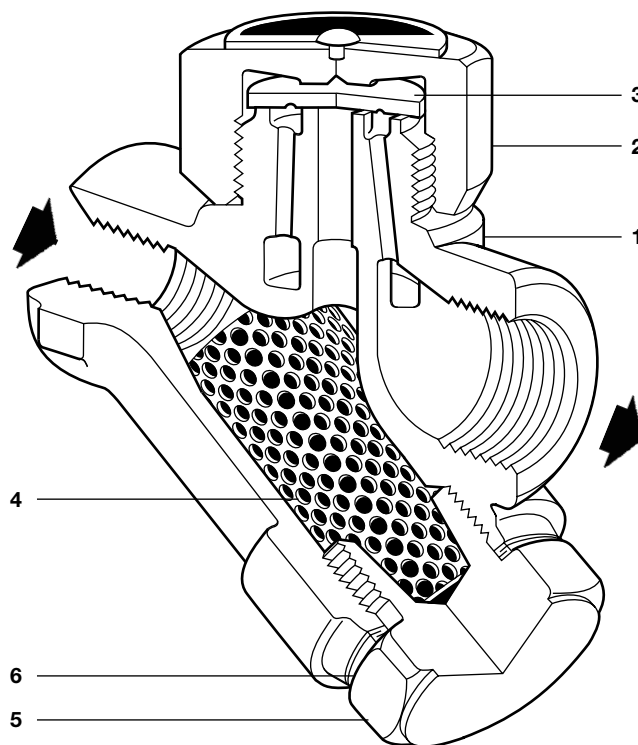
|                               |                               |                      |
|-------------------------------|-------------------------------|----------------------|
| Body design conditions        |                               | PN63                 |
| PMA                           | 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                  |

**Note:** For lower operating temperatures consult Spirax Sarco

Maximum backpressure should not exceed 80% of PMOB 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

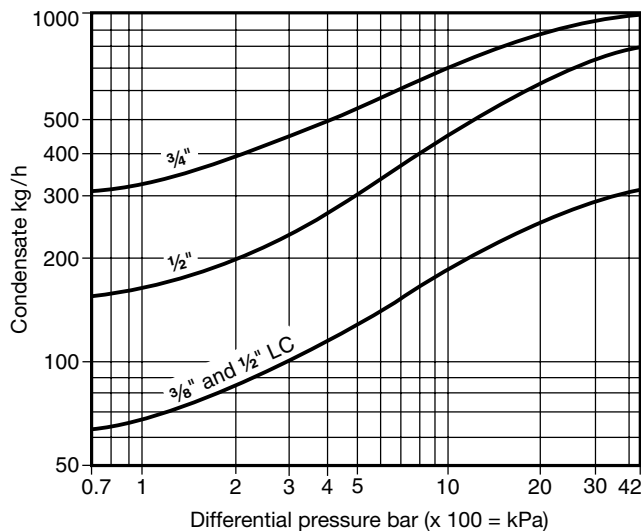
Designed for a maximum cold hydraulic test pressure of 95 bar g



### Materials

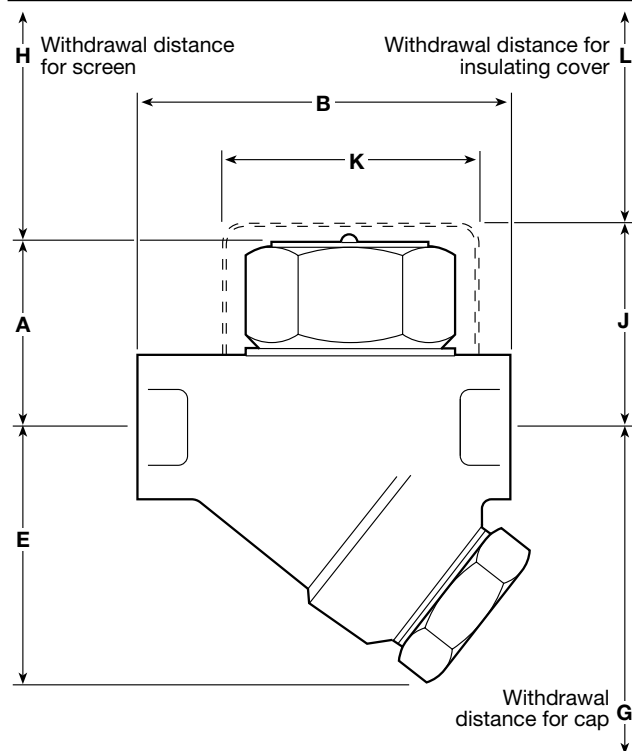
| No. | Part                              | Material                            |
|-----|-----------------------------------|-------------------------------------|
| 1   | Body                              | Stainless steel ASTM A743 Gr. CA 40 |
| 2   | Cap                               | Stainless steel AISI 416            |
| 3   | Disc                              | Stainless steel BS 1449 420 S45     |
| 4   | Strainer screen                   | Stainless steel BS 1449 304 S16     |
| 5   | Strainer cap                      | Stainless steel AISI 416            |
| 6   | Strainer cap gasket               | Stainless steel BS 1449 304 S16     |
| 7   | Insulating cover (optional extra) | Aluminium                           |

## 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 connections.

## Spare parts

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

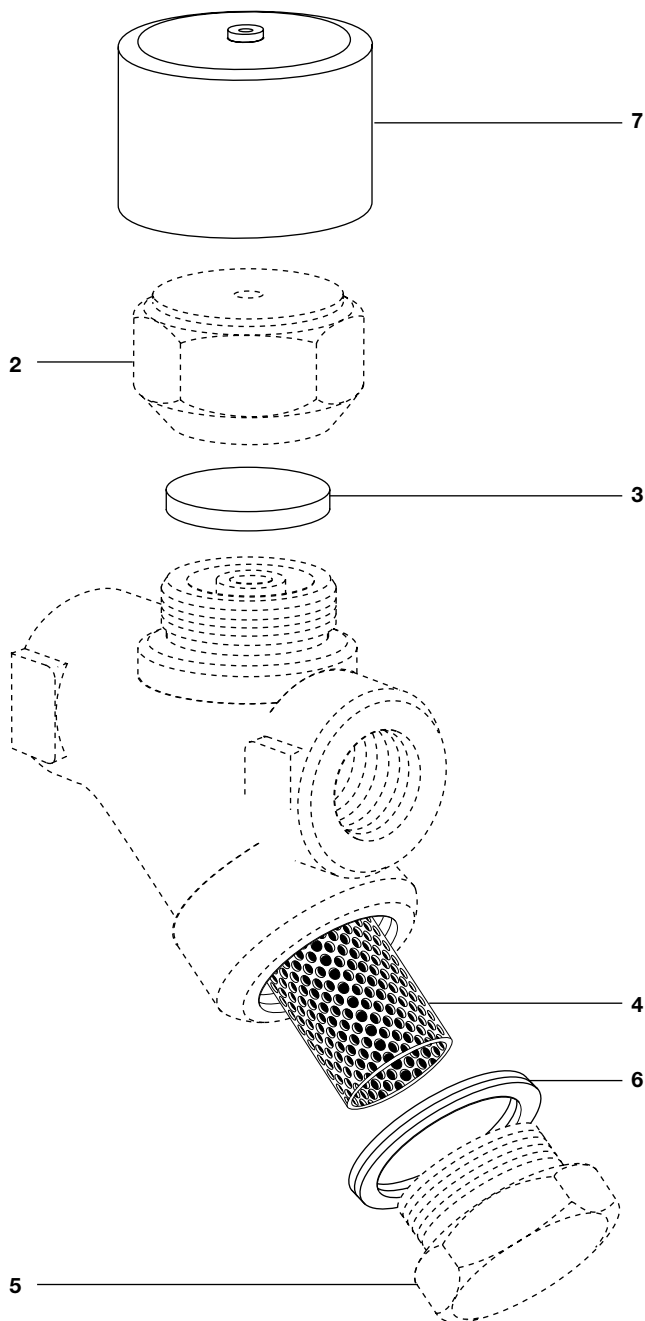
### Available spares

|                                   |      |
|-----------------------------------|------|
| 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 1/2" LC TD42 thermodynamic steam trap.



## Recommended tightening torques

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