

# spirax sarco

Cert. No. LRQ 0963008 ISO 9001

# **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.

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

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

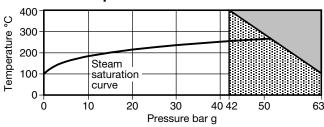
3/8", 1/2" LC - Low Capacity, 1/2" and 3/4" screwed BSP or NPT.

# 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.

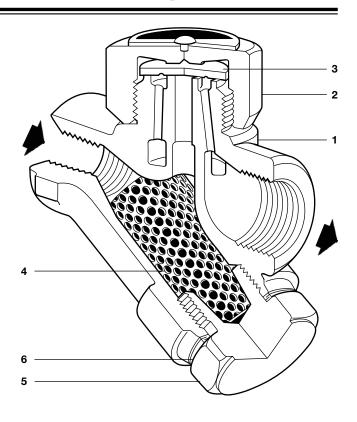
# Pressure/temperature limits



The product must not be used in this region.

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

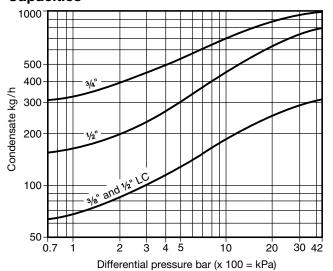
| Body design conditions   | PN63                    |  |  |  |
|--|-------------------------|--|--|--|
| PMA Maximum allowable pressure   | 63 bar g @ 100°C        |  |  |  |
| TMA Maximum allowable temperature 400°C @ 4  |                         |  |  |  |
| Minimum allowable temperature  | 0°C                     |  |  |  |
| PMO Maximum operating pressure   | 42 bar g recommended    |  |  |  |
| TMO Maximum operating temperature  | 400°C @ 42 bar g        |  |  |  |
| Minimum operating temperature 0°0 Note: For lower operating temperatures consult Spirax Sarc |                         |  |  |  |
| PMOB the inlet pressure under any cotherwise the trap may not shut-                          | conditions of operation |  |  |  |
| Minimum operating differential pressure for satisfactory operation                           | 0.25 bar g              |  |  |  |
| Designed for a maximum cold hydraulic test pressure of 95 bar g                              |                         |  |  |  |



## **Materials**

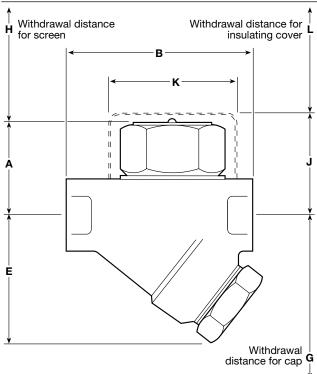
| 2 Cap Stainless steel Al 3 Disc Stainless steel BS 1449 42 4 Strainer screen Stainless steel BS 1449 30 5 Strainer cap Stainless steel Al 6 Strainer cap gasket Stainless steel BS 1449 30 7 Insulating cover Aluminium | No. | Part                              | Material        |                     |
|---|-----|-----------------------------------|-----------------|---------------------|
| 3 Disc Stainless steel BS 1449 42 4 Strainer screen Stainless steel BS 1449 30 5 Strainer cap Stainless steel Al 6 Strainer cap gasket Stainless steel BS 1449 30 7 Insulating cover Aluminium                          | 1   | Body                              | Stainless steel | ASTM A743 Gr. CA 40 |
| 4 Strainer screen Stainless steel BS 1449 30 5 Strainer cap Stainless steel Al 6 Strainer cap gasket Stainless steel BS 1449 30 7 Insulating cover Aluminium  | 2   | Сар                               | Stainless steel | AISI 416            |
| 5 Strainer cap Stainless steel Al 6 Strainer cap gasket Stainless steel BS 1449 30 7 Insulating cover Aluminium   | 3   | Disc                              | Stainless steel | BS 1449 420 S45     |
| 6 Strainer cap gasket Stainless steel BS 1449 30 7 Insulating cover Aluminium   | 4   | Strainer screen                   | Stainless steel | BS 1449 304 S16     |
| 7 Insulating cover Aluminium  | 5   | Strainer cap                      | Stainless steel | AISI 416            |
| Aluminium   | 6   | Strainer cap gasket               | Stainless steel | BS 1449 304 S16     |
| (optional extra)  | 7   | Insulating cover (optional extra) | Aluminium       |                     |

# **Capacities**



# Dimensions/weights (approximate) in mm and kg

| Size | Α  | В  | Е  | G   | Н  | J  | K  | L  | Weight |
|------|----|----|----|-----|----|----|----|----|--------|
| 3/8" | 41 | 78 | 55 | 85  | 41 | 57 | 57 | 38 | 0.75   |
| ½"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.

this 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

For ease and maintenance, consideration should be given to fitting isolation valves upstream and downstream of the steam trap.

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 ½" 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.

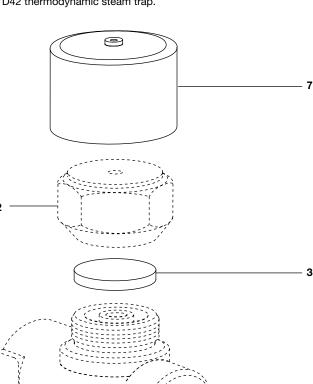
# Available spares

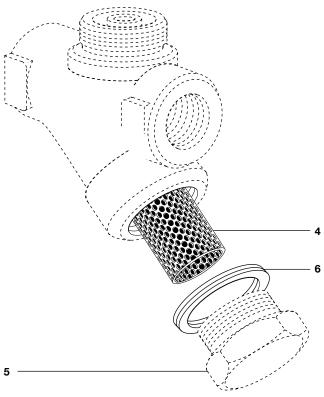
| Disc (packet of 3)                | 3    |
|-----------------------------------|------|
| Strainer screen and gasket        | 4, 6 |
| Insulating cover                  | 7    |
| Strainer cap gasket (packet of 3) | 6    |

## 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 ½" LC TD42 thermodynamic steam trap.





# Recommended tightening torques

| Iten | n        |    | or<br>mm |     | N m       |
|------|----------|----|----------|-----|-----------|
| 2    | (TD42LC) | 36 |          |     | 135 - 150 |
|      | (TD42)   | 41 |          |     | 180 - 200 |
| 5    |          | 32 |          | M28 | 170 - 190 |
|      |          |    |          |     | •         |