# spirax sarco

**TI-IBR15-19IN** 

Issue 1

# TD42L and TD42H Thermodynamic Steam Traps

#### Description

The TD42L and TD42H are maintainable thermodynamic steam traps. The TD42L is specifically designed for relatively small condensate loads and therefore is ideal for mains drainage applications. For process type loads the TD42H is available.

For those applications where the release of air is a concern, an anti-air-binding disc is available i.e. TD42LA and TD42HA.

All external body surfaces have an electroless nickel preparation (ENP) which is both energy saving and oxidation resistant.

#### **Standards**

These products fully comply with the requirements of the Indian Boiler Regulations, 1950.

#### Certification

This product is available with a manufactures' Typical Test Report and IRP contification

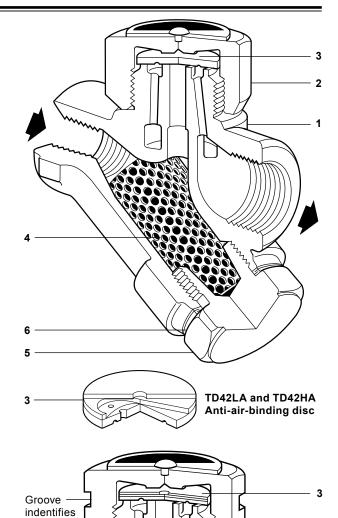
**Note:** All certification/inspection requirements must be stated at time of order placement.

#### Sizes and pipe connections

| TD42L  | ½", ¾" and 1"     | screwed BSP or NPT |
|--------|-------------------|--------------------|
| TD42H  | ½", ¾" and 1"     | screwed BSP or NPT |
| TD42LA | 1/2", 3/4" and 1" | screwed BSP or NPT |
| TD42HA | ½" and ¾"         | 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.

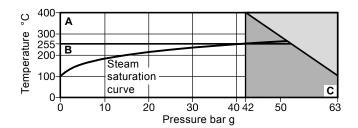


#### **Materials**

LA versions

| No. | Part                              | Material        |                 |
|-----|-----------------------------------|-----------------|-----------------|
| 1   | Body                              | Stainless steel | ASTM A743 CA 40 |
| 2   | Сар                               | Stainless steel | ASTM A582 416   |
| 3   | Disc                              | Stainless steel | AISI 420        |
| 4   | Strainer screen                   | Stainless steel | AISI 304        |
| 5   | Strainer cap                      | Stainless steel | ASTM A582 416   |
| 6   | Strainer cap gasket               | Stainless steel | AISI 304        |
| 7   | Insulating cover (optional extra) | Aluminium       |                 |

#### Pressure / temperature limits (ISO 6552)



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

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

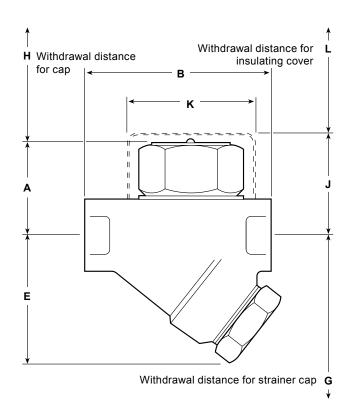
#### A - C TD42L and TD42H

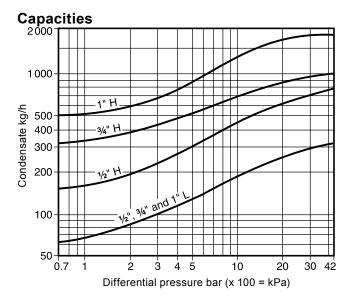
#### B - C TD42LA and TD42HA

| Body d  | esign conditions                            |   | PN63              |
|---|---|---|-------------------|
| PMA   | Maximum allowable pressure                  |   | 63 bar g @ 100 °C |
| TMA   | Maximum allowable temperature               |   | 400 °C @ 42 bar g |
| Minimu  | ım allowable temperature                    |   | 0 °C              |
| РМО   | Maximum operating pressure                  |   | 42 bar g          |
| TMO Maximum operating temperature                 |   | TD42L and TD42H                         | 400 °C @ 42 bar g |
|   | Maximum operating temperature               | TD42LA and TD42HA                       | 255 °C @ 42 bar g |
| Minimu  | ım operating temperature                    |   | 0°C               |
| Minimum inlet pressure for satisfactory operation |   | TD42L and TD42H                         | 0.25 bar g        |
|   |   | TD42LA and TD42HA                       | 0.80 bar g        |
| PMOB  | Maximum operating backpressure should       | not exceed 80% of the upstream pressure |                   |
| Design  | ed for a maximum cold hydraulic test pressu | ure of                                  | 94.5 bar g        |

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

| Size | ) | Α  | В  | Ε  | G   | Н  | J  | K  | L  | Weight |
|------|---|----|----|----|-----|----|----|----|----|--------|
| 1/2" | L | 41 | 78 | 55 | 85  | 20 | 52 | 57 | 38 | 0.75   |
| 3/4" | L | 44 | 85 | 60 | 100 | 20 | 52 | 57 | 38 | 0.95   |
| 1"   | L | 48 | 95 | 65 | 100 | 20 | 58 | 57 | 38 | 1.50   |
| 1/2" | Н | 41 | 78 | 55 | 85  | 41 | 57 | 57 | 38 | 0.80   |
| 3/4" | Н | 47 | 90 | 60 | 100 | 41 | 63 | 57 | 38 | 1.00   |
| 1"   | Н | 53 | 96 | 66 | 100 | 41 | -  | -  | -  | 1.50   |





## Safety information,

#### installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-IBR15-17IN) supplied with the product.

**Installation note:** The TD42L and TD42H should be installed in the horizontal plane, with a small drop leg proceeding them.

**Disposal:** This 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 Spirax Sarco ½" TD42L thermodynamic steam trap having screwed BSP connections.

#### Spare parts

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

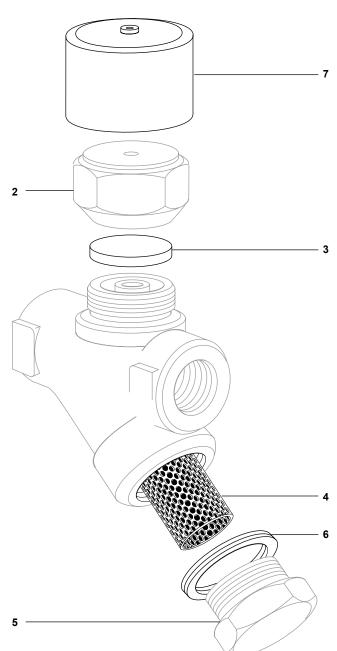
#### Available spares

| Disc (packet of 3)               | (TD42L or TD42H)   | 3       |
|----------------------------------|--------------------|---------|
| Disc and strainer screen         | (TD42LA or TD42HA) | 3, 4, 6 |
| Strainer screen and gasket       | (TD42L or TD42H)   | 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"

TD42L thermodynamic steam trap.



#### Recommended tightening torques

| Item |                     | or<br>mm | <b>*</b> | N m       |
|------|---------------------|----------|----------|-----------|
|      | (TD42L - all sizes) | 36 A/F   |          | 135 - 150 |
| 2    | (TD42H - ½", ¾")    | 41 A/F   |          | 180 - 200 |
|      | (TD42H - 1")        | 55 A/F   |          | 250 - 275 |
| 5    |                     | 32 A/F   | M28      | 170 - 190 |