TI-P068-17 CMGT Issue 6

# Spirax Sarco TD32F Flanged Thermodynamic Steam Trap

#### Description

The TD32F is a maintainable medium pressure flanged thermodynamic steam trap which has an integral strainer screen fitted to protect the internals from dirt.

The TD32FLC is designed specifically for low load applications such as steam mains drainage applications.

The TD32FA and TD32FALC are fitted with an anti-air-binding disc to ensure prompt removal of air on start-up.

#### **Standards**

This product fully complies with the requirements of the Pressure Equipment Directive (PED).

#### Certification

This product is available with certification to EN 10204 3.1.

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

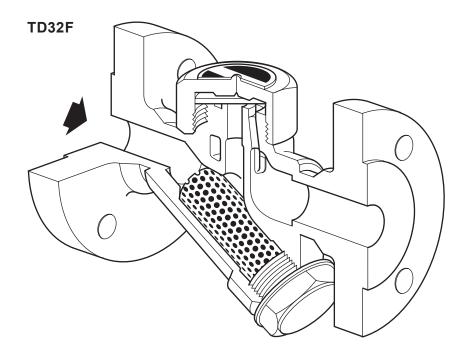
# Sizes and pipe connections

DN15, DN15LC, DN20, DN20LC, DN25 and DN25LC

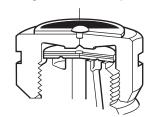
Flanged ASME (ANSI) B 16.5 Class 150 and 300, DIN 2501 PN40 and JIS/KS 10, 16 and 20.

#### **Optional extras**

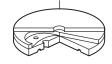
**Insulating cover (for the DN15 and DN20 only):** To prevent the trap being unduly influenced by excessive heat loss such as when subjected to low outside temperatures, wind, rain etc.



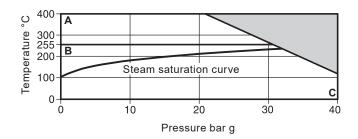
The TD32FLC and TD32FALC versions are identified by the groove in the cap



The TD32FA and TD32FALC have an anti-air-binding disc



# Pressure/temperature limits



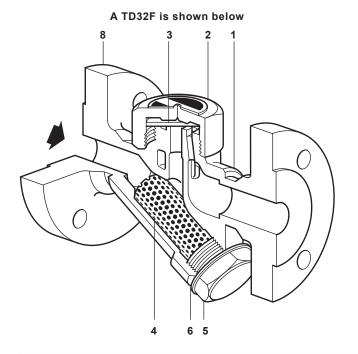
The product **must not** be used in this region.

A - C TD32F and TD32FLC

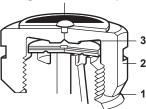
#### B - C TD32FA and TD32FALC

| PN4        |   | design conditions  |  |
|------------|---|--|--|
| 40 bar (   | Maximum allowable pressure                                |  |  |
| 400 °C     | Maximum allowable temperature                             |  |  |
| 0 °0       |   | um allowable temperature                                 |  |
| 32 bar (   | ırated steam service                                      | O Maximum operating pressure for saturated steam service |  |
| 400 °C     | TD32F and TD32FLC   |  |  |
| 255 °C     | TD32FA and TD32FALC                                       | Maximum operating temperature                            |  |
| 0 °0       |   | um operating temperature                                 |  |
| 0.25 bar ( | Minimum operating pressure for satisfactory operation is: |  |  |
|            | 80% of upstream pressure                                  | Maximum operating backpressure is                        |  |
| 60 bar     | pressure of:  | ned for a maximum cold hydraulic test p                  |  |

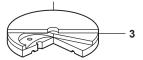
# **Materials**



# The TD32FLC and TD32FALC versions are identified by the groove in the cap



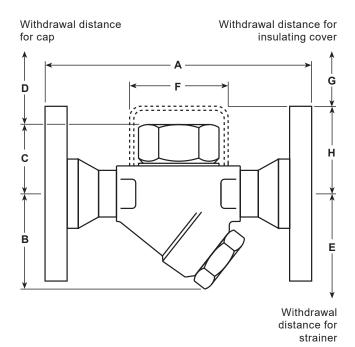
The TD32FA and TD32FALC have an anti-air-binding disc



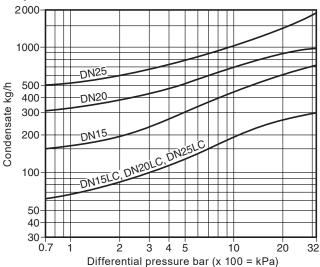
| No.        | Part   | Material  |   |
|------------|--|---|---|
| 1          | Body   | Stainless steel   | ASTM A743 CA-40                               |
| 2          | Сар  | Stainless steel   | AISI 416                                      |
| 3          | Disc   | Stainless steel   | BS 1449 420 S45                               |
| 4<br>Note: | Strainer screen The TD32FA and TDFALC are fitted with a 100 mesh stainless s | Stainless steel<br>steel screen. All other versions hav | ASTM A240 316L ve a 0.8 mm perforated screen. |
| 5          | Strainer cap   | Stainless steel   | AISI 416                                      |
| 6          | Strainer cap gasket  | Stainless steel   | BS 1449 304 S16                               |
| 7          | Insulating cover (optional extra for the DN15 and DN20 only)                 | Aluminium   |   |
| 8          | Flanges  | Steel   | DIN 17243 C22.8 Ws 1.0460                     |

# Dimensions/weights (approximate) in mm and kg

| Size                  | Α   | В  | С  | D  | Е   | F  | G  | Н  | Weight |
|-----------------------|-----|----|----|----|-----|----|----|----|--------|
| DN15<br>and<br>DN15LC | 150 | 55 | 41 | 40 | 80  | 57 | 38 | 55 | 2.4    |
| DN20<br>and<br>DN20LC | 150 | 60 | 47 | 40 | 95  | 57 | 38 | 61 | 3.1    |
| DN25<br>and<br>DN25LC | 160 | 65 | 53 | 40 | 100 | _  | _  | _  | 4.2    |



# **Capacities**



#### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P068-26) supplied with the product.

#### Installation note:

The TD32F 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 DN15 Spirax Sarco TD32FALC low capacity steam trap with flanged PN40 connections and having an integral strainer screen and anti-air-binding disc fitted.

# **Spare parts**

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

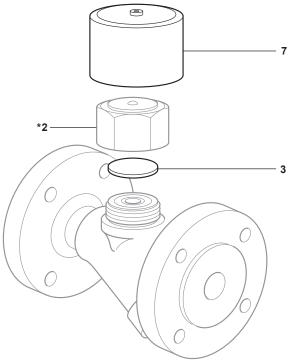
## Available spares

| Disc for TD32FLC (packet of 3)                          | 3       |
|---|---------|
| Disc, strainer screen and gasket for TD32FA or TD32FALC | 3, 4, 6 |
| Strainer screen and gasket                              | 4, 6    |
| Strainer cap gasket (packet of 3)                       | 6       |
| Insulating cover (for the DN15 and DN20 only)           | 7       |

## 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 for a DN15 Spirax Sarco TD32F thermodynamic steam trap.



# Recommended tightening torques

| Item | Part               | or mm  | N m       |
|------|--------------------|--------|-----------|
| 2    | DN15LC, 20LC, 25LC | 36 A/F | 135 - 150 |
|      | DN15               | 41 A/F | 180 - 200 |
|      | DN20               | 41 A/F | 180 - 200 |
|      | DN25               | 55 A/F | 250 - 275 |
| 5    |                    | 32 A/F | 170 - 190 |

