



TD42A Thermodynamic Steam Trap

Description

The TD42A is a maintainable thermodynamic steam trap where the release of air is a concern. It is supplied with an anti-air-binding disc.

Standards

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

Certification

This product is available with a manufacturers' Typical Test Report.

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

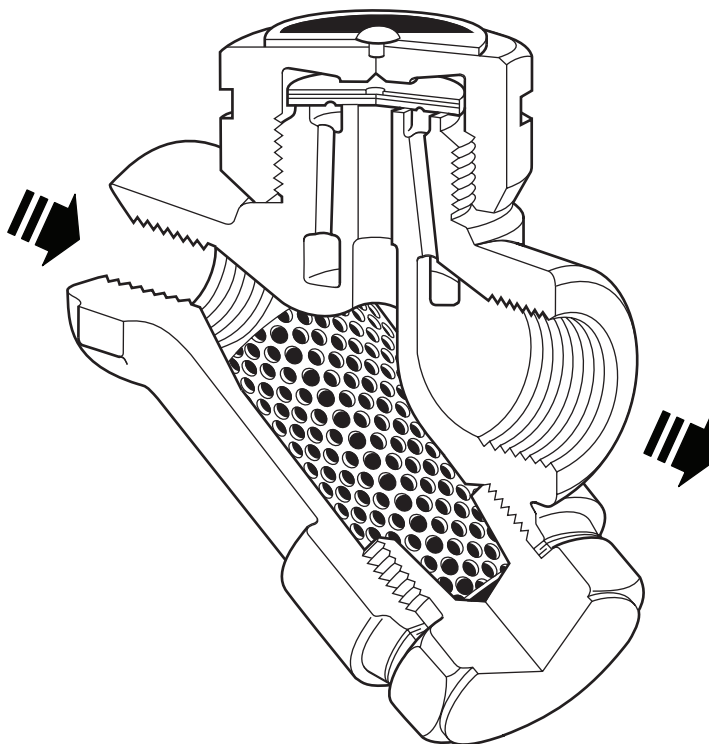
Sizes and pipe connections

$\frac{3}{8}$ ", $\frac{1}{2}$ " LC and $\frac{1}{2}$ " screwed BSP (BS 21 parallel) or NPT.

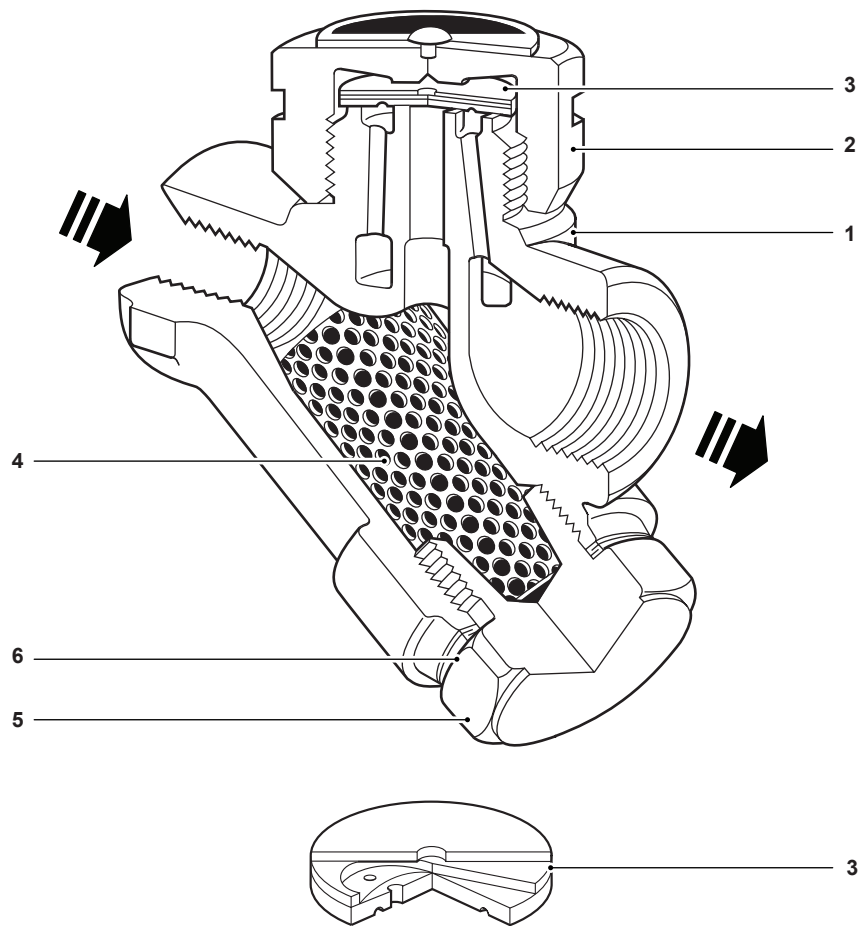
Optional extras

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 or NPT.



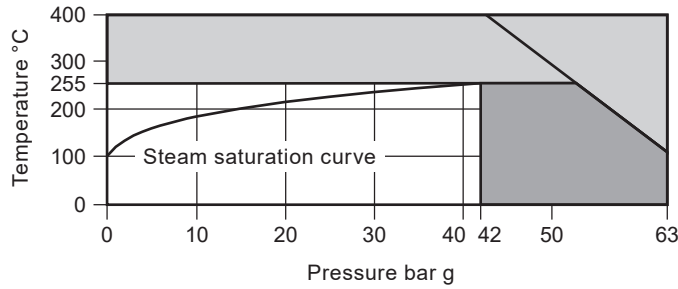
Materials




Anti-air-binding disc

| No. | Part | Material | |
|-----|-----------------------------------|-----------------------------|-----------------------|
| 1 | Body | Stainless steel | ASTM A743 Gr. CA 40 F |
| 2 | Cap | Stainless steel | AISI 416 |
| 3 | Disc | Stainless steel Bi-metal | 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 | |

Pressure/temperature limits

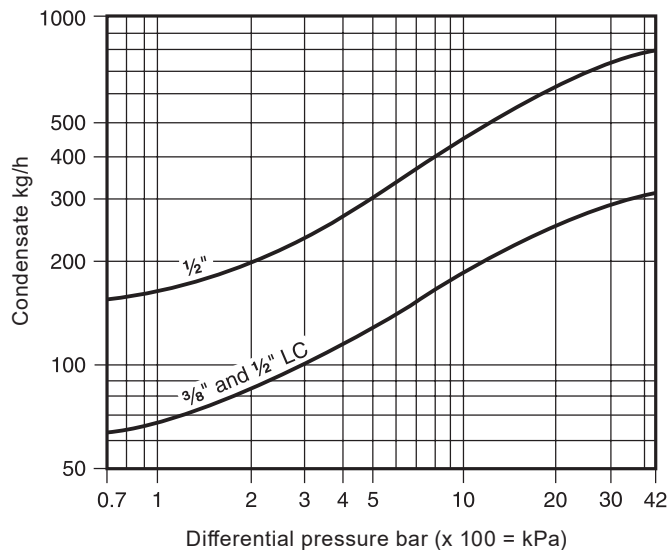


 The product **must not** be used in this region.

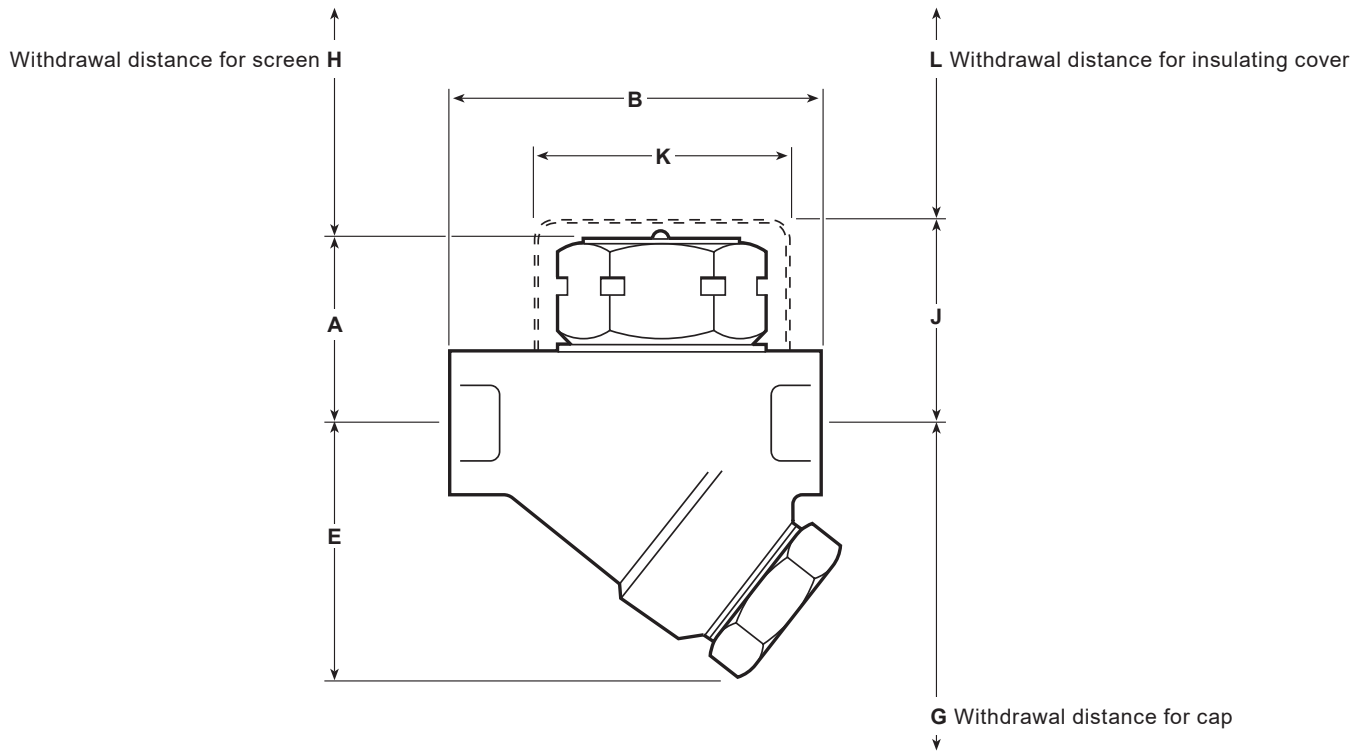
 For optimum product performance the PMO should not exceed 42 bar g.

| | |
|---|-------------------|
| 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 | -10 °C |
| PMO Maximum operating pressure for saturated steam service | 42 bar g |
| TMO Maximum operating temperature | 255 °C |
| Minimum operating temperature | 0 °C |
| Note: For lower operating temperatures consult Spirax Sarco. | |
| PMOB 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 | 0.8 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 |

Safety information, installation and maintenance

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

Installation note:

The TD42A 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 ½" Spirax Sarco TD42A 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.

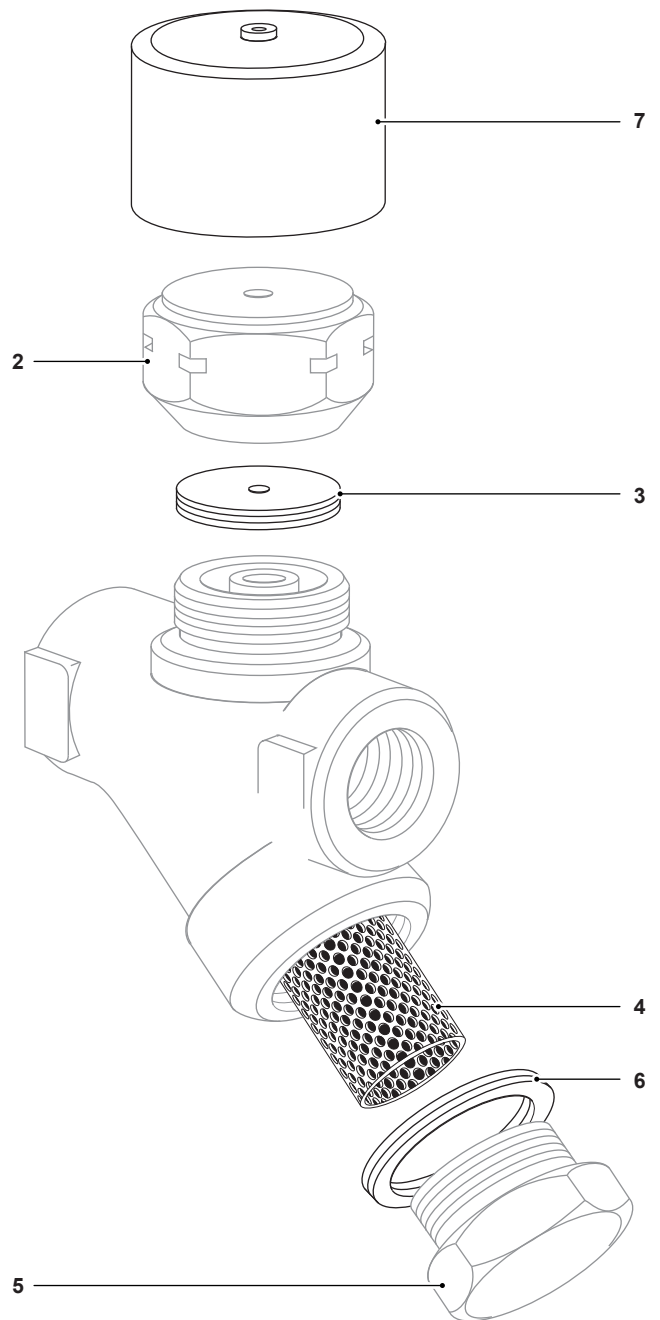
Available spares

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



How to order spares

Always order spares by using the description given in the column head 'Available spares' and state the size and type of trap.

Example: 1 - Strainer screen and gasket for a Spirax Sarco ½" LC TD42A thermodynamic steam trap.



Recommended tightening torques

| Item | Part |  or mm |  | N m |
|------|-------------|--|---|-----------|
| 2 | (¾", ½" LC) | 36 A/F | | 135 - 150 |
| | (½") | 41 A/F | | 180 - 200 |
| 5 | | 32 A/F | M28 | 170 - 190 |