



UTDS46M

Stainless Steel Thermodynamic Steam Trap for use with Pipeline Connectors

Description

The UTDS46M is a workshop maintainable stainless steel thermodynamic steam trap with integral strainer, integral air vent, insulation cover and a replaceable seat. It has been specifically designed for low capacity applications up to 46 bar g (667 psi g). The UTDS46M is attached to a suitable pipeline connector by two screws for quick and easy installation, and replacement.

Optional extra

At extra cost a **BDV2 integral blowdown valve** can be pre-fitted to the strainer cap but must be specified at the time of order placement.

Standard

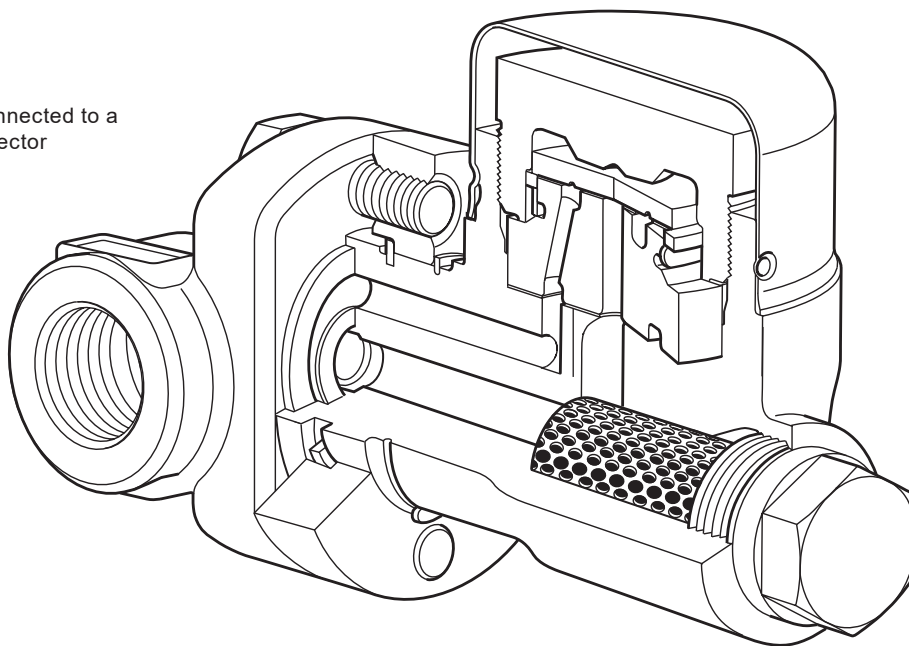
This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

Certification

This product is available with certification to EN 10204 3.1.

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

UTDS46M shown connected to a
PC10HP pipeline connector



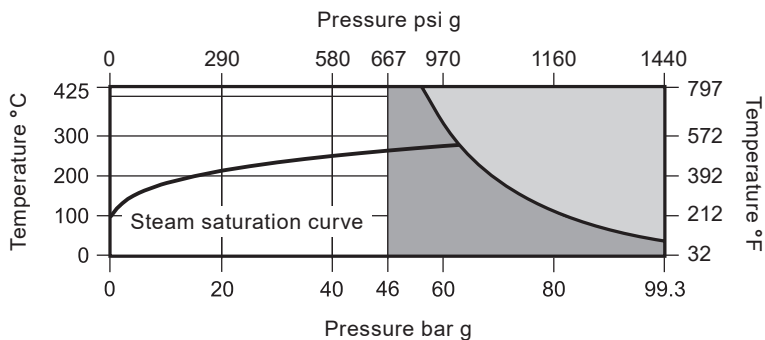
Pipeline connector options

The UTDS46M can be fitted to a variety of pipeline connectors:

| | | | |
|---------------|---|----------|--------------|
| PC10HP | Straight connector | ASME 600 | (TI-P128-10) |
| PC3_ | Straight connector with one piston isolation valve | ASME 600 | (TI-P128-02) |
| PC4_ | Straight connector with two piston isolation valves | ASME 600 | (TI-P128-03) |

See the relevant Technical Information sheet as listed above for details of the connections available for each pipeline connector.

Pressure / temperature limits



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

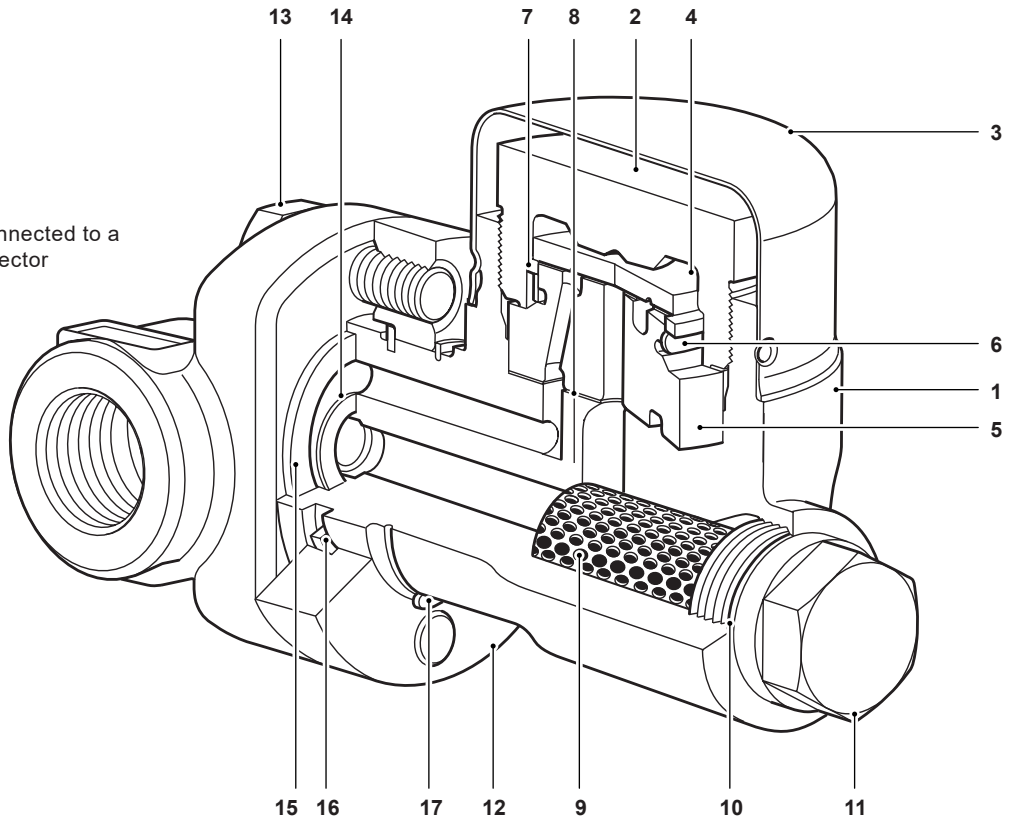
 The product **should not** be used in this region.

Note: The model of pipeline connector and connection selected will dictate the maximum operating limits of the complete assembly. Reference the specific pipeline connector Technical Information sheet as detailed in 'Pipeline connector options'.

| Body design conditions | | ASME Class 600 | |
|---|-------------------------------|--------------------|----------------------|
| PMA | Maximum allowable pressure | 99.3 bar g @ 38 °C | 1,440 psi g @ 100 °F |
| TMA | Maximum allowable temperature | 425 °C @ 56 bar g | 797 °F @ 812 psi g |
| Minimum allowable temperature | | -40 °C | -40 °F |
| PMO | Maximum operating pressure | 46 bar g @ 425 °C | 667 psi g @ 797 °F |
| TMO | Maximum operating temperature | 425 °C @ 46 bar g | 797 °F @ 667 psi g |
| Minimum operating pressure | | 1.5 bar g | 22 psi g |
| Minimum operating temperature | | 0 °C | 32 °F |
| Note: For lower operating temperatures consult Spirax Sarco | | | |
| PMOB Maximum operating backpressure is 80% of the upstream pressure | | | |
| Designed for a maximum cold hydraulic test pressure of | | 149 bar g | 2,161 psi g |

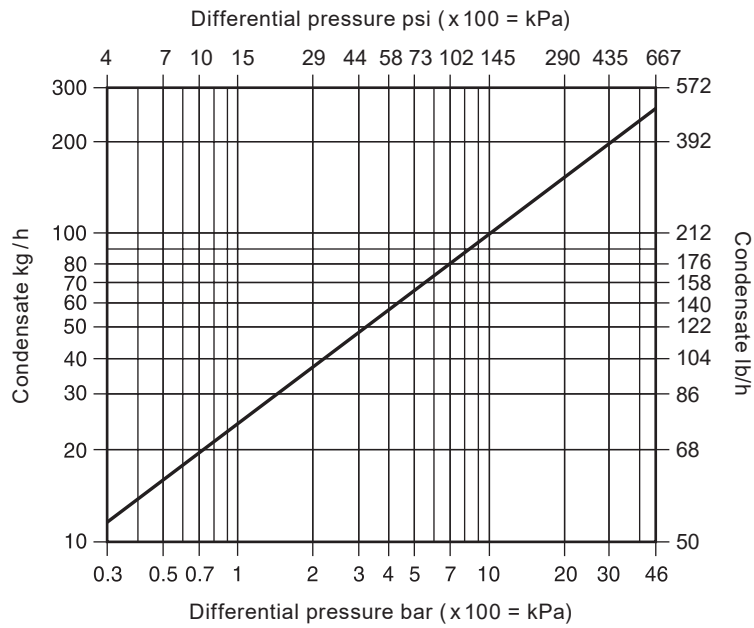
Materials

UTDS46M shown connected to a PC10HP pipeline connector

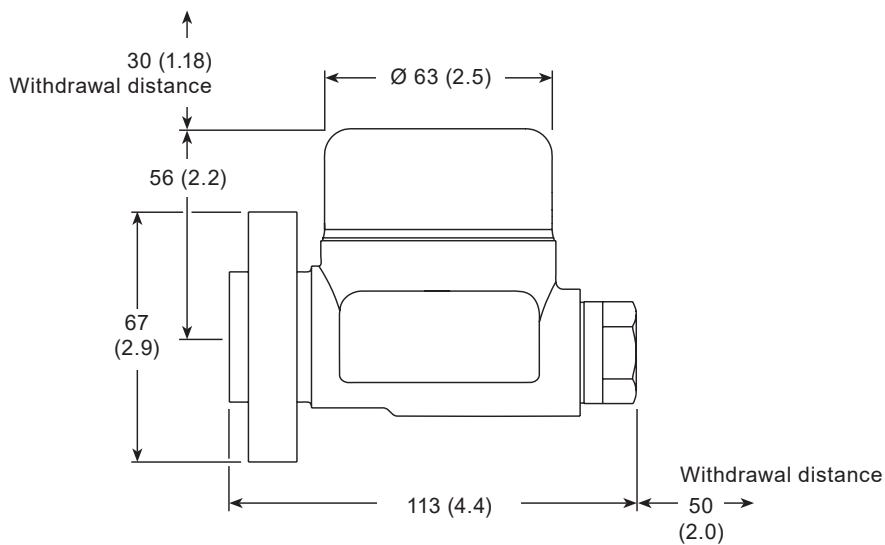


| No. | Part | Material | |
|-----|---------------------|-----------------------------------|----------------------|
| 1 | Body | Stainless steel | 1.4308/ASTM A351 CF8 |
| 2 | Top cap | Stainless steel | 1.4301/ASTM A479 304 |
| 3 | Insulating cover | Stainless steel | EN 10088-1 1.4301 |
| 4 | Disc | Hardened steel | 1.2379 |
| 5 | Seat | Hardened steel | 1.2379 |
| 6 | Bimetal ring | Bimetal | |
| 7 | Support | Stainless steel | AISI 304 |
| 8 | Seat gasket | Graphite foil | |
| 9 | Strainer screen | Stainless steel | ASTM A478 316L |
| 10 | Strainer cap gasket | Stainless steel | AISI 304 |
| 11 | Strainer cap | Stainless steel | 1.4308/ASTM A351 CF8 |
| 12 | Flange | Steel - ELNP | ASTM A193 B7 |
| 13 | Screws | Steel | ASTM A193 B7 |
| 14 | Inner gasket | Graphite/stainless steel laminate | AISI 316 strip |
| 15 | Outer gasket | Graphite/stainless steel laminate | AISI 316 strip |
| 16 | Split ring | Stainless Steel | ASTM A240 304 |
| 17 | Crescent ring | Carbon spring steel | |

Capacities



Dimensions/weights (approximate) in mm (inches) and kg (lbs)



Weight

approximately 1.75 kg (3.86 lb)

How to order - The UTDS46M is supplied in two parts:-

| | | |
|-----------------------------------|---------------|--|
| 1. The swivel pipeline connectors | PC10HP | Straight pipeline connector |
| | PC3_ | Straight connector with one integral piston isolation valve |
| | PC4_ | Straight connector with two integral piston isolation valves |

2. The **UTDS46M trap** complete with inner and outer gaskets and two connector screws.
These items will be supplied in a protective box.

Note: Any optional extras need to be specified at the time of order placement.

How to order example:

1 off Spirax Sarco ¾" PC10HP swivel pipeline connector with socket weld connections.

1 off Spirax Sarco UTDS46M thermodynamic steam trap fitted with a BDV2 integral blowdown valve. The unit is supplied complete with connector screws and gaskets.

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P187-05) supplied with the product.

Installation note:

The UTDS46M is designed for installation with the disc in a horizontal plane with the insulating 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 of maintenance, consideration should be given to fitting isolation valves upstream and downstream of the steam trap.

Spare parts

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

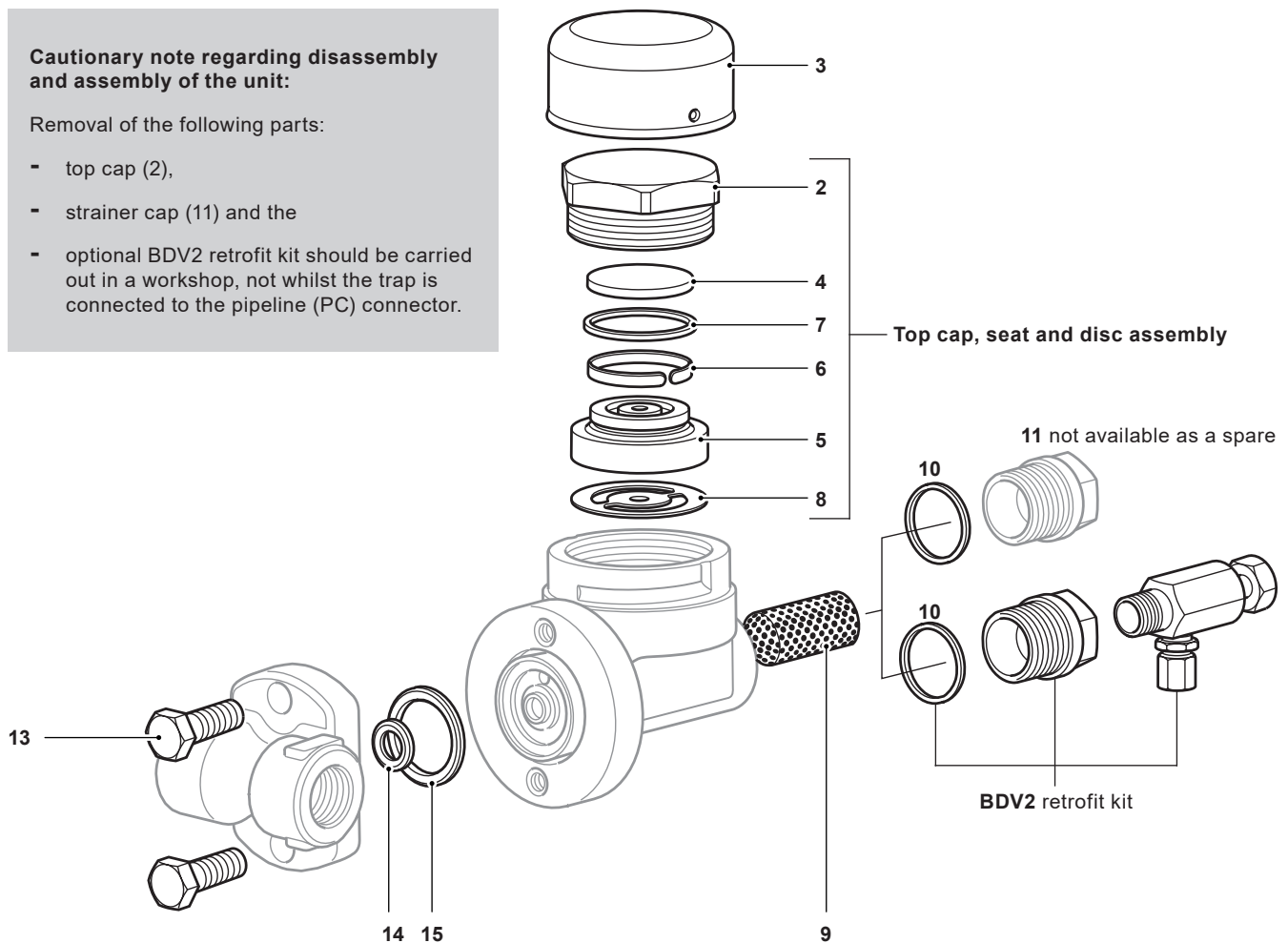
Available spares

| | |
|------------------------------------|------------------|
| Insulating cover | 3 |
| Top cap, seat and disc assembly | 2, 4, 5, 6, 7, 8 |
| Strainer screen | 9, 10 |
| Set of gaskets (packets of 3 sets) | 8, 10 |
| Connector screws and gaskets | 13, 14, 15 |
| BDV2 blowdown valve retrofit kit | |


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 steam trap.

Example: 1 - Top cap, seat and disc assembly for a Spirax Sarco UTDS46M thermodynamic steam trap.



Recommended tightening torques (for suitably lubricated threads)

| Item | Part |  mm | N m | (lbf ft) |
|------|------------------|--|-----|-------------|
| 2 | Top cap | 50 A/F | 400 | 295 |
| 11 | Strainer cap | 24 A/F | 110 | 46.5 - 48.7 |
| 13 | Connector screws | 5/16" A/F | 33 | 19 |