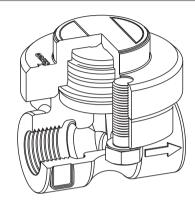
ST Issue 1

# UTDM42L Thermodynamic Steam Trap Installation and Maintenance Instructions

## **Description**

The UTDM42L thermodynamic steam trap is fully maintainable and manufactured in austenitic stainless steel with a replaceable seat. It is designed for steam pressures up to 42 bar g (when installed on a ANSI/ASME 600 rated connector such as the Spirax Sarco PC10HP) and provides rapid and complete removal of condensate. The UTDM42L can easily and simply be removed or maintained without breaking into the pipeline speeding up trap replacement with minimal system downtime. A wide variety of pipeline connectors are available with screwed, socket weld and flanged connections. The UTDM42L is fully recyclable.



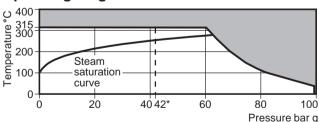
# **Limiting conditions**

#### (ISO 6552) - when installed on an ANSI/ASME 600 rated connector

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Maximum body design conditions	ANSI/ASME 600		
PMA - Maximum allowable pressure	99.3 bar g		
TMA - Maximum allowable temperature	315 °C		
Minimum allowable temperature	- 50 °C		
Cold hydraulic test pressure	149 bar g		
PMO - Maximum operating pressure (recommended)	42 bar g		

**Note:** The model, rating and connections of the specified pipeline connector will dictate the maximum operating pressure and temperature of the complete assembly. Consult the relevant Technical Information Sheet.

# **Operating range**



The product must not be used in this region.

\*PMO Maximum recommended operating pressure 42 bar g.

Note: Minimum operating differential pressure for satisfactory operation is 0.25 bar.

PMOB Maximum operating back pressure 80% of upstream pressure.

See the separate Technical Information Sheets for details of connections available on pipeline connectors.

#### Installation

The UTDM42L can be installed on any pipeline connector. Ideally the trap should be installed in horizontal pipework. See separate Installation and Maintenance Instructions for Spirax Sarco pipeline connectors (IM-P128-11, IM-P128-13 and IM-P128-06).

Remove the protective plastic cover and ensure that both gaskets are clean and undamaged and that the transfer holes are clear. Place the UTDM42L body against the connector gasket face and apply a small amount anti-seize compound to the threads of the connector screws. Tighten screws finger tight and ensure that the trap body is parallel to the connector. Tighten the screws to the recommended torque. Open isolation valves slowly until normal operating conditions are achieved. Check for leaks.

When fitted in horizontal pipework the trap should be preceded by a small drop leg.

Ensure the correct pipeline connector is selected to suit system rating.

#### Maintenance

Before undertaking any maintenance on the trap it must be isolated from both supply line and return line and any pressure allowed to safely normalise to atmosphere. The trap should then be allowed to cool to ambient temperature. Always ensure that the correct tools, safety procedures and protective equipment are used at all times.

Maintenance of the trap unit is achieved by unscrewing the two connector screws and removing the trap. The trap unit should be held securely and the insert removed by carefully prising the seat from the cover by means of a screwdriver, using the under cut on the diameter of the seat. When replacing the seat and disc it is important to ensure that all surfaces are clean and free from dirt. The disc should be placed in the cover ensuring that the grooved side will be in contact with the seat faces. The new seat must be placed into the cover so that it is squarely located. Gentle pressure should be applied to push the seat fully into the cover. Care must be taken not to damage the seal. The trap unit should be positioned against the connector gasket face and a small amount of anti-seize compound applied to the threads of the connector screws. Tighten screws finger tight and ensure that the trap body is parallel to the connector. Tighten the screws to the specified torque. Open isolation valves slowly until normal operating conditions are achieved. Check for leaks.

**Disposal** 

The UTDM42L trap unit is manufactured from stainless steel and is therefore totally recyclable. The 'O' ring/seal should be removed prior to disposal. No ecological hazard is anticipated with the disposal of this product provided due care is taken.

## How to order

When ordering a UTDM42L and pipeline connector they must be ordered individually as they are supplied as separate components to ease installation. Each UTDM42L is supplied in a protective box complete with inner and outer gaskets (securely crimped in place) and two connector screws.

**Example:** 1 off UTDM42L thermodynamic steam trap - ANSI/ASME 600 rated. 1 off ½" PC10HP pipeline connector, ANSI/ASME 600 rating with NPT screwed connections.

# Spare parts

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

#### Available spare

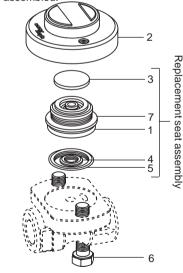
Connector screws		6 (2 off)		
Replacement seat assembly		1, 3, 4, 5, 7		
Complete trap unit	1, 2, 3, 4	, 5, 6 (2 off), 7		

#### How to order spares

Always order spare parts by using the description given in the column headed 'Available spares' and state the Model No. and type of the trap.

**Example:** 1 off Replacement seat assembly for the UTDM42L.

**Note**: The replacement seat assembly is supplied as a unit with inner/outer gaskets already assembled.



## Recommended tightening torques

Item		mm or		N m	(lbf ft)
6	9/16"	3/8'	' - UNC	30 - 35	(22 - 26)