

UTD 42L/LA and UTD 42H/HA Steam Trap & Swivel Connector

UTD42L and LA Steam Trap

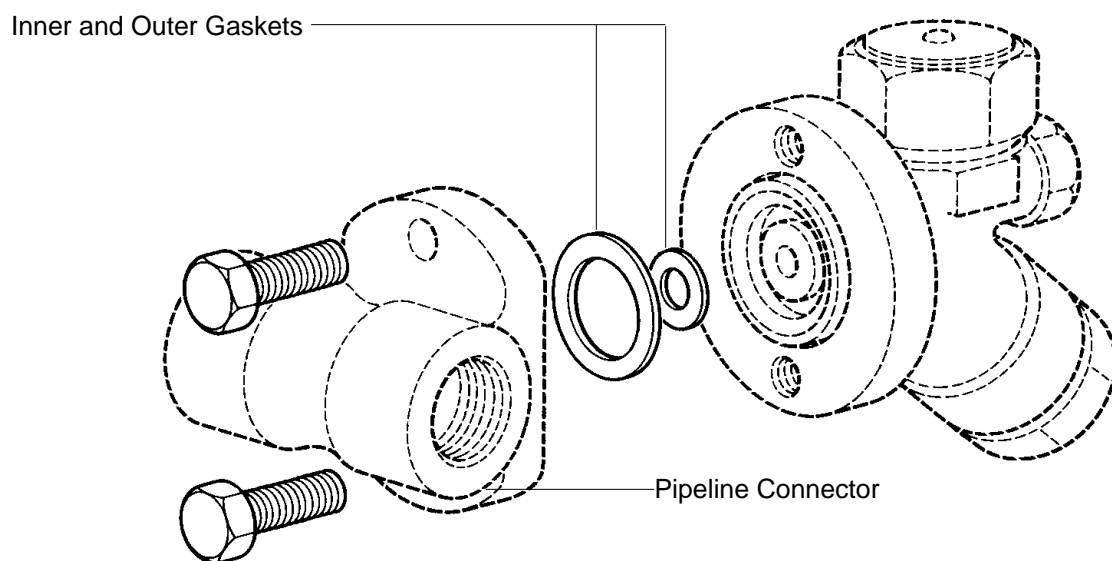


Fig 1

Description

The UTD42 is a stainless steel thermodynamic steam trap with integral strainer which is fitted to a pipeline connector. The UTD42L is specifically designed for lower loads associated with mains drainage and tracing applications up to 42 barg. The UTD42H is designed for higher loads. For applications where the release of air is required an anti air-binding disc can be fitted. These traps are designated UTD42LA and UTD42HA. All trap bodies have an electroless nickel preparation finish (ENP) which is both energy efficient and corrosion resistant. An integral blowdown valve can be fitted for screen blowdown. All UTD42 traps are fitted by two screws to a permanently installed stainless steel pipeline connector to ensure the maintenance is both quick and easily undertaken. Traps can be removed/replaced using a simple wrench with minimum system downtime.

Limiting conditions (ISO 6552)

Body design conditions PN 50 A600
PMA — Max. allowable pressure 99 barg
TMA — Max. allowable temperature 400°C
Cold hydraulic test pressure 75 barg

Product supply

The UTD 42 Swivel Connector and Steam Trap is supplied in two parts:-

1. The pipeline Connector which is supplied complete with a plastic protector for the mating flange face. This should not be removed until the steam trap is ready to be fitted. This will ensure that gasket mating faces are in good condition, and that no leaks will result.
2. The steam trap is supplied separately afterwards, or as a replacement unit. The unit will consist of a trap with gaskets fitted and two connector bolts which will be supplied in a separate linen bag. The Swivel Connector and/or the Steam Trap can be ordered and supplied independently.

UTD 42L and LA Steam Trap

Installation

The pipework connector can be installed in either horizontal or vertical pipework. If the pipeline connector is to remain in the pipework for some time before the steam trap is coupled to it, the flange protector on the connector should be left in place. The mating flange on the UTD 42 trap is free to rotate 360°. The steam trap should be fitted with the cap above the centre line of the trap. Ensure inner and outer gaskets are in place and secure trap to pipeline connector using two connector screws. Apply anti-seize compound to the threads, tighten screws finger tight and ensure that the steam trap is in a horizontal position with the cap uppermost. Tighten connector screws, to the recommended tightening torque. Ensure that **a)** the pipeline connector is fitted such that the flange connection is in the vertical plan and **b)** that the swivel pipeline connector is installed with the direction of flow pointing in the correct direction.

The UTD42 can also be fitted to a AC3 or PC4 pipeline connector complete with integral piston valves.

Important — Check that both inner and outer gaskets are in position, before assembly commences.

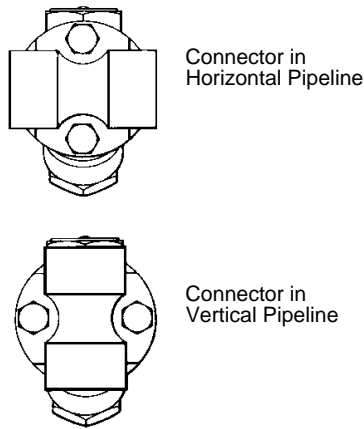


Fig 2

Clean the contact face on the pipeline connector. Position the new, or reconditioned, UTD42 trap unit. Apply anti-seize compound to the connector screw threads, tighten screws finger tight and ensure trap is in horizontal position with the top cap uppermost. Tighten the connector screws to the recommended torques.

Adjusting the trap to the Horizontal position

The thermodynamic steam trap gives optimum performance when the disc is in the horizontal plane. By loosening two bolts on the flange (9/16" AF spanner) it is possible to rotate the trap such that it is placed in the horizontal position. The two bolts should be evenly tightened to hold the trap in position, and then tightened to 30/35 Nm 22/26 lbf ft. (See Fig. 3).

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.

9/16" AF
30/35 Nm 22/26 lbf ft

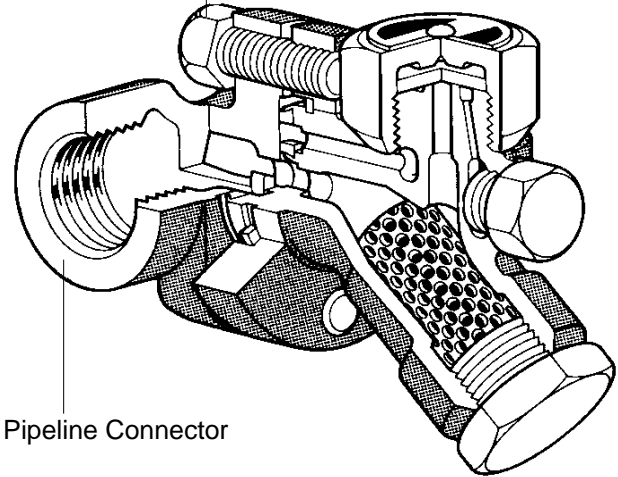


Fig 3

Spare parts

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

AVAILABLE SPARE

UTD 42 Trap unit assembled

	1,2,3,5,6,7,10,11,12,13
Insulating cover	14
Pkt. of 3 discs (UTD42L and UTD42H)	3
Connector screw and gasket	10,11,12
Strainer screen (UTD42L and UTD42H)	5
Strainer screen gasket	7
Disc and strainer screen (UTD42LA and UTD42HA)	3,5

How to order

Always order spares by using the description given in the column headed Available Spare and stating the type of trap.

Example:- 1 - Packet of 3 discs for UTD42L

To replace the disc

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.

Remove insulating cover if fitted and unscrew cap using spanner. Do not use Stillsons or a wrench of similar type which may cause distortion of the cap.

If the disc and body seating faces are only slightly worn they can be refaced by lapping individually on a flat surface such as a surface plate. A figure of eight motion and a little grinding compound gives the best results.

If the wear is too great to be rectified by simple lapping, the seating faces on the body must be ground flat and then lapped and the disc replaced by a new one. The total amount of metal removed in this way should not exceed 0.25 mm (0.010").

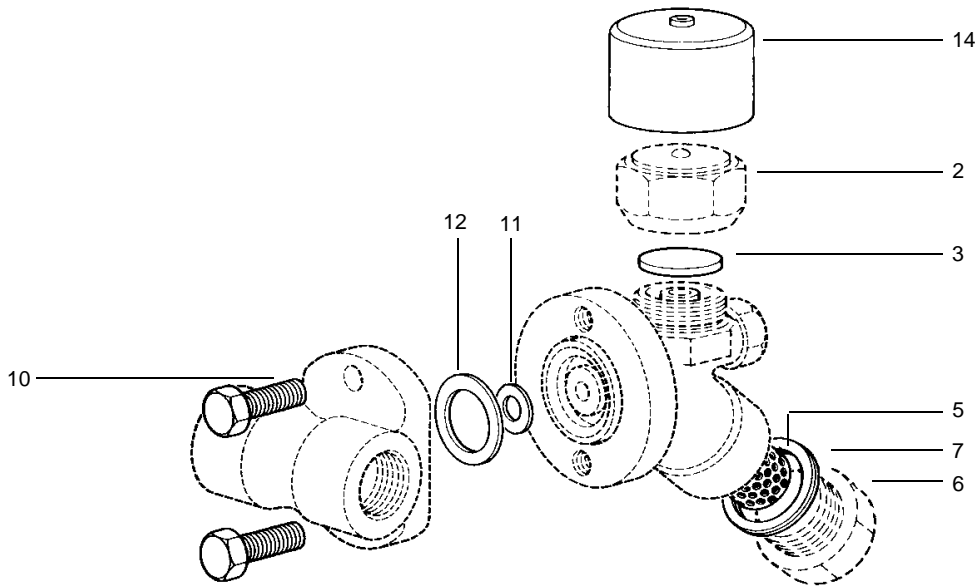
When reassembling, the disc must be placed in position with the grooved side in contact with body seating face. Screw on cap; no gasket is required but a suitable high temperature anti-seize grease should be applied to the threads.

To replace inner/outer gaskets



The gaskets are retained in the grooves of the steam trap by means of a staking process (in 3 locations). Gaskets can be removed using a small screwdriver. Care must be taken not to damage gasket faces. Deformed metal lips can then be straightened and new gaskets installed and staked to retain them.

To Clean or Replace Strainer

Unscrew strainer cap using spanner, withdraw screen and clean, or if damaged replace with new one. To reassemble, insert screen into cap, then screw cap into place. A fine smear of 'Molybdenum Disphide' grease should be applied to the first few threads. Care should be taken to ensure that the gasket and gasket faces are clean. Tighten cap to the recommended torque. If an integral blowdown valve is fitted it should be periodically blowdown to remove debris collected in the screen. Blowdown screw must be tightened to the recommended torque. Ensure that adequate safety precautions are taken when opening the blowdown valve to atmosphere. Hand protection is recommended.



Recommended Tightening Torques

Item	 or mm		Nm
2 (UTD42L/LA)	36		135 - 150
2 (UTD42H/HA)	41		135 - 150
6	32		170 - 190
10	9/16"		30 - 35

Note: The blowdown screw on the integral blowdown valve should be tightened to 40-50Nm.

Spirax Sarco Applications Engineering Department

Toll Free at: 1-800-833-3246

SPIRAX SARCO, INC. • 1150 NORTHPOINT BLVD. • BLYTHEWOOD, SC 29016

PHONE 803-714-2000 • FAX 803-714-2200