



Cert. No. LRQ 0963008

ISO 9001

# spirax/sarco

TI-P614-03

ST Issue 2

## IUTD30L and IUTD30H Thermodynamic Steam Traps with Integral Spiratec Sensors

### Description

The **IUTD30L** and **IUTD30H** stainless steel thermodynamic steam traps with integral strainer are fitted to pipeline connectors. The **IUTD30L** is specifically designed for lower loads associated with mains drainage and tracing applications up to 30 bar g. The **IUTD30H** is designed for higher loads.

Both traps are fitted with an integral Spiratec sensor for quick and accurate detection of steam leakage and/or system cooling. Traps can be supplied with sensors to detect waterlogging and steam wastage (WLS1) or for steam leakage only (SS1).

All trap/sensor types can be simply integrated into all existing Spiratec monitoring systems. All trap bodies have an electroless nickel preparation finish (ENP) which is both energy efficient and corrosion resistant. The 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.

### 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.

### Standards

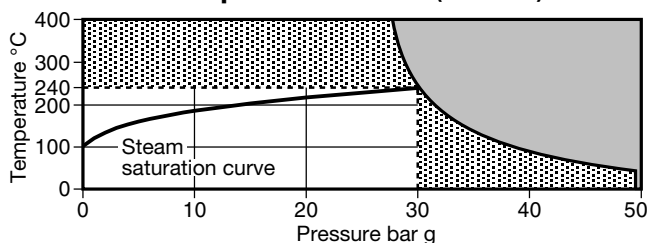
These products fully comply with the requirements of the European Pressure Equipment Directive 97/23/EC.

### Certification

These products are available with certification to EN 10204 3.1.

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

### Pressure / temperature limits (ISO 6552)



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

The product should not be used in this region or beyond its operating range as damage to the internals may occur.

**Note:** The model of pipeline connector and connections 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'.

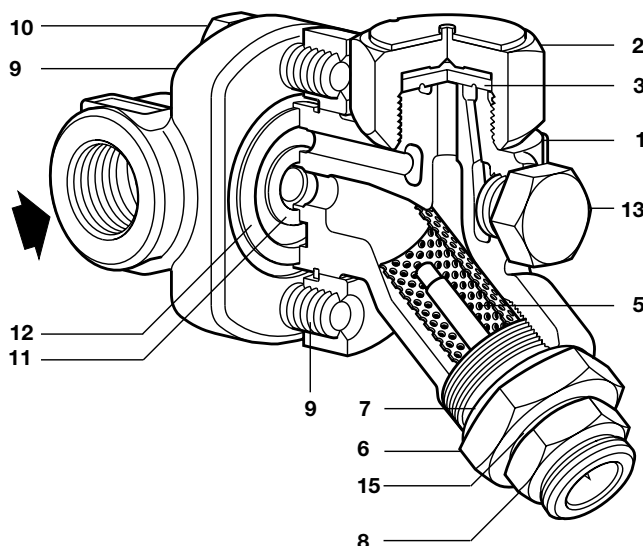
Body design conditions		PN50 (ANSI 300)
PMA	Maximum allowable pressure	50 bar g @ 38°C
TMA	Maximum allowable temperature	400°C @ 27.5 bar g
Minimum allowable temperature		0°C
PMO	Maximum operating pressure for saturated steam service	30 bar g
Maximum operating temperature		240°C @ 30 bar g
Minimum operating temperature		0°C
<b>Note:</b> For lower operating temperatures consult Spirax Sarco		
ΔPMX	Maximum differential pressure	30 bar
PMOB	Maximum operating backpressure should not exceed 80% of the upstream pressure	
Minimum inlet pressure for satisfactory operation		0.25 bar g
Designed for a maximum cold hydraulic test pressure of 75 bar g		

### Pipeline connector options

The IUTD30 can be fitted to a variety of pipeline connectors:

<b>PC10</b>	Straight connector	ANSI/ASME 300	(TI-P128-10)
<b>PC10HP</b>	Straight connector	ANSI/ASME 600	(TI-P128-10)
<b>PC3</b>	Connector with one piston isolation valve	ANSI/ASME 600	(TI-P128-02)
<b>PC4</b>	Connector with two piston isolation valves	ANSI/ASME 600	(TI-P128-03)

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



### Materials

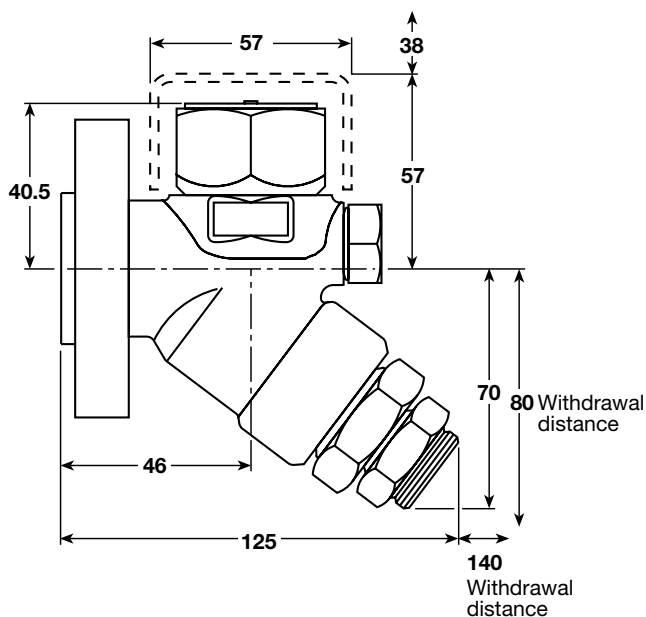
No.	Part	Material	
1	Body	Stainless steel/ENP	ASTM A 743 Gr. CA 40 F
2	Cap	Stainless steel	ASTM A582 416
3	Disc	Stainless steel	BS 1449 420 S45
5	Strainer screen	Stainless steel	BS 1449 304 S16
6	Sensor adaptor	Stainless steel	BS 970 416 S37
7	Adaptor gasket	Stainless steel	BS 1449 304 S16
8	Sensor	Stainless steel	
9	Pipeline connector	Stainless steel	ASTM A351 CF8
10	Connector screw	Steel	ASTM A193 B7
11	Inlet gasket	Graphite / Stainless steel laminate	AISI 316 strip
12	Outlet gasket	Graphite / Stainless steel laminate	AISI 316 strip
13	Plug	Stainless steel	ASTM A276 431
14	Insulating cover (optional extra)	Aluminium	
15	Sensor gasket	Stainless steel	
16	Blanking plug (not shown)	Steel	

Local regulations may restrict the use of this product to below the conditions quoted.

In the interests of development and improvement of the product, we reserve the right to change the specification without notice.

© Copyright 2007

## Dimensions (approximate) in mm



## Weight (approximate) in kg

IUTD30L/H with SS1 sensor	2.50
IUTD30L/H with WLS sensor	2.65

## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P154-02) supplied with the product.

### Installation note:

The pipework connector can be installed in either horizontal or vertical pipework.

The mating flange on the IUTD30 trap is free to rotate 360°. The steam trap should be fitted with the cap above the centre line of the trap. Ensure that the steam trap is in a horizontal position with the cap (2) uppermost.

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 e.g. PC3\_ and PC4\_.

### Disposal

The product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

## How to order

The IUTD30L is supplied in two parts:-

1. The swivel pipeline connector	PC10	Standard connection
	PC3_	One integral ISO valve
	PC4_	Two integral ISO valves

2. The IUTD30 trap complete with inner and outer gaskets (securely crimped in place) and two connector screws. These items will be supplied in a box.

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

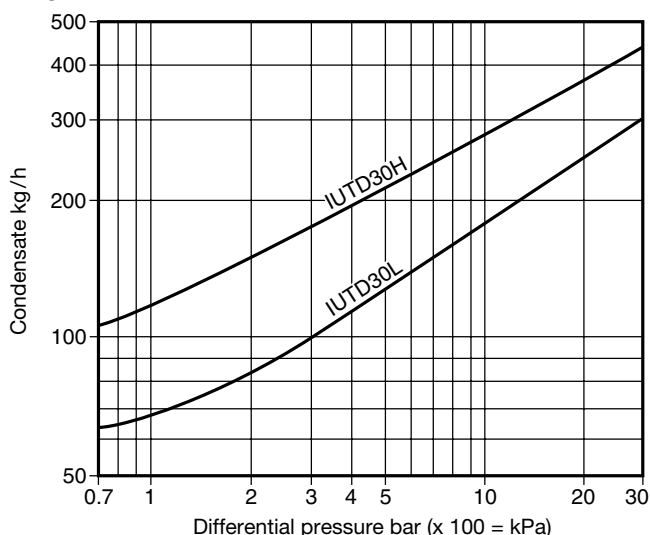
### How to order example:

1 off Spirax Sarco DN20 PC10 swivel pipeline connector with socket weld connections..

1 off Spirax Sarco IUTD30L thermodynamic steam trap fitted with SS1 sensor, complete with connector screws and gaskets.

1 off Insulating cover to fit an IUTD30L.

## Capacities



## Spare parts

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

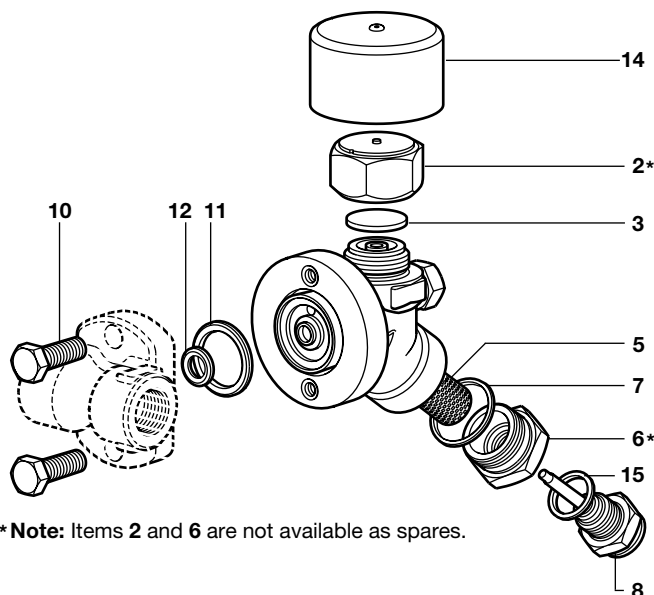
### Available spares

Complete trap unit, excluding pipeline connector	
Connector screws and gasket	10, 11, 12
Disc (packet of 3)	3
Strainer screen	5
Strainer screen gasket	7
Insulating cover	14
Sensor assembly (state SS1 or WLS1)	8, 15

### How to order

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

**Example:** 1 - Packet of 3 discs for a Spirax Sarco IUTD30L thermodynamic steam trap.



\* Note: Items 2 and 6 are not available as spares.

## Recommended tightening torques

Item	mm	Nm
2 (IUTD30L)	36 A/F	135 - 150
2 (IUTD30H)	41 A/F	135 - 150
6	32 A/F	170 - 190
8	24 A/F	50 - 55
10	9/16"	30 - 35