

spirax sarco

TI-P113-01
 ST Issue 8

UIB30 and UIB30H Sealed Inverted Bucket Steam Traps (for use with Pipeline Connectors)

Description

The UIB30 and UIB30H are sealed inverted bucket steam traps for either horizontal or vertical installation (with the cover hanging downwards). The UIB30H is designed for higher capacities. When installed with a suitable pipeline connector (available separately from Spirax Sarco) the UIB can easily and simply be removed without breaking into the pipeline, thus speeding up trap replacement with minimal system downtime. Pipeline connectors are available with screwed, socket weld and flanged end connections. The cover is also available with the option of a threaded base port to allow drainage.

Optional extras

The cover (1) is also available with a threaded drain plug and connection (13 + 14) in 3/8" NPT, 1/2" NPT or 1/2" BSP to allow for drainage. If this option is required it must be specified at the time of order placement.

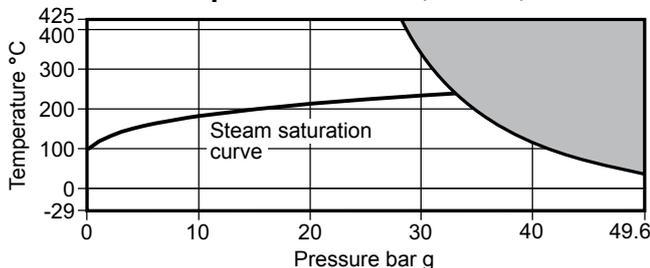
Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97 / 23 / EC.

Certification

This product is 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.

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		ASME 300
PMA	Maximum allowable pressure	49.6 bar g @ 38°C
TMA	Maximum allowable temperature	425°C@28 bar g
Minimum allowable temperature		-29°C
PMO	Maximum operating pressure for saturated steam service	32 bar g
TMO	Maximum operating temperature	425°C @ 28 bar g
Minimum operating temperature		0°C

Note: For lower operating temperatures consult Spirax Sarco

Δ PMX	Maximum differential pressure	30.0 bar	UIB30/4	UIB30H/5
		20.0 bar	UIB30/5	UIB30H/6
		12.0 bar	UIB30/6	UIB30H/7
		8.5 bar	UIB30/7	UIB30H/8
		5.0 bar		UIB30H/10
		4.0 bar	UIB30/8	
		2.5 bar	UIB30/10	
		2.0 bar		UIB30H/12
		1.5 bar	UIB30/12	

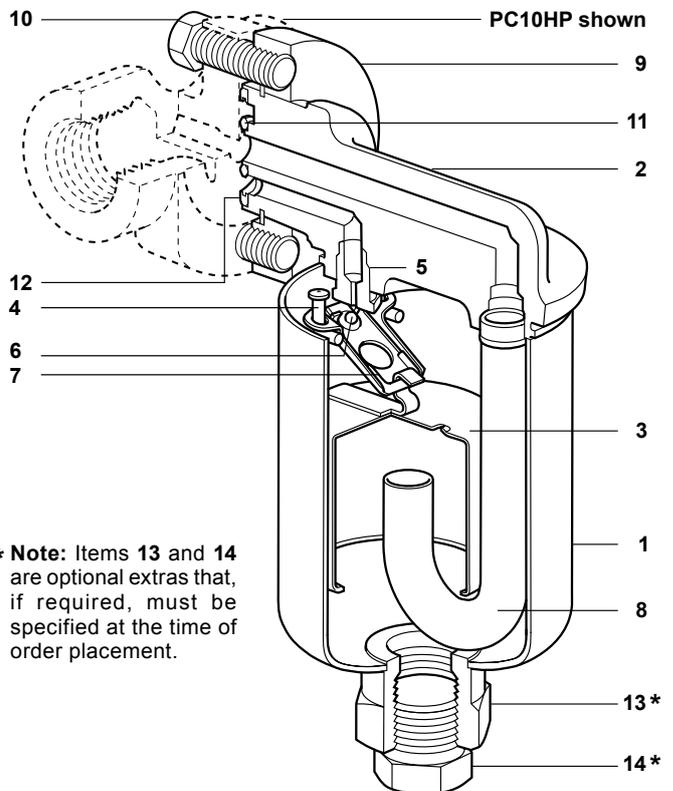
Designed for a maximum cold hydraulic test pressure of 75 bar g

Pipeline connector options

The UIB can be fitted to a variety of pipeline connectors including:

PC10HP	Straight connector	ASME 600	(TI-P128-10)
PC20	+ 'Y' type strainer	ASME 300	(TI-P128-15)
PC3_	+ 1 piston isolation valve	ASME 600	(TI-P128-02)
PC4_	+ 2 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.



* **Note:** Items 13 and 14 are optional extras that, if required, must be specified at the time of order placement.

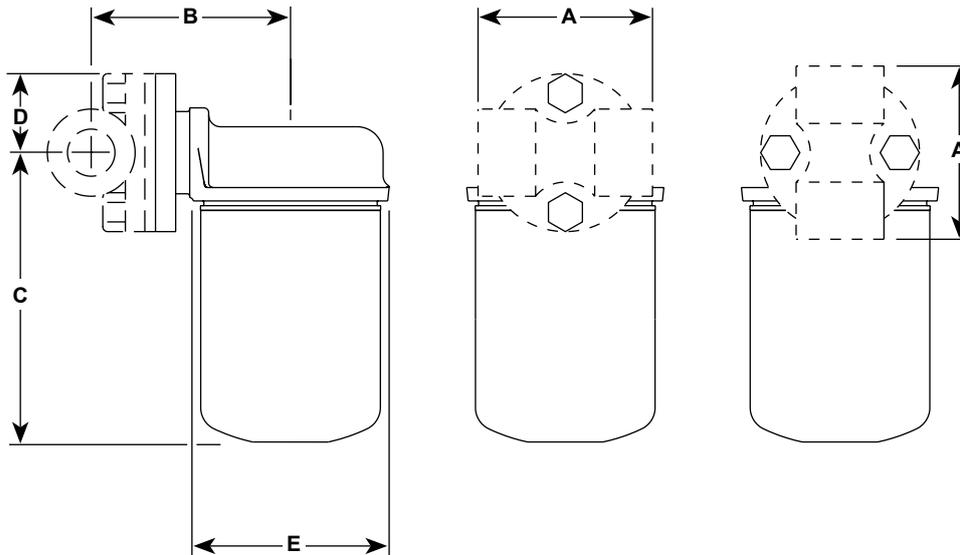
Materials

No.	Part	Material	
1	Cover	Stainless steel	ASTM A240 Gr. 304
2	Body	Stainless steel	ASTM A182 F304
3	Bucket	Stainless steel	1.4301
4	Pivot pin	Stainless steel	1.4301
5	Valve seat	Stainless steel	440B
6	Valve	Stainless steel	440B
7	Valve lever	Stainless steel	1.4301
8	Internal tube	Stainless steel	1.4306
9	Flange	Alloy steel - ELNP	ASTM A193 B7
10	Connector screw	Steel	ASTM A193 B7
11	Inlet gasket	Graphite /	AISI 304 strip
12	Outlet gasket	Stainless steel laminate	
* 13	Drain connection	Stainless steel	ASTM A182 F304 / F304L
* 14	Drain plug	Stainless steel - ELNP	ASTM A479 316

UIB30 and UIB30H + PC10HP

Dimensions/weights (approximate) in mm and kg

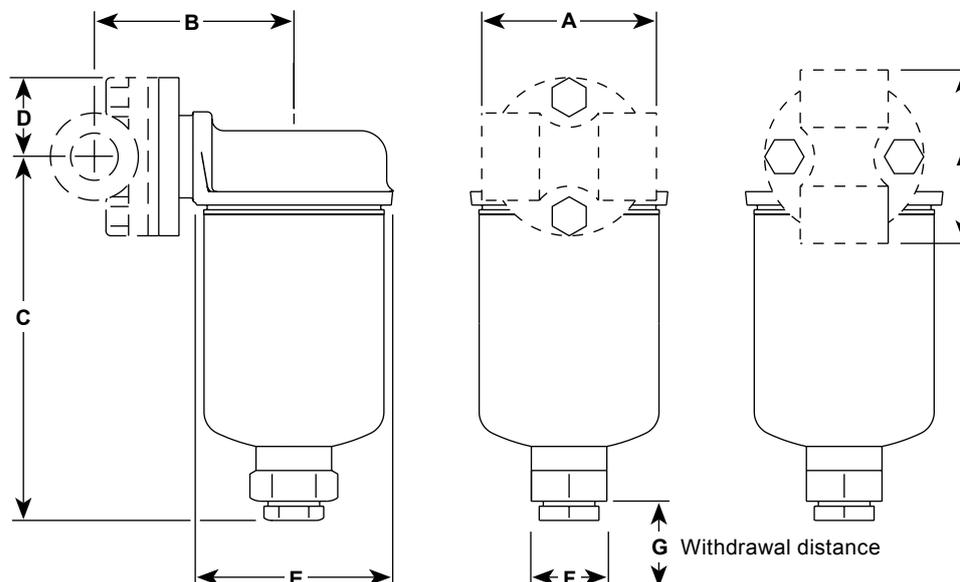
Size	A	B	C		D	E	Weight			
			UIB30	UIB30H			UIB30	UIB30 + PC10HP	UIB30H	UIB30H + PC10HP
DN15 - 1/2"	61.5	88	124.5	159.0	33.5	83	1.70	2.30	1.85	2.45
DN20 - 3/4"	73.5	86	124.5	159.0	33.5	83	1.70	2.40	1.85	2.55
DN25 - 1"	90.0	89	124.5	159.0	33.5	83	1.70	2.40	1.85	2.55



UIB30 and UIB30H with optional drain plug + PC10HP

Dimensions/weights (approximate) in mm and kg

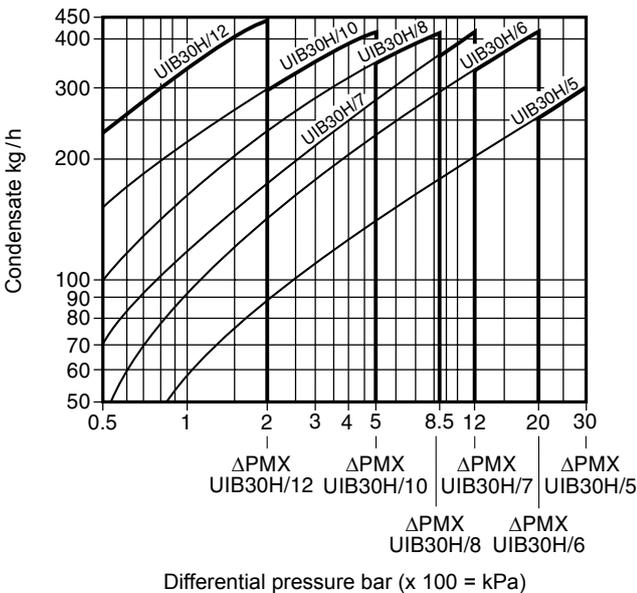
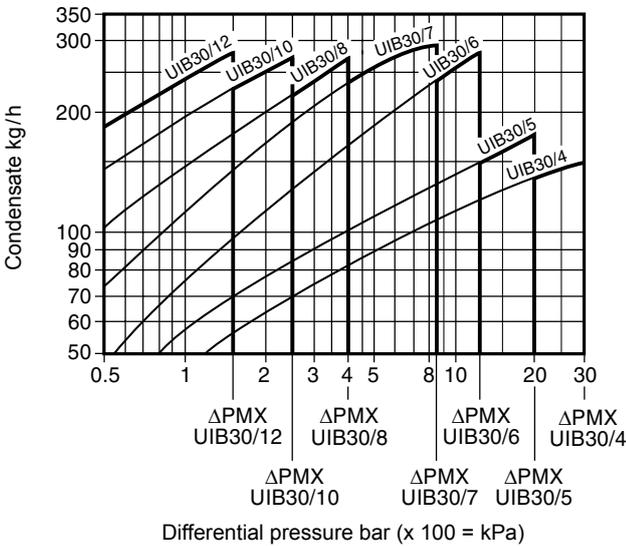
Size	A	B	C		D	E	F	G Plug withdrawal distance	Weight			
			UIB30	UIB30H					UIB30	UIB30 + PC10HP	UIB30H	UIB30H + PC10HP
DN15 - 1/2"	61.5	88	158	192	33.5	83	32	20	1.90	2.50	2.05	2.65
DN20 - 3/4"	73.5	86	158	192	33.5	83	32	20	1.90	2.60	2.05	2.75
DN25 - 1"	90.0	89	158	192	33.5	83	32	20	1.90	2.60	2.05	2.75



Capacities

Note: The trap should be selected for the most appropriate working pressure differential and not on the basis of load.

For example: 80 kg/h at 7 bar differential should be handled with the UIB30/7 and not the UIB30/4.



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P113-02) supplied with the product.

Installation note:

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

Disposal:

The UIB30 trap unit is manufactured from stainless steel and is therefore totally recyclable. No ecological hazard is anticipated with the disposal of this product provided due care is taken.

Spare parts

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

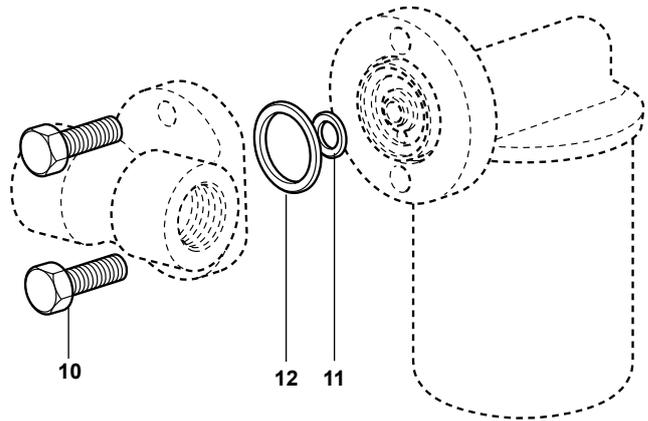
Available spares

Connector screw and gasket set **10, 11, 12**

How to order spares

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

Example: 1 - Connector screw and gasket set for a Spirax Sarco UIB30 sealed inverted bucket steam trap.



Recommended tightening torques

Item	Part	 or 	N m
10	Connector screws	3/16"	33

How to order

The UIB30 is supplied in two parts:-

- | | | |
|--|---------------|----------------------------|
| | PC10HP | Standard connection |
| 1. The swivel pipeline connector | PC20 | + 'Y' type strainer |
| | PC3_ | + 1 integral ISO valve |
| | PC4_ | + 2 integral ISO valves |
| 2. The UIB30 trap complete with inner and outer gaskets and two connector screws. | | |

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

How to order example:

1 off 1/2" PC10HP swivel connector having screwed NPT connections for use with a UIB30/4 sealed inverted bucket steam trap.

1 off UIB30/4 sealed inverted bucket steam trap complete with gaskets and connector screws.

or

1 off UIB30/4 sealed inverted bucket steam trap with a 1/2" NPT drain plug and connection, complete with gaskets and connector screws.