

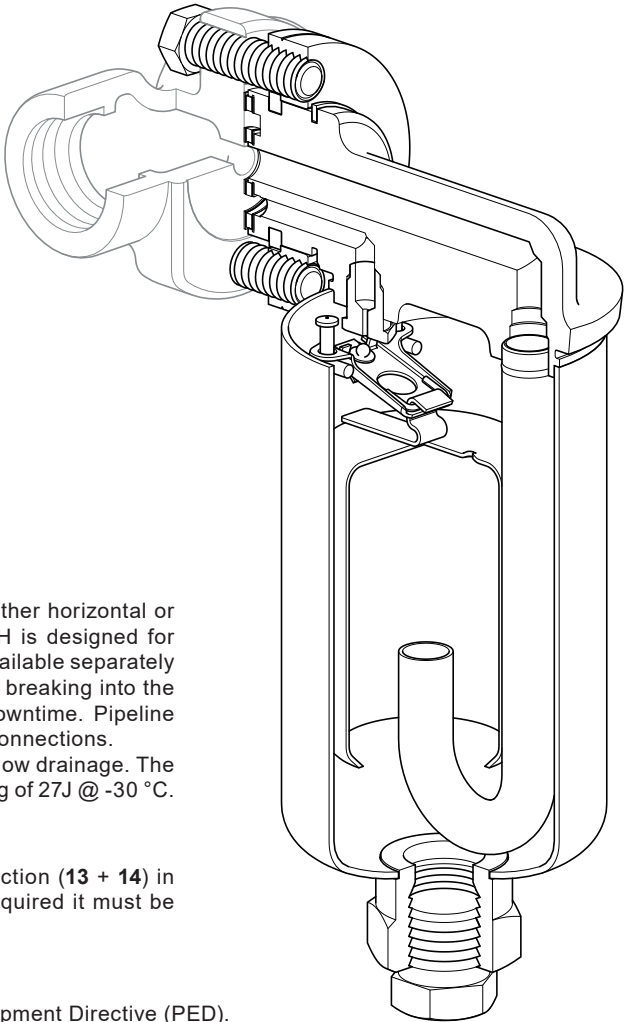
TI-P113-01  
CMGT Issue 10



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. The body and cover meet typical industry standards including Charpy testing of 27J @ -30 °C.

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 Pressure Equipment Directive (PED).

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.

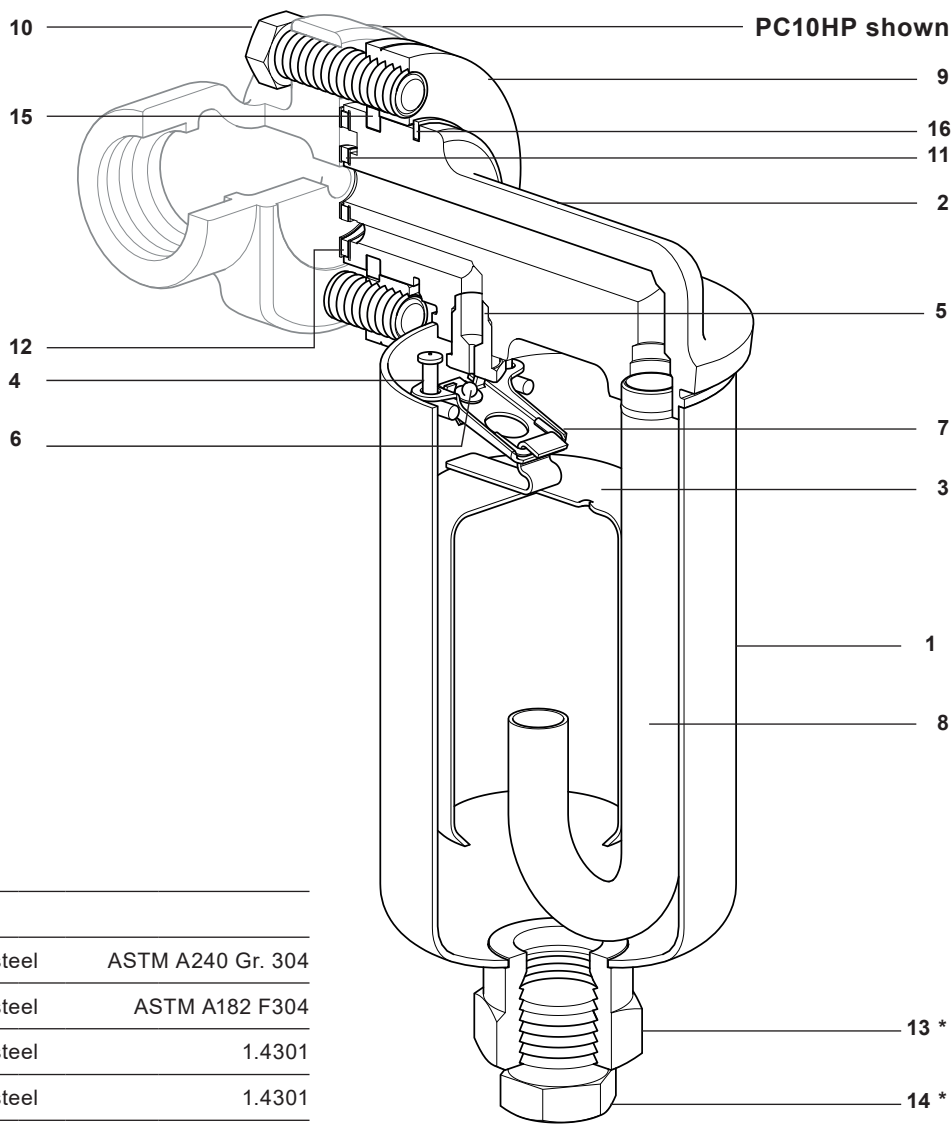
Pipeline connector options

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

PC10HP	Straight connector	ASME 600	(TI-P128-10)	See the relevant Technical Information sheet as listed for details of the connections available for each pipeline connector.
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)	

8

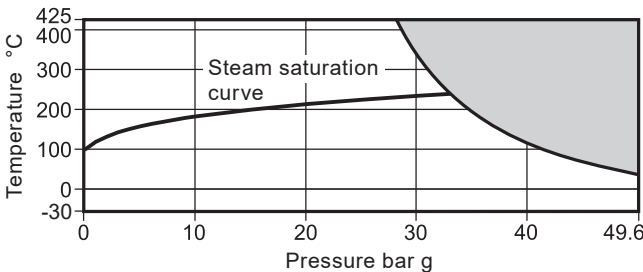
Steam traps  
Swivel connectors and traps  
Materials



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/Stainless steel laminate	AISI 304 strip
12	Outlet gasket		
13 *	Drain connection	Stainless steel	ASTM A182 F304 / F304L
14 *	Drain plug	Stainless steel - ELNP	ASTM A479 316
15	Split ring	Stainless steel	ASTM A240 304
16	Crescent ring	Carbon spring steel	

\* **Note:** Items **13** and **14** are optional extras that, if required, must be specified 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'.

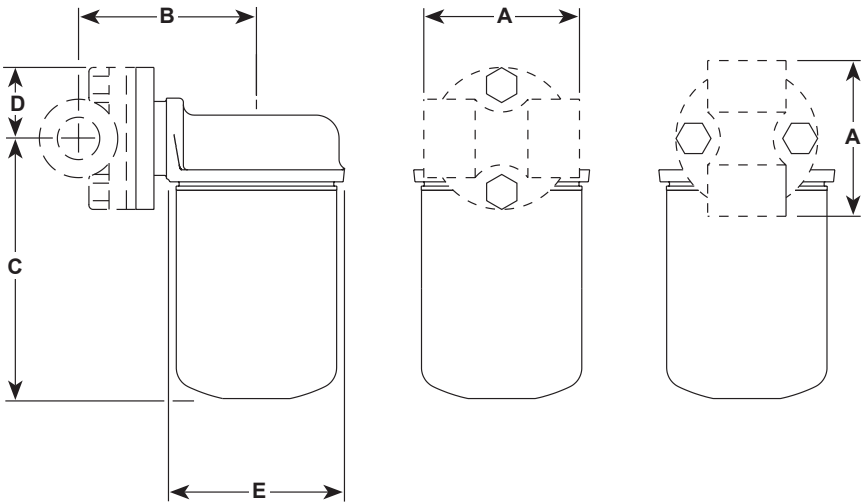
Body design conditions		ASME 300	
PMA	Maximum allowable pressure	49.6 bar g @ 38 °C	
TMA	Maximum allowable temperature	425 °C @ 28 bar g	
Minimum ambient temperature		-30 °C	
PMO	Maximum operating pressure for saturated steam service	32 bar g	
TMO	Maximum operating temperature	425 °C @ 28 bar g	
Minimum operating temperature		0 °C	
<b>Note:</b> 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	

Steam traps  
Swivel connectors and traps

Dimensions/weights (approximate) in mm and kg

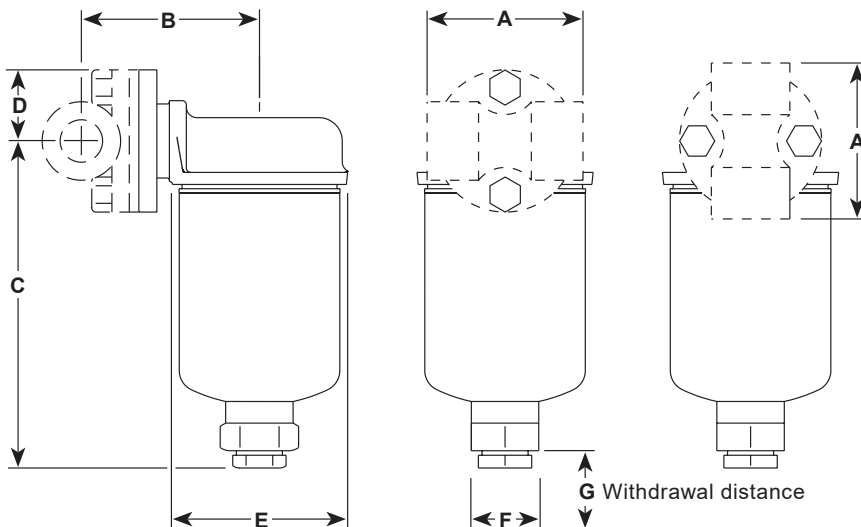
UIB30 and UIB30H + PC10HP

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



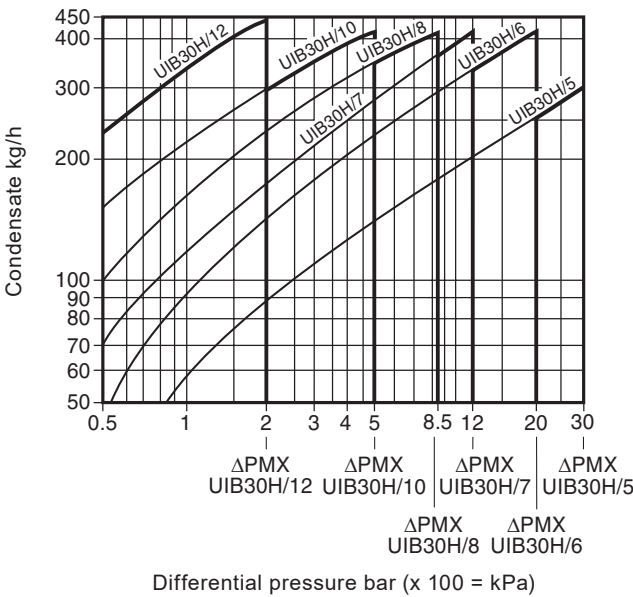
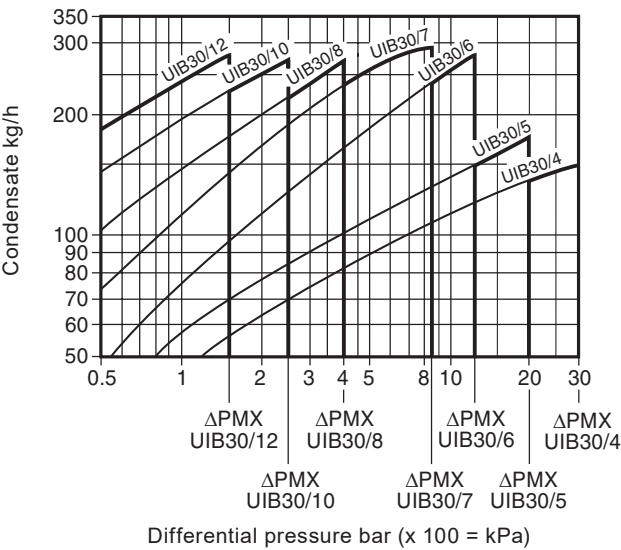
UIB30 and UIB30H with optional drain plug + PC10HP

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.



**How to order** The UIB30 is supplied in two parts:

1. The swivel pipeline connector	PC10HP	Standard connection	<b>Note:</b> Any optional extras need to be specified at the time of order placement.
	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.			

How to order example:

1 off ½" 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 ½" NPT drain plug and connection, complete with gaskets and connector screws.

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.

8

Steam traps

Swivel connectors and traps

Spare parts

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

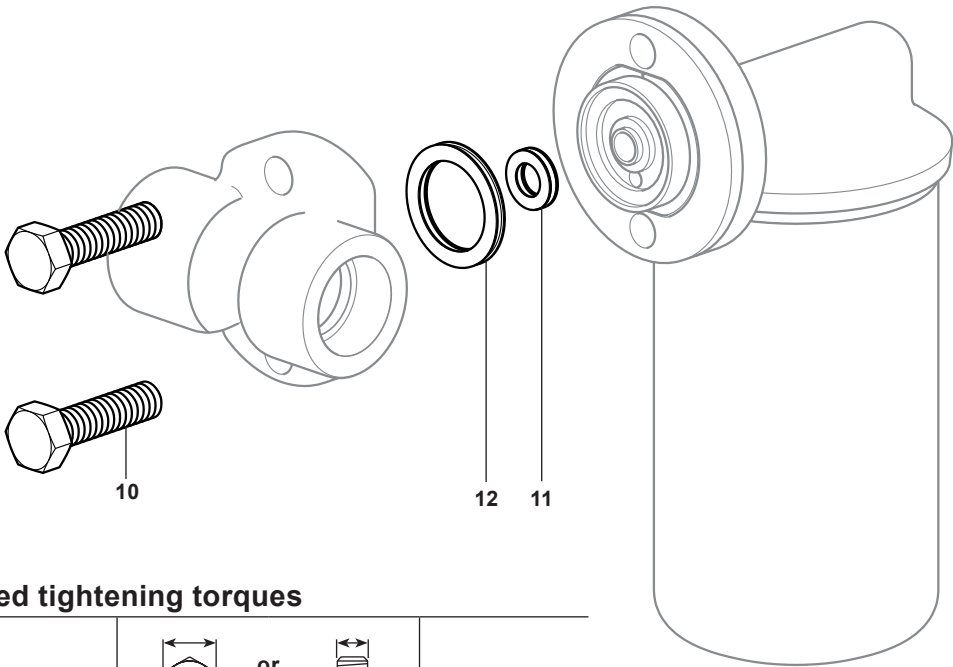
Available spares

Connector screw and gasket set	10, 11, 12
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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	9/16"	33

spirax

sarco

UIB45

TI-P113-03

CMGT Issue 3

Sealed Inverted Bucket Steam Trap

(for use with Pipeline Connectors)

Description

The UIB45 is a sealed inverted bucket steam trap for either horizontal or vertical installation (with the cover hanging downwards). When installed with a suitable pipeline connector (available separately from Spirax Sarco) the UIB45 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.

Standards

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

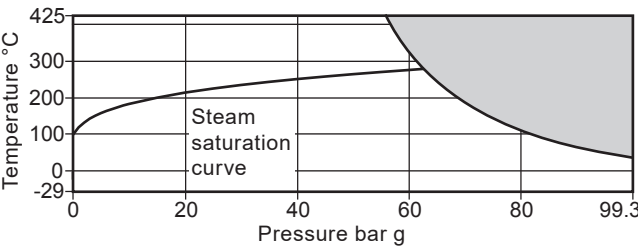
**Note:** The body/cover weld joint complies with ASME section IX.

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.

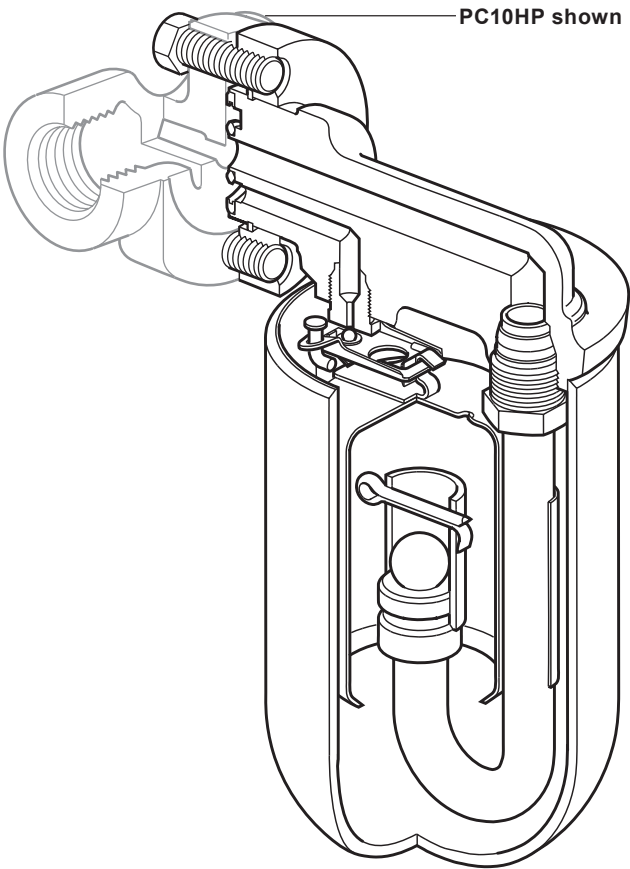
**Note:** The model of pipeline connector and connections selected will dictate the maximum operating limits of the complete assembly. Reference the specific pipeline connector Technical Information sheet as detailed in 'Pipeline connector options'.

Body design conditions		ASME 600
PMA	Maximum allowable pressure	99.3 bar g @ 38 °C
TMA	Maximum allowable temperature	425 °C @ 56 bar g
Minimum allowable temperature		-29 °C
PMO	Maximum operating pressure for saturated steam service	63 bar g
TMO	Maximum operating temperature	425 °C @ 56 bar g
Minimum operating temperature		0 °C

**Note:** For lower operating temperatures consult Spirax Sarco

Δ PMX	Maximum differential pressure	45.0 bar	UIB45/5
		20.0 bar	UIB45/6
		8.5 bar	UIB45/8
		4.5 bar	UIB45/10

Designed for a maximum cold hydraulic test pressure of 149 bar g



Pipeline connector options

The UIB45 can be fitted to a variety of pipeline connectors including:

PC10HP	Straight connector	ASME 600 (TI-P128-10)
PC20	Straight connector with Maximum differential pressure	ASME 300 (TI-P128-15)
PC3_	Straight connector with one piston isolation valve	ASME 600 (TI-P128-02)
PC4_	Straight connector with two piston isolation valve	ASME 600 (TI-P128-03)

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



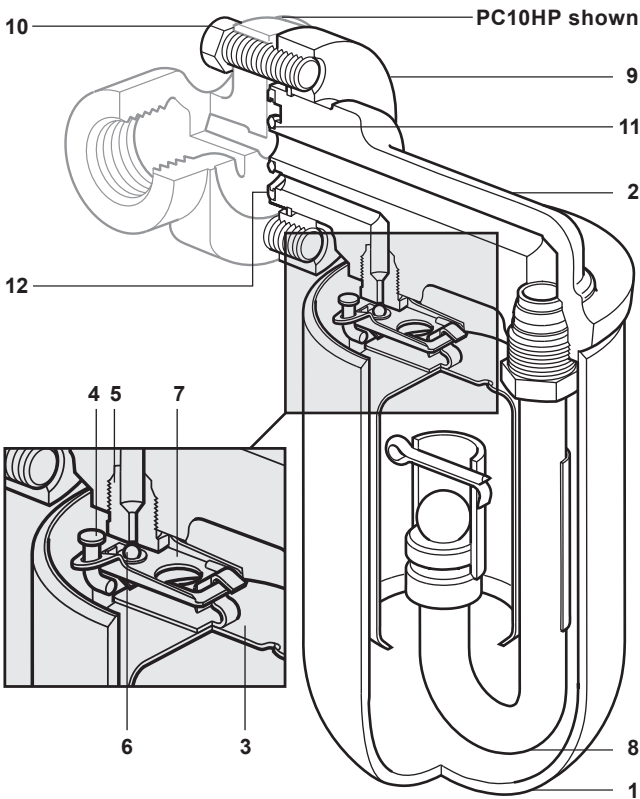
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Steam traps

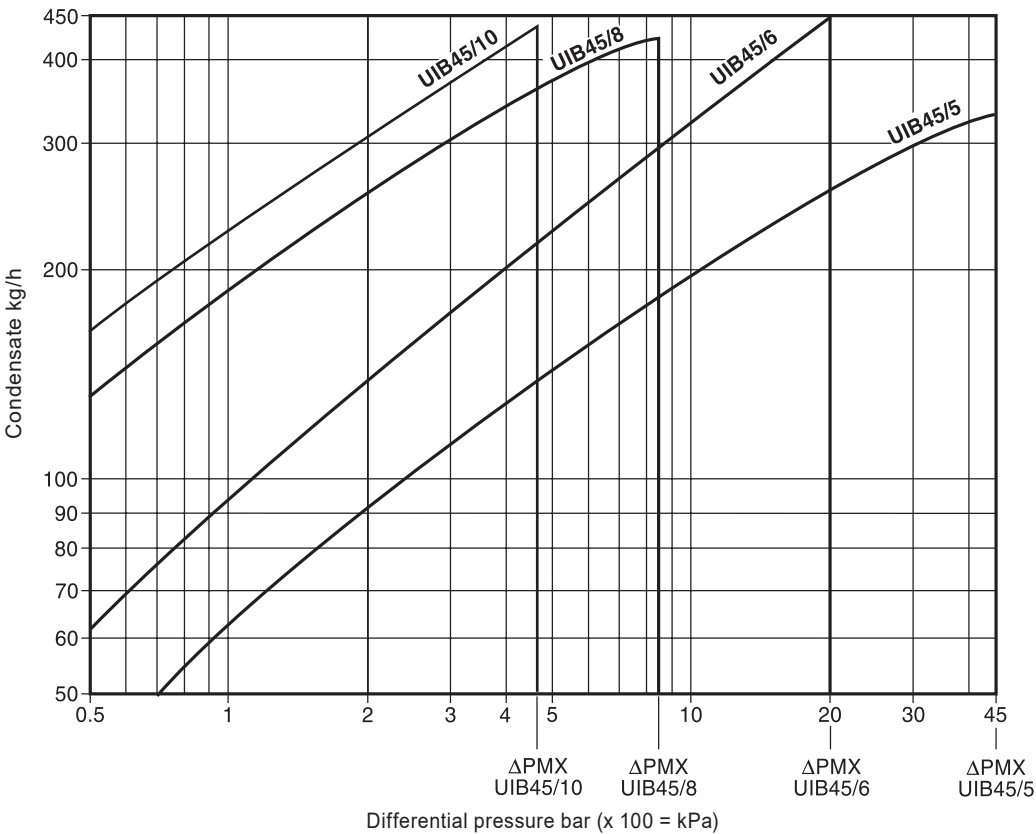
Swivel connectors and traps

Materials

No.	Part	Material	
1	Cover	Stainless steel	ASTM A240 Gr. 304
2	Body	Stainless steel	ASTM A182 F304
3	Bucket	Stainless steel	BS 1449 304 S 12
4	Pivot pin	Stainless steel	BS 970 304 S 15
5	Valve seat	Stainless steel	AISI 440B
6	Valve	Stainless steel	AISI 440B
7	Valve lever	Stainless steel	BS 1449 304 S 16
8	Internal tube	Stainless steel	ASTM A269 304
9	Flange	Alloy steel - ELNP	ASTM A193 B7
10	Connector screw	Steel	ASTM A193 B7
11	Inlet gasket	Graphite / stainless steel laminate	AISI 304 strip
12	Outlet gasket	Graphite / stainless steel laminate	AISI 304 strip



Capacities



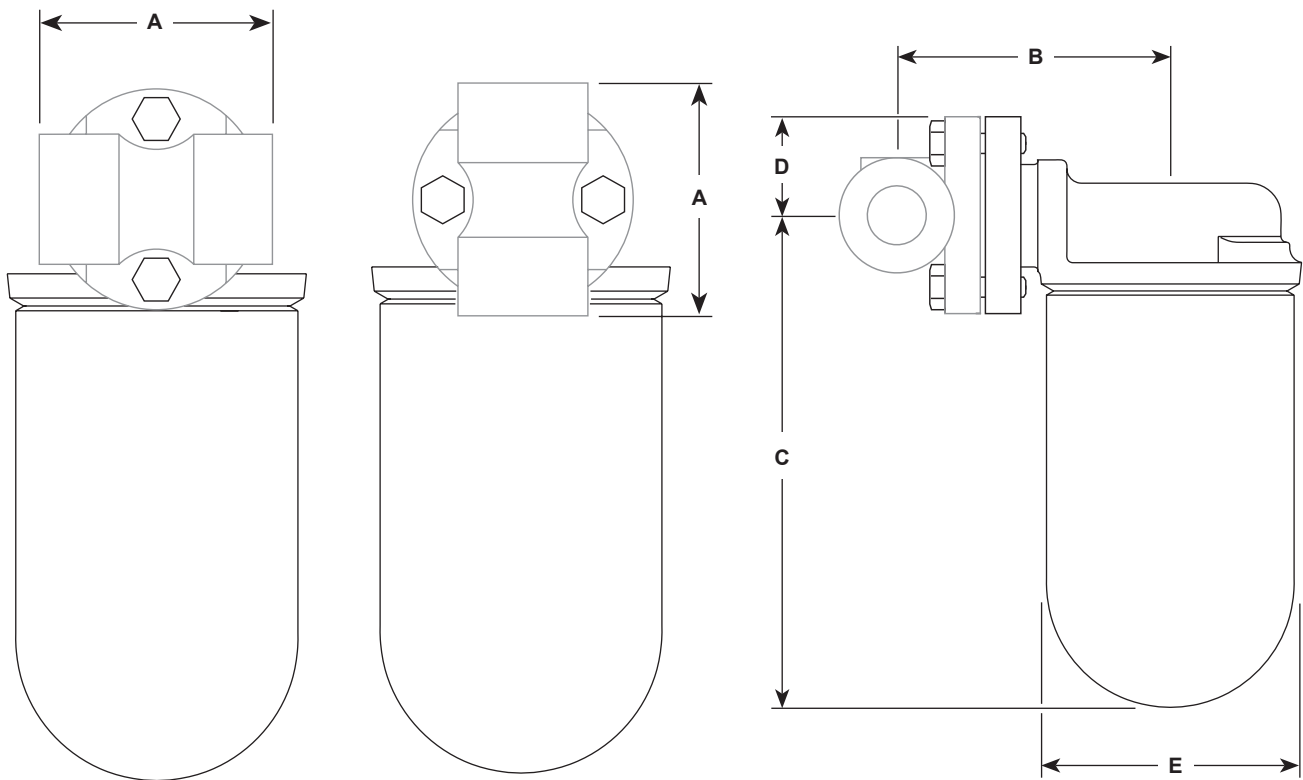
**Note:** Trap should be selected for the most appropriate working pressure differential and not on the basis of load. e.g. 80 kg/h at 7 bar differential should be handled with the UIB45/8 and not the UIB45/5.



Dimensions/weights (approximate) in mm and kg

Size	A	B	C	D	E	Weight
DN15 - ½"	61.5	86	170	33.5	90	2.6
DN20 - ¾"	73.5	84	170	33.5	90	2.6
DN25 - 1"	90.0	87	170	33.5	90	2.6

Please note: The weights shown are for the trap only and do not include the pipeline connector.



How to order

The UIB45 is supplied in two parts:-

1. The swivel pipeline connector	PC10HP	Straight connection
	PC20	Straight connection with 'Y' type strainer
	PC3_	Straight connection with one integral ISO valve
	PC4_	Straight connection with two integral ISO valves
2. The UIB45 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 ½" PC10HP straight connector having screwed NPT connections for use with a UIB45/5 sealed inverted bucket steam trap.  
1 off UIB45/5 sealed inverted bucket steam trap complete with gaskets and connector screws.

Steam traps  
Swivel connectors and traps

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P113-04) supplied with the product.

**Installation note:**  
The pipeline connector can be installed in either horizontal or vertical pipework.

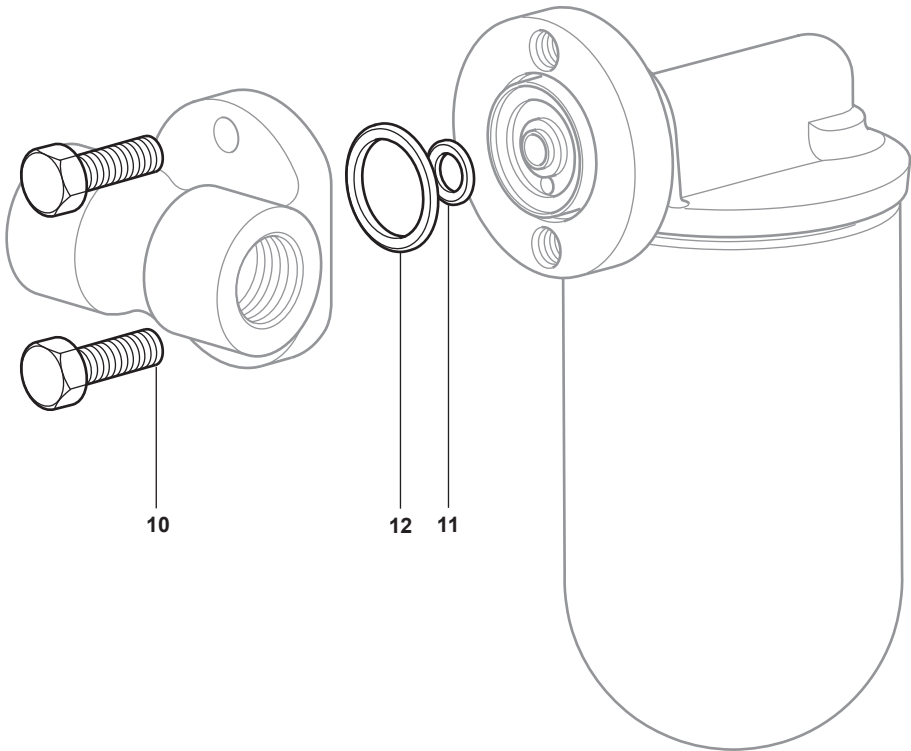
**Disposal:**  
The UIB45 trap unit is manufactured from stainless steel and is therefore totally recyclable. No ecological hazard is anticipated with the disposal of this product provided due care is taken.

**Spare parts**  
The spare parts available are shown in solid outline. Parts drawn in a grey 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 UIB45 sealed inverted bucket steam trap.



Recommended tightening torques (for suitably lubricated threads)

Item	Part		or		N m
		mm			
10	Connector screws	9/16"			33