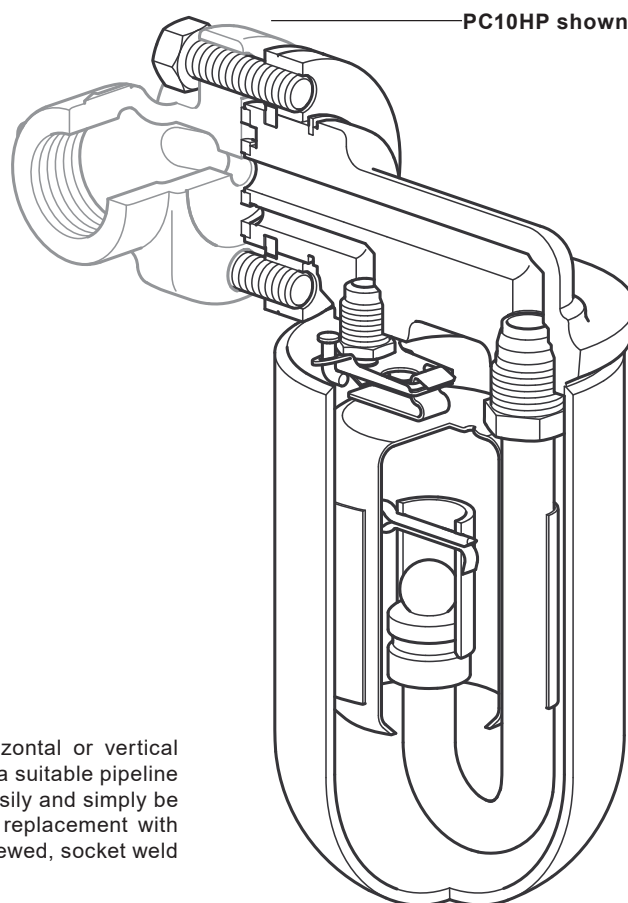




TI-P113-03
CMGT Issue 5

UIB45

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 EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

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.

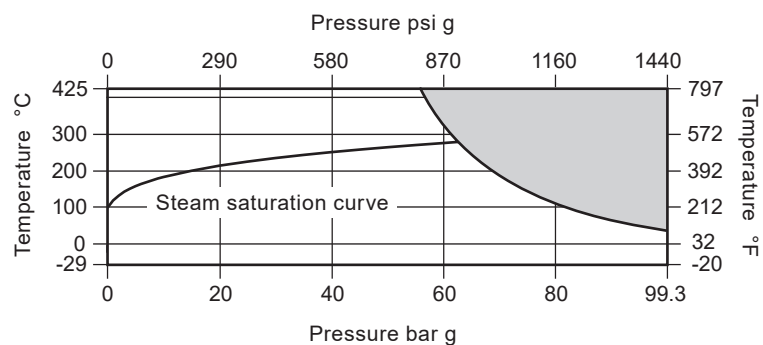
Pipeline connector options

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.

Pressure/temperature limits (ISO 6552)

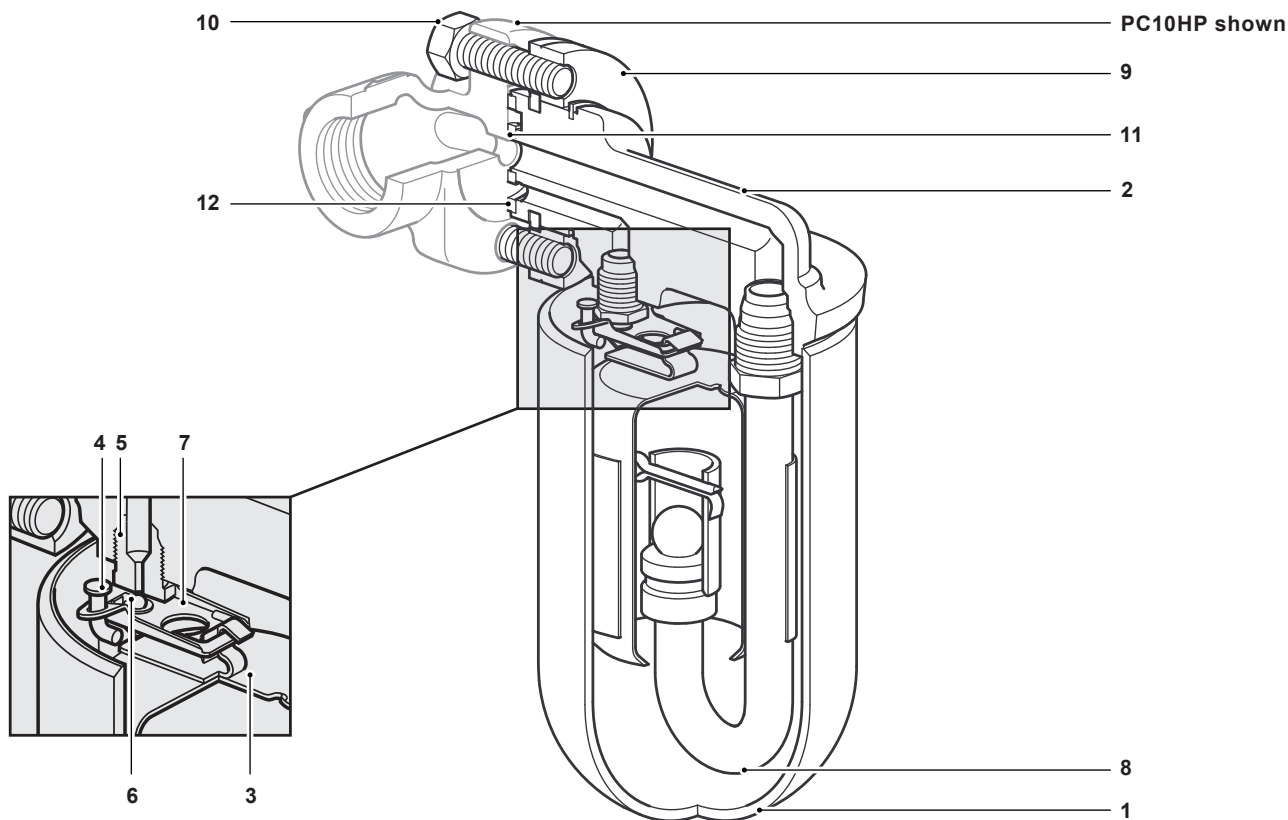


The product **must not** be used in this region.

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'.

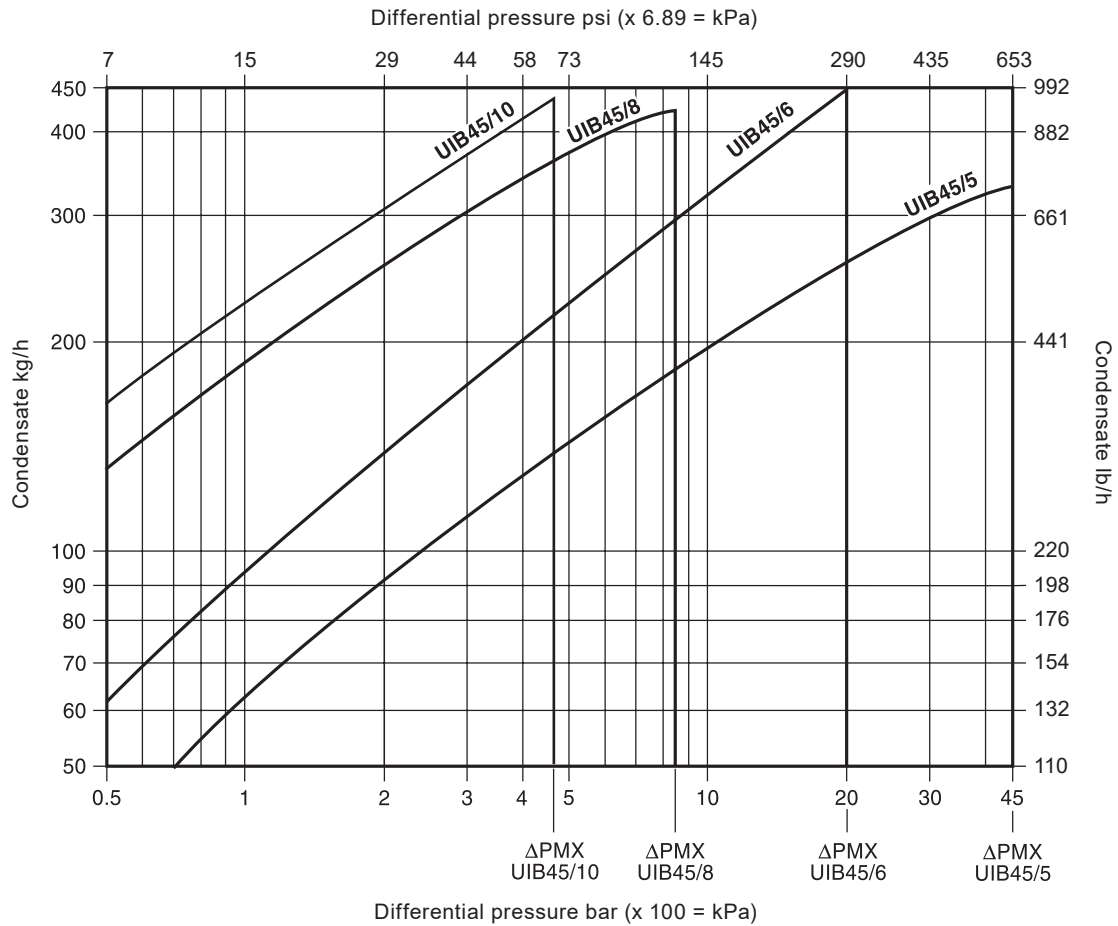
Body design conditions			ASME 600	
PMA	Maximum allowable pressure	99.3 bar g @ 38 °C	1440 psi g @ 100 °F	
TMA	Maximum allowable temperature	425 °C @ 56 bar g	797 °F @ 812 psi g	
Minimum allowable temperature		-29 °C	-20 °F	
PMO	Maximum operating pressure for saturated steam service	63 bar g	914 psi g	
TMO	Maximum operating temperature	425 °C @ 56 bar g	797 °F @ 812 psi g	
Minimum operating temperature		0 °C	32 °F	
Note: For lower operating temperatures consult Spirax Sarco				
Δ PMX	Maximum differential pressure	UIB45/5	45.0 bar	653 psi
		UIB45/6	20.0 bar	290 psi
		UIB45/8	8.5 bar	123 psi
		UIB45/10	4.5 bar	65 psi
Designed for a maximum cold hydraulic test pressure of		149 bar g	2161 psi	

Materials



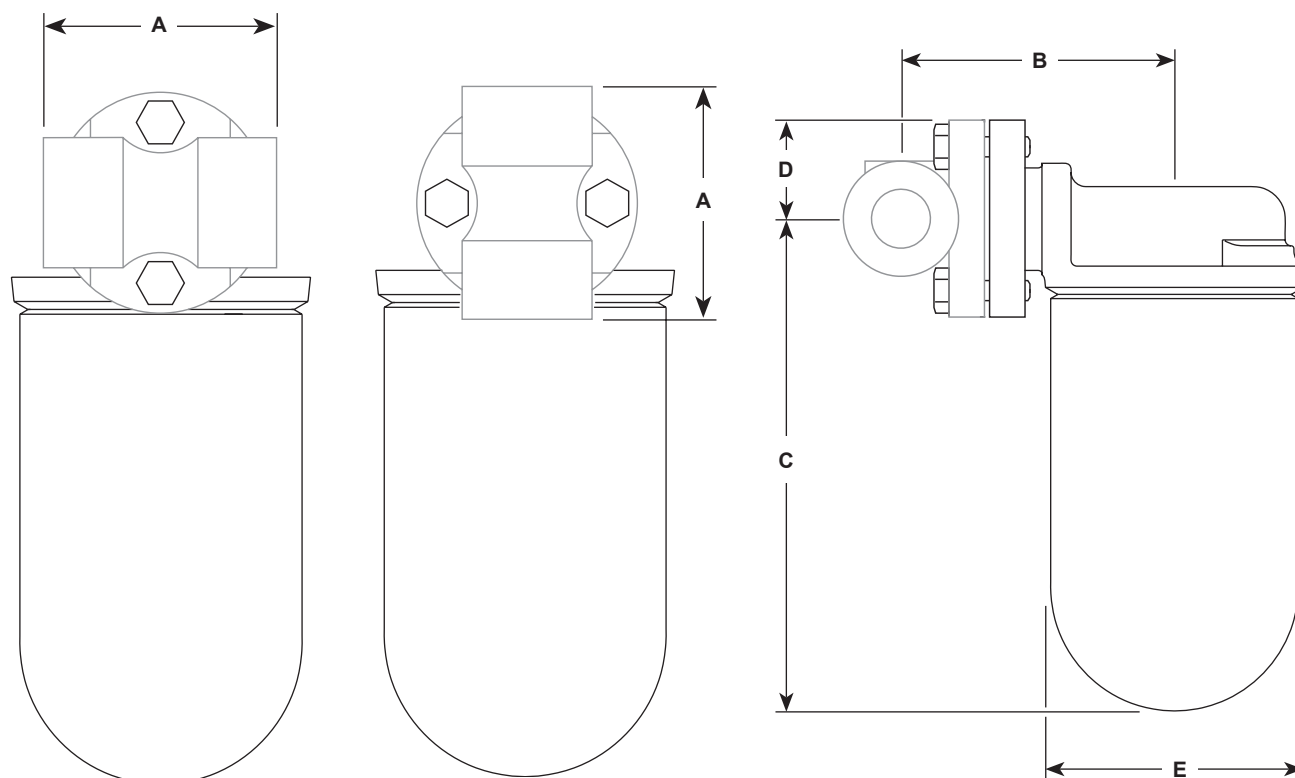
No.	Part	Material	
1	Cover	Stainless steel	ASTM A240 Gr. 304
2	Body	Stainless steel	ASTM A182 F304
3	Bucket	Stainless steel	BS 1449 304 S 12
4	Pivot pin	Stainless steel	BS 970 304 S 15
5	Valve seat	Stainless steel	AISI 440B
6	Valve	Stainless steel	AISI 440B
7	Valve lever	Stainless steel	BS 1449 304 S 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 (176 lb/h at 102 psi) differential should be handled with the UIB45/8 and not the UIB45/5.

Dimensions/weights (approximate) in mm (in) and kg (lb)



Size	A	B	C	D	E	Weight
DN15 - 1/2"	61.5 (2.4)	89 (3.5)	170 (6.7)	33.5 (1.3)	90 (3.5)	2.6 (5.7)
DN20 - 3/4"	73.5 (2.9)	87 (3.4)				
DN25 - 1"	90.0 (3.5)	90.0 (3.5)				

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 1/2" 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.

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.

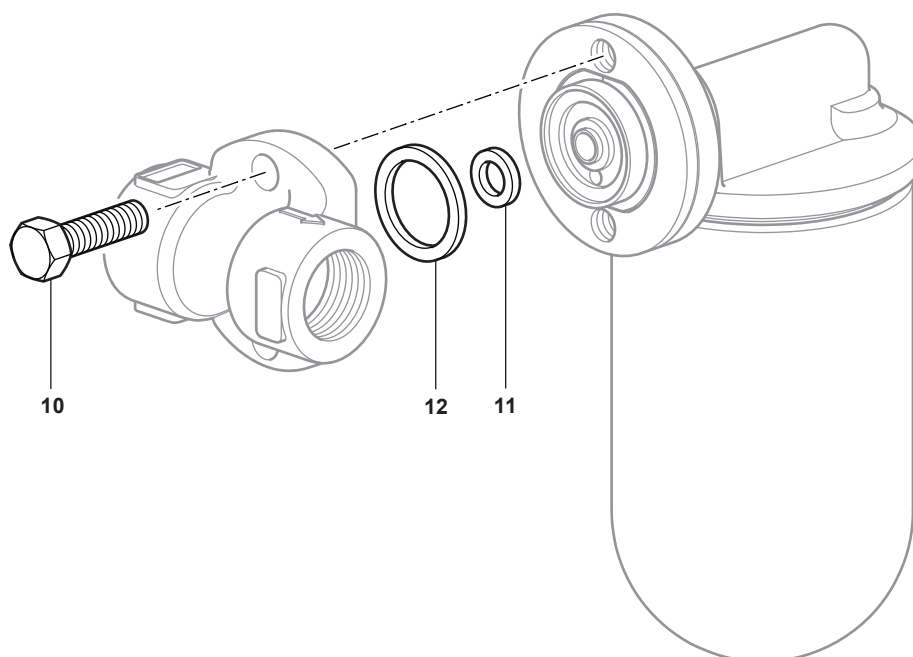



Table 1 Recommended tightening torques (for suitably lubricated threads)

Item	Part	 mm	N m	ft-lbf
10	Connector screws	$\frac{9}{16}$ " A/F	30 - 35	22 - 26