

spirax sarco

Stainless Steel Sealed Inverted Bucket Steam Trap SIB 45

Steam Traps
Inverted Buckets

The trap contains an inverted bucket mechanism which responds to the difference in density between steam and condensate. The discharge action is cyclic. Condensate and non-condensibles are discharged close to steam temperature. The SIB 45 is sealed for tamper-proof operation. The SIB 45/5 has an integral check valve.

Model	SIB 45
PMO	652 psig (see below)
Sizes	3/4", 1"
Connections	NPT / SW (see below)
Construction	Tamper-proof, all Stainless Steel
Options	SW Connections (standard on SIB 45/5)

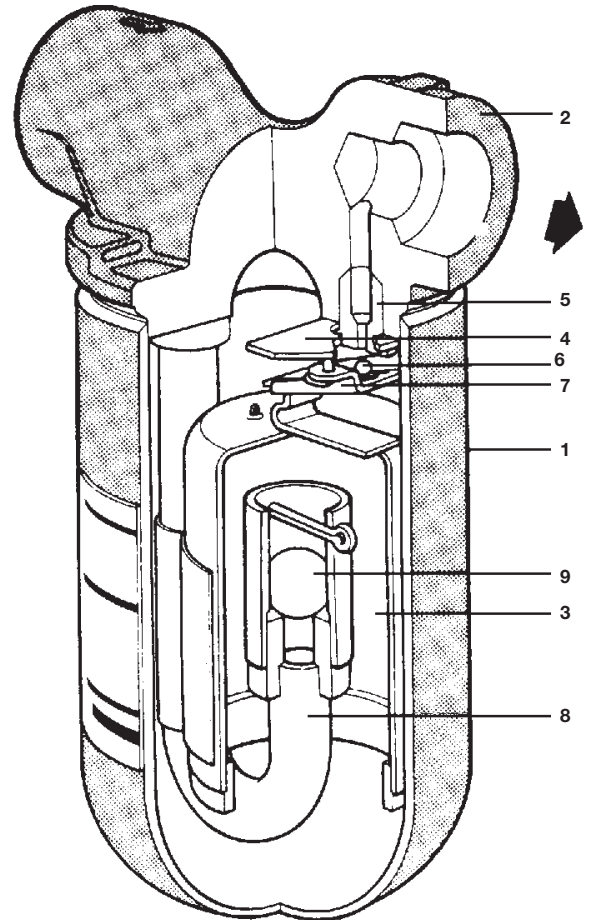
Standards

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

CONSTRUCTION MATERIALS

No.	Part	Material	
1	Cover*	Stainless Steel	ASTM A240 Gr 304
2	Body*	Stainless Steel	ASTM A314 Gr 304
3	Bucket	Stainless Steel	ASTM A240 Gr 304
4	Valve Guide Plate	Stainless Steel	AISI 321
5	Valve Seat	Stainless Steel	AISI 440B
6	Valve	Stainless Steel	AISI 440B
7	Valve Lever	Stainless Steel	AISI 321
8	Internal Tube	Stainless Steel	ASTM A 269-304
9	Check Valve Assy. (SIB 45/5 only)	Stainless Steel	BS 970 431 S29 ASTM A 269 TP 316 AISI 420

* The cover is welded to the body using the TIG process. Welds are approved in accordance with ASME section IX and BS 4870 (1981.)



LIMITING OPERATING CONDITIONS

Trap Model	Connections	Operating Pressure Range	
		Min. psig (barg)	Max. psig (barg)
SIB 45/10	NPT	– – to	65 (4.5)
SIB 45/8	NPT	65 (4.5) to	123 (8.5)
SIB 45/6	NPT	123 (8.5) to	290 (20)
SIB 45/5 (45)	SW	290 (20) to	652

Max. Operating Temperature * 842°F (450°C) at all operating pressures

* For superheated steam applications, a check valve should be installed at the trap inlet. (SIB 45/5 has an integral check valve.)

PRESSURE SHELL DESIGN CONDITIONS

PMA Max. allowable pressure	1440 psig/up to 100°F	100 barg/up to 38°C
	862 psig/529°F	59 barg/276°C
	782 psig/842°F	54 barg/450°C
TMA Max. allowable temperature	842°F/0-782 psig	450°C/0-54 barg

TYPICAL APPLICATIONS

Steam tracing, steam main drip stations, laundry equipment, industrial dryers and storage tanks.

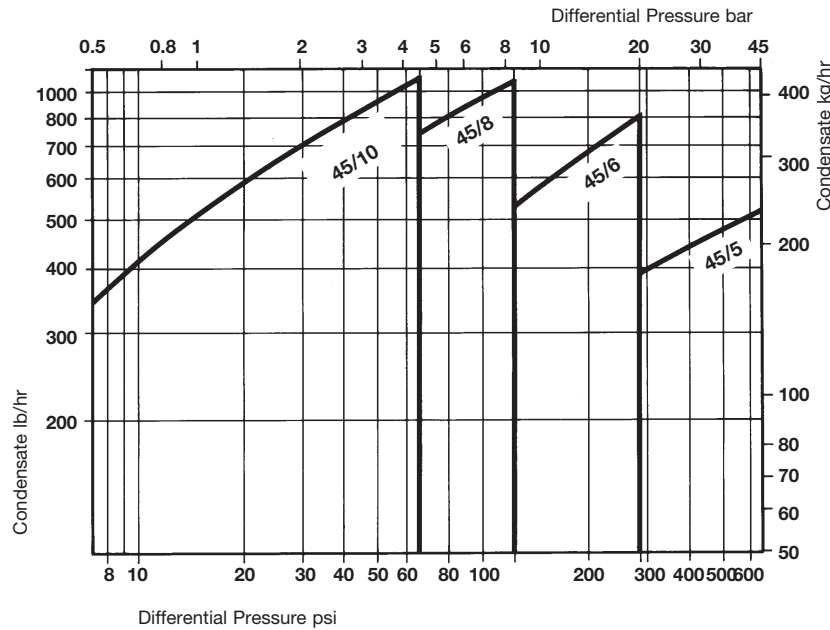
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.
In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-2-411-US 3.17

Stainless Steel Sealed Inverted Bucket Steam Trap

SIB 45

CAPACITIES



SAMPLE SPECIFICATION

Steam traps shall be encapsulated inverted bucket type of all-stainless steel construction, which is tamper-proof and maintenance-free, and resists distortion due to freezeup or waterhammer. Trap to have a forged body and drawn cover fully weld-sealed against leakage, with threaded (socket weld) end connections for installation in horizontal piping. Operation shall be self-priming, with orifice size selected for the capacity required by the application, and suitable for working pressure to 652 psig.

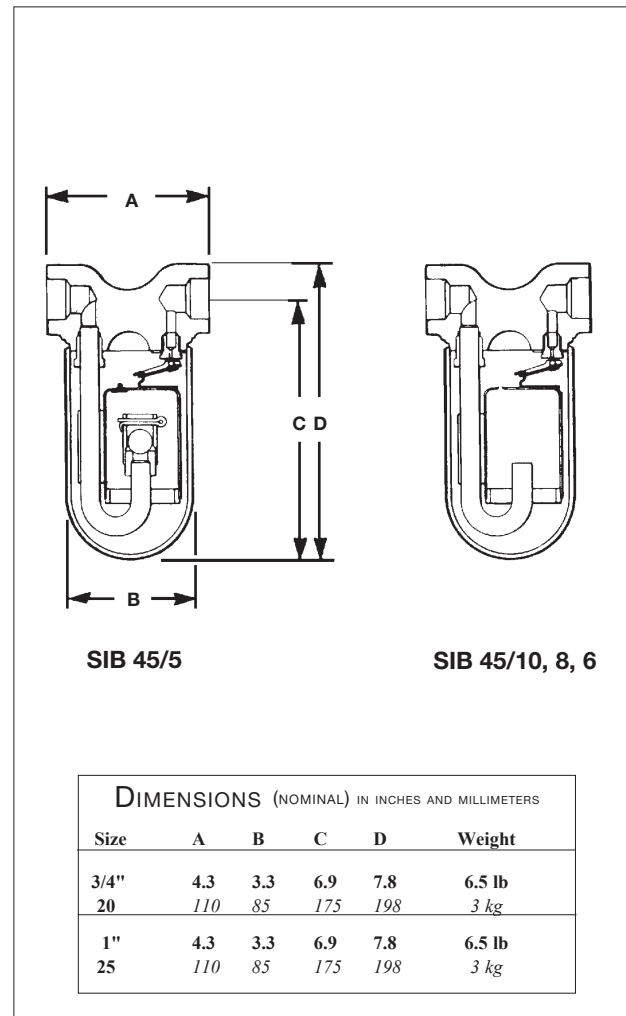
INSTALLATION

A pipeline strainer should be installed ahead of any trap to protect the head and seat from dirt and scale. Suitable full-port isolation valves should be placed around trap to permit servicing. The trap should be installed below the equipment drainage connection in a horizontal position so that the bucket will rise and fall vertically. If installed in exposed locations, consideration should be given to insulating the trap.

MAINTENANCE

This product is factory sealed for tamper-proof operation, and no repair parts are available. Complete isolation of the trap from both supply and return line is required before the trap is removed.

Complete installation and maintenance instructions are given in IMI 2.400, which accompanies the product.



TI-2-411-US 3.17