

# spirax/sarco®

## Stainless Steel Drain Trap CAS14 and CAS14S

The **float-operated liquid drain trap** discharges continuously in direct response to variations in liquid flow rate, assuring thorough drainage of the system.

Model	CAS14	CAS14S
<b>Sizes</b>	1/2", 3/4", 1"	
<b>Connections</b>	NPT, SW	
<b>Construction</b>	316 Stainless Steel Body, Stainless Steel Internals	

### Typical Applications

Process applications requiring an austenitic stainless steel liquid drain trap.

### Limiting Operating Conditions

Max. Operating Conditions PMO up to 200 psig 14 barg  
(see chart below for sg lower than 1)

Max. Operating Temperature TMO CAS14 392°F 200°C  
CAS14S 437°F 225°C

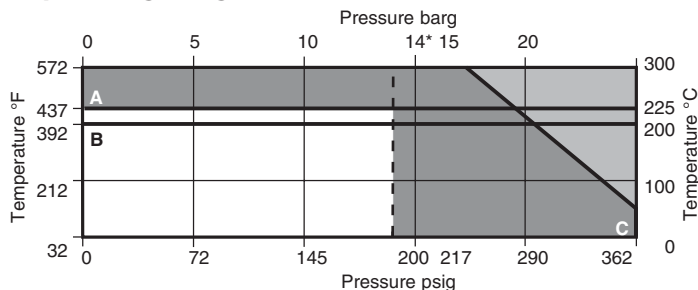
Minimum specific gravity .6

### Pressure Shell Design Conditions

PMA - Maximum Allowable Pressure 362 psig 25 barg

TMA - Maximum Allowable Temperature 572 °F 300°C

### Operating range



- The product must not be used in this region.
- The Viton soft seat versions should not be used in this region as damage to the internals may occur.

\*PMO Maximum operating pressure 200 psig - 14 barg.

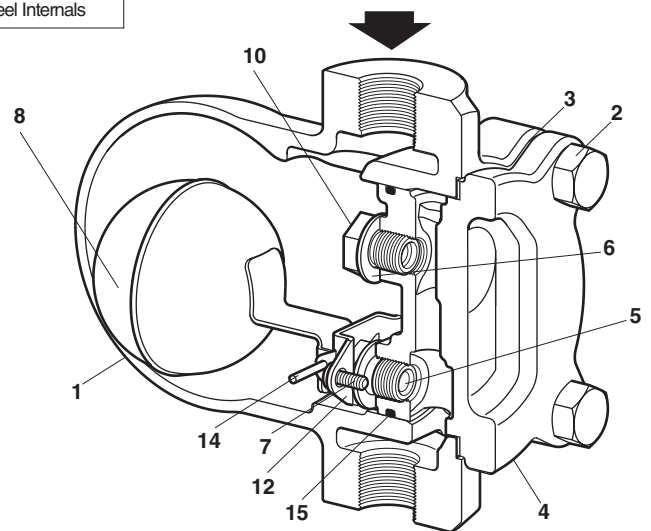
**A - C** CAS14S

**B - C** CAS14

### ΔPMX - Maximum differential pressure

The maximum differential pressure depends on the specific gravity of the liquid being drained.

Trap	Specific gravity				
	1.0	0.9	0.8	0.7	0.6
	<b>Maximum differential pressure psig</b>				
<b>CAS14</b>	200	200	200	130	72
<b>CAS14S</b>	200	200	200	130	72



### Construction Materials

No.	Part	Material
1	Body	Austenitic stainless steel (316) EN 10213-4 (1.4408) ASTM A351 CF8M
2	Cover bolts	Stainless steel BS EN 3506 A2-70
3	Cover gasket	Reinforced exfoliated graphite
4	Cover	Austenitic stainless steel (316) EN 10213-4 (1.4408) ASTM A351 CF8M
5	Main valve seat	Stainless steel BS 970 431 S29
6	Main valve seat gasket	Stainless steel
7	Main valve assembly screws	Stainless steel
8	Ball float and lever	Stainless steel BS 1449 304 S16
9	Valve cone	CAS14 Viton CAS14S Stainless steel AISI 440B
10	Blanking plug	Stainless steel
12	Pivot frame	Stainless steel
14	Pivot pin	Stainless steel
15	'O' ring	FDA approved viton to FDA regulation 177.2600
*16	Valve spring (1" only)	Stainless steel

\*Note: Items 9 and 16 are clearly identified on the backside.

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-P148-38-US 10.09

# Stainless Steel Liquid Drain Trap CAS14 and CAS14S

## Capacity

The discharge capacity depends on the differential pressure (inlet pressure minus outlet pressure) and the specific gravity of the liquid being drained. See TI-7-318.

## Sample Specification

Drain traps shall be of the mechanical ball float type having stainless steel bodies, vertical line connections, and all stainless steel internals. All internals are to be renewable and field serviceable.

## Installation

The trap must be fitted in a vertical pipe line with direction of flow as indicated and so that the float mechanism is free to rise and fall in a vertical plane. Full-flow isolating valves should be placed to permit servicing.

The trap discharge should be piped to a safe place.

## Maintenance

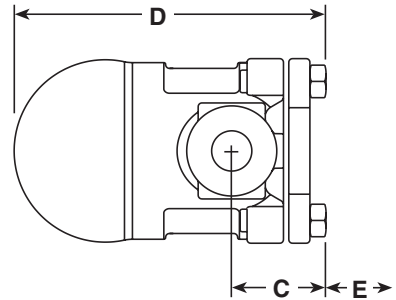
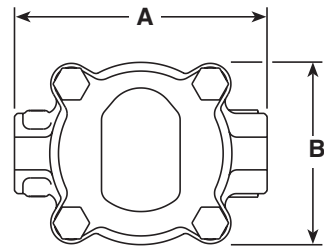
This product can be maintained without disturbing the piping connections. Complete isolation of the trap from both supply and return line is required before any servicing is performed.

The trap should be disassembled periodically for inspection and cleaning of the valve head and seat.

Worn or damaged parts should be replaced using a complete repair kit.

**Complete installation and maintenance instructions are given in IM-P148-39 which accompanies the product.**

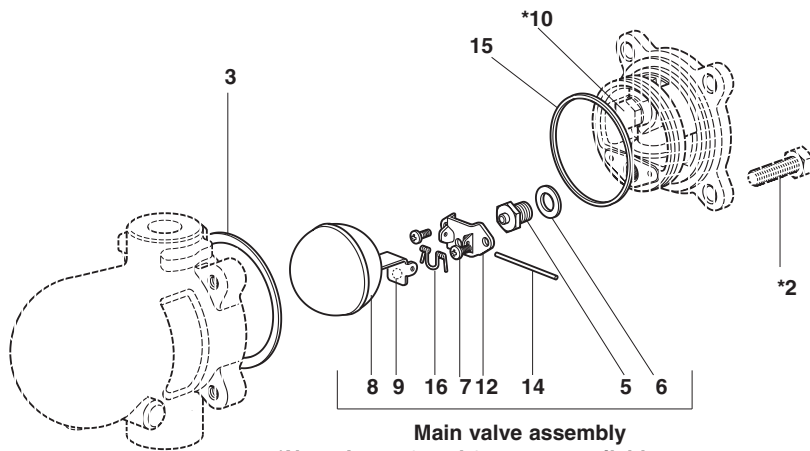
Liquid drain traps can be used to drain most liquids from most gases. However, some applications, particularly those involving hazardous or unusual fluids, may be subject to regulation or may otherwise require special consideration. Traps used on volatile gas application should never discharge to atmosphere. They need to drain into a containment system or flare line. Spirax Sarco will endeavor to provide whatever data is necessary to assist in product selection.



**Dimensions**  
(nominal) in inches and millimeters

Size	A	B	C	D	E Withdrawal distance	Weight lbs kg
1/2"	5.3 135	3.8 97	1.9 48	6.4 162	5.3 135	8.2 3.73
3/4"	5.3 135	3.8 97	1.9 48	6.4 162	5.3 135	8.2 3.73
1"	5.5 139	4.4 113	2.0 51	7.0 179	5.7 1145	9.3 4.23

## Spare Parts



**Main valve assembly**  
\*Note: Items 2 and 3 are not available as spares

## Spare parts

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

### Available spares

Maintenance Kit	CAS14	3, 5, 6, 7 (2 off), 8, 9, 12, 14, 15
Seal Kit	CAS14S	3, 5, 6, 7 (2 off), 8, 9, 12, 14+16 (1" only), 15

### How to order spares

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

**Example:** 1 - Maintenance kit for a Spirax Sarco 1/2" CAS14 austenitic stainless steel liquid drain trap.

### Recommended tightening torques

Item	Part	or mm	FT./LBS
2	Cover bolt	M10 x 30	15 - 18
5	Main valve seat	17 A/F	36 - 37
7	Main valve assembly screws	Pozidrive M4 x 6	2 - 2.2
10	Blanking plug	17 A/F	36 - 37

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