

spirax sarco®

Stainless Steel Sealed Inverted Bucket Steam Trap SIB30 and SIB30H

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 SIB30 is sealed for tamper-proof operation.

| | |
|---------------------|--------------------------------------|
| Model ⇄ | SIB30 |
| PMO | 435 psig (see below) |
| Sizes | 1/2", 3/4" |
| Connections | NPT |
| Construction | Tamper-proof, all Stainless Steel |
| Options | SW Connections |

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 | AISI 321 |
| 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 | AISI 304/AISI 321 |

*The body/cover weld joint complies with ASME section IX and BS 4870 (1981).

Limiting Operating Conditions

PMO - Maximum operating pressure limitations

| Δ P PSIG BAR | | Trap | |
|--------------|------|----------|-----------|
| 435 | 30.0 | SIB30/4 | SIB30H/5 |
| 290 | 20.0 | SIB30/5 | SIB30H/6 |
| 174 | 12.0 | SIB30/6 | SIB30H/7 |
| 123 | 8.5 | SIB30/7 | SIB30H/8 |
| 73 | 5.0 | | SIB30H/10 |
| 58 | 4.0 | SIB30/8 | |
| 36 | 2.5 | SIB30/10 | |
| 29 | 2.0 | | SIB30H/12 |
| 22 | 1.5 | SIB30/12 | |

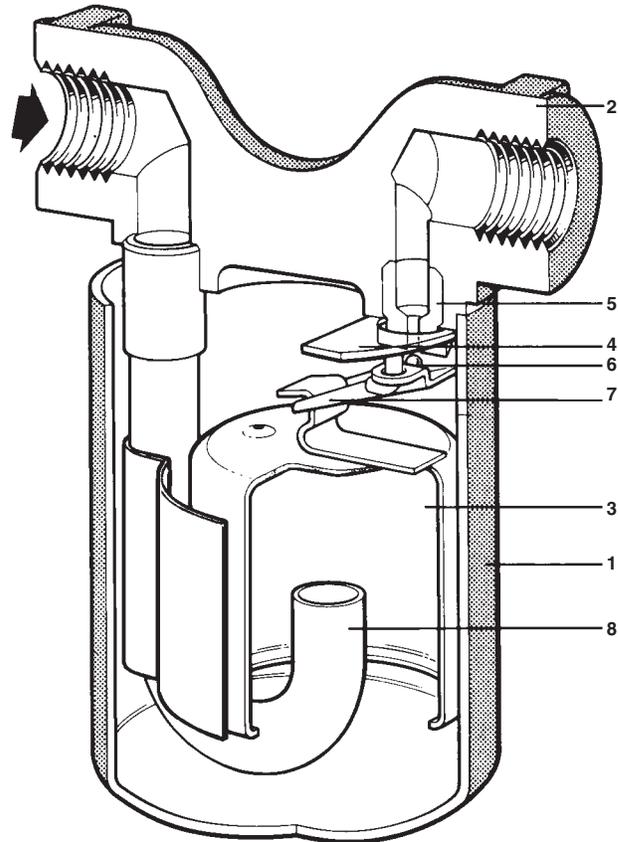
Pressure Shell Design Conditions

Limiting conditions (ISO 6552)

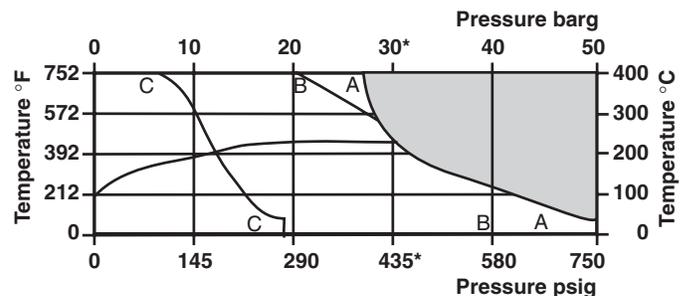
| | |
|-------------------------------------|-----------------|
| Maximum body design conditions | PN50 (ANSI 300) |
| PMA - Maximum allowable pressure | 50 barg |
| TMA - Maximum allowable temperature | 400°C |
| Cold hydraulic test pressure | 75 barg |

Typical Applications

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



Operating Range (SHELL)



■ The product must not be used in this region.

* PMO Maximum operating pressure recommended with proper mechanism

A - A Flanged ANSI 300, screwed and socket weld
B - B Flanged BS 4504 PN40
C - C Flanged ANSI 150

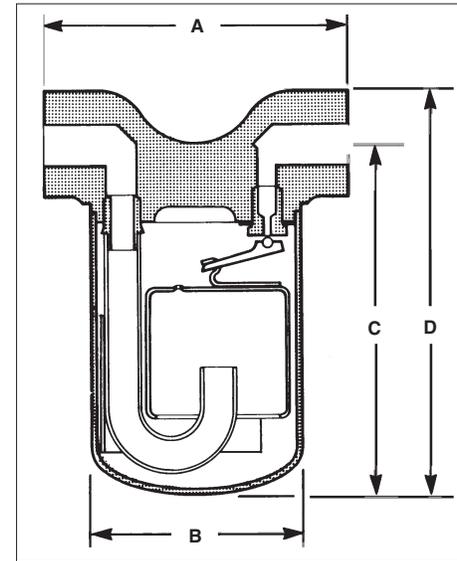
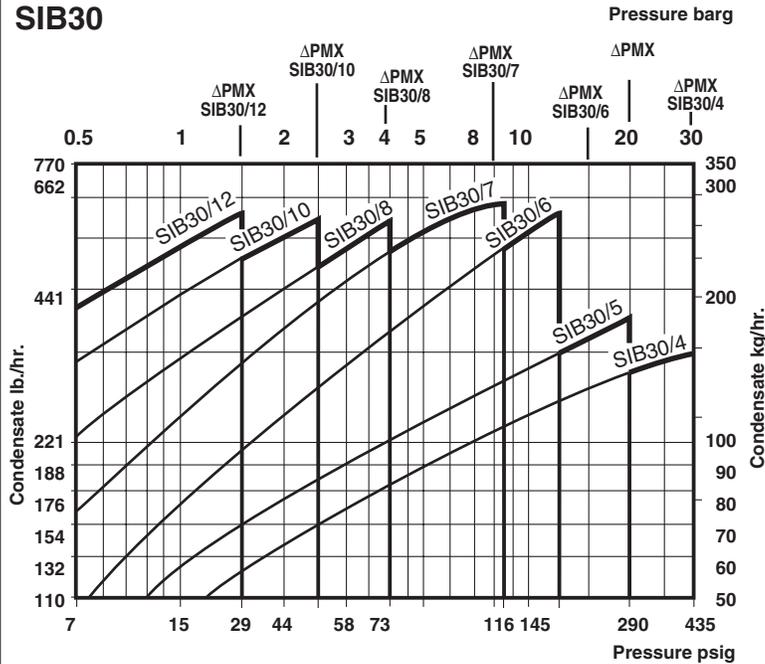
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-2-410-US 06.04

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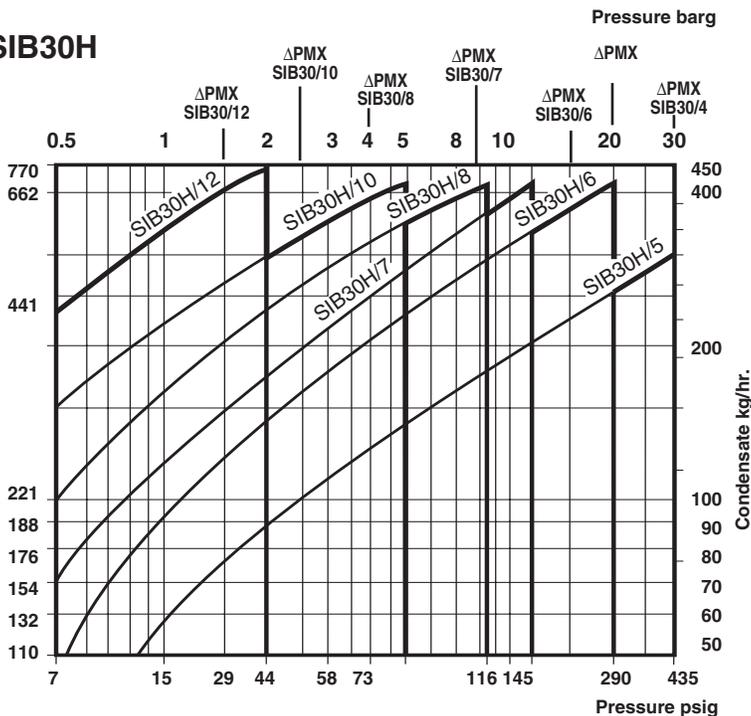
SIB30



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.

SIB30H



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.

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 435 psig.

Dimensions (nominal) in inches and millimeters

| Size | A | B | C | D | Weight |
|---------------|-----|-----|-----|-----|---------|
| SIB30 | | | | | |
| 1/2" | 4.3 | 3.0 | 4.9 | 5.6 | 3.3 lb |
| 15 | 110 | 76 | 124 | 143 | 1.5 kg |
| 3/4" | 4.3 | 3.0 | 4.9 | 5.6 | 3.3 lb |
| 20 | 110 | 76 | 124 | 143 | 1.5 kg |
| SIB30H | | | | | |
| 1/2" | 4.3 | 3.0 | 6.3 | 7.0 | 3.9 lb |
| 15 | 110 | 76 | 159 | 177 | 1.75 kg |
| 3/4" | 4.3 | 3.0 | 6.3 | 7.0 | 3.9 lb |
| 15 | 110 | 76 | 159 | 177 | 1.75 kg |

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