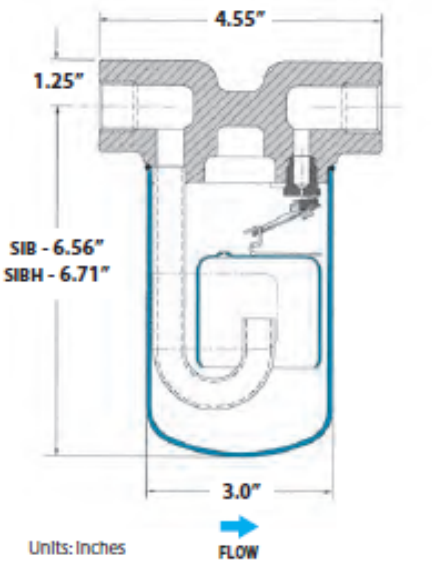
Steam Traps
Inverted Bucket Steam Trap

SIB/SIBH
Inverted Bucket

Model	SIB, SIBH
Size	1/2", 3/4"
Connections	NPT, SW
Body Material	Stainless Steel
PMO Max. Operating Pressure	450 PSIG*
TMO Max. Operating Temperature	750°F
PMA Max. Allowable Pressure	720 PSIG @ 100°F
TMA Max. Allowable Temperature	750°F @ 400 PSIG



SIB
Inverted Bucket
Steam Trap



Typical Applications

DRIP, TRACING: The **SIB & SIBH** Inverted Bucket Steam traps are suitable for removing condensate from steam mains and steam supply lines. They are also used on unit heaters, laundry equipment, and other smaller, low capacity and less critical process applications where slow start-up can be tolerated. The discharge orifice of the inverted bucket trap is mounted at the top of the trap body, which makes them less susceptible to failure from dirt and debris when compared to other trap types. The SIBH is physically larger and has a higher pressure capability for a particular orifice size than the SIB.

How It Works

When the trap is filled with condensate, the inverted bucket inside the steam trap loses its buoyancy and rests on the bottom of the trap. This pulls the disc off the seat allowing condensate to be discharged through the seat orifice located at the top of the trap. When steam enters, it fills the inverted bucket causing the bucket to float to the surface which closes the discharge valve, containing the steam in the system. Eventually, the steam is bled off through a small hole in the top of the bucket causing it to sink, which repeats the cycle.

Features

- All stainless steel body
- Acceptable for superheated steam (with check valve installed at inlet)
- Waterhammer resistant
- Valve & seat are located at the top of the trap body making them less prone to clogging from debris and pipe scale
- All stainless steel internals with hardened valve & seat

Sample Specification

Steam trap shall be an all stainless steel module design inverted bucket type with a frictionless valve lever assembly.

Option

CV = built-in Inlet Check Valve recommended for Superheated Steam

Installation and Maintenance

Trap must be installed in upright position to function properly. The stainless steel body is seal welded and therefore non-repairable. If a new trap is required, remove and replace. Bucket traps require an internal water seal to operate. Applications with superheated steam can cause the water seal to flash into steam and trap to fail in open position. A check valve installed at trap inlet will help prevent the loss of prime.

MATERIALS

Body	Stainless Steel GR CF3
Cover	304L Stainless Steel
Internals	300 Series Stainless Steel
Valve Plug & Seat	420F Stainless Steel

CAPACITIES – *Condensate (lbs/hr)*

Model	Orifice Size	PMO (PSIG)	Differential Pressure (PSI) 5	10	15	20	25	30	40	50	60	70	80	100	125	150	180	200	250	350	450
SIB-20	3/16"	20	450	560	640	690															
SIB-80	1/8"	80	300	350	400	440	460	500	550	580	635	660	690								
SIB-150	#38	150	210	250	280	300	320	350	380	400	420	450	470	500	550	570					
SIBH-15	1/4"	15	830	950	1060																
SIBH-30	3/16"	30	530	700	820	880	950	1000													
SIBH-70	5/32"	70	380	500	580	620	680	710	770	840	90	950									
SIBH-125	1/8"	125	285	375	440	485	530	560	620	670	720	780	800	860	950						
SIBH-200	7/64"	200	205	265	315	350	385	410	465	500	580	590	620	650	700	810	840	860			
SIBH-250	#38	250	155	205	240	270	295	320	360	400	500	530	550	580	630	660	690	710	760		
SIBH-450	.057	450	31	50	70	84	95	105	120	133	145	152	160	174	187	198	208	215	228	248	263

Helpful Selection Information

The PMO (maximum operating pressure) rating of model selected must meet or exceed the maximum steam pressure or the trap may not open. For example; the **SIB-12-N-150** has a PMO of 150 PSI. Condensate capacity (lbs/hr) of the trap is based on the differential pressure across the trap.



SIB
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Steam Trap



SIBH
Inverted Bucket
Steam Trap

Size/ Connection	Model Code	PMO PSI	Weight lbs	Cross Reference Spirax Sarco	Armstrong
1/2" NPT	SIB-12-N-20	20	5.0	SIB30	1810
3/4" NPT	SIB-13-N-20				
1/2" SW	SIB-12-SW-20				
3/4" SW	SIB-13-SW-20				
1/2" NPT	SIB-12-N-80	80	5.0	SIB30	1810
3/4" NPT	SIB-13-N-80				
1/2" SW	SIB-12-SW-80				
3/4" SW	SIB-13-SW-80				
1/2" NPT	SIB-12-N-150	150	5.0	SIB30	1810
3/4" NPT	SIB-13-N-150				
1/2" SW	SIB-12-SW-150				
3/4" SW	SIB-13-SW-150				
1/2" NPT	SIB-12-N-450	450	5.0	SIB30	1810
3/4" NPT	SIB-13-N-450				
1/2" SW	SIB-12-SW-450				
3/4"SW	SIB-13-SW-450				
1/2" NPT	SIBH-12-N-15	15	5.5	SIB30H	1811
3/4" NPT	SIBH-13-N-15				
1/2" SW	SIBH-12-SW-15				
3/4" SW	SIBH-13-SW-15				
1/2" NPT	SIBH-12-N-30	30	5.5	SIB30H	1811
3/4" NPT	SIBH-13-N-30				
1/2" SW	SIBH-12-SW-30				
3/4" SW	SIBH-13-SW-30				
1/2" NPT	SIBH-12-N-70	70	5.5	SIB30H	1811
3/4" NPT	SIBH-13-N-70				
1/2" SW	SIBH-12-SW-70				
3/4" SW	SIBH-13-SW-70				
1/2" NPT	SIBH-12-N-125	125	5.5	SIB30H	1811
3/4" NPT	SIBH-13-N-125				
1/2" SW	SIBH-12-SW-125				
3/4" SW	SIBH-13-SW-125				
1/2" NPT	SIBH-12-N-200	200	5.5	SIB30H	1811
3/4" NPT	SIBH-13-N-200				
1/2" SW	SIBH-12-SW-200				
3/4" SW	SIBH-13-SW-200				
1/2" NPT	SIBH-12-N-250	250	5.5	SIB30H	1811
3/4" NPT	SIBH-13-N-250				
1/2" SW	SIBH-12-SW-250				
3/4" SW	SIBH-13-SW-250				
1/2" NPT	SIBH-12-N-450	450	5.5	SIB30H	1811
3/4" NPT	SIBH-13-N-450				
1/2" SW	SIBH-12-SW-450				
3/4" SW	SIBH-13-SW-450				