



Established 1958

## Inverted Bucket Steam Traps Series TA-IB (Models 8080 & 8181)

### Operation

Tunstall Associates, Inc. produces a full line of Inverted Bucket Steam Traps containing a stainless steel bucket and valve mechanism which are either in a full closed position, or a full open position to discharge condensate.

As the system starts, air and non-condensable gases vent through the orifice in the bucket; condensate also enters through the standpipe which forms a water seal in the bottom of the bucket. As steam enters the trap a simple lever mechanism attached to the inverted bucket snaps shut; then as the steam condenses the buoyancy of the bucket changes thus opening the lever mechanism, and allowing pressure to force the condensate out of the trap. This process repeats itself exactly and continuously to maximize the efficient use of energy. No cooling leg required. Refer to capacity charts when ordering.



### Features

- In-Line Connection
- High Strength Cast Iron Body
- Hardened Stainless Steel Valve & Seat
- Stainless Steel Bucket
- Test Plug
- Low Maintenance

### Materials of Construction

Body & Cover	Cast Iron-ASTM-A-126-7 Class B
Bucket & Linkage	Stainless Steel
Valve & Seat	Hardened Stainless Steel
Standpipe	Steel Pipe
Cover Gasket	Non-Asbestos

### Applications

- Converters
- Dryers
- High-Pressure Drip
- Laundry Equipment
- Oil Pre-heaters
- Pressing Machinery
- Process Equipment
- Steam Cookers
- Steam Heated Vats
- Unit Heater

### Model 8080

Max. Operating Pressure: 150 PSIG  
Max. Allowable Temperature: 366°F

### Model 8181

Max. Operating Pressure: 250 PSIG  
Max. Allowable Temperature: 450°F

Inverted  
Bucket traps



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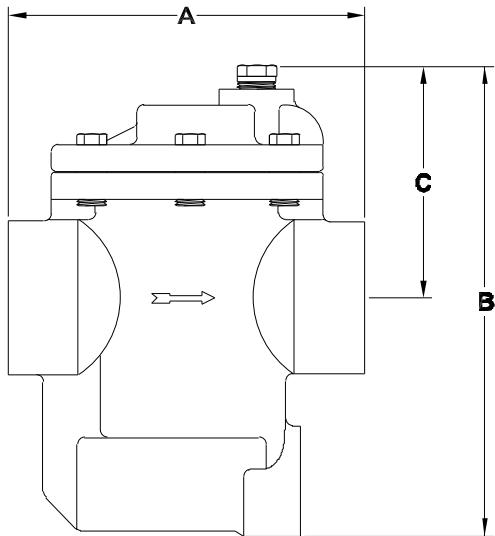
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Bulletin-TA-Series-TA-IB-0814  
Inverted Bucket Traps

# Inverted Bucket Steam Traps - Series TA-IB (Models 8080 & 8181)

## Engineering Specifications

### Capacity Chart



**Model 8080 &  
Model 8181**

Inverted  
Bucket traps

Differential Pressure PSI	Model 8080		Model 8181	
	Orifice Size (In.)	Condensate Per hour	Orifice Size (In.)	Condensate Per hour
1/4	↑	139	↑	191
1/2	↑	200	↑	300
3/4	↑	240	↑	395
1	↑	270	↑	450
2	↑	340	↑	590
3	↑	390	↑	680
4	↑	425	↑	750
5	↑	450	↑	830
10	↑	560	↑	950
15	↑	640	1/4	1060
20	3/16	690	↑	585
25	↑	460	↑	655
30	↑	500	3/16	710
40	↑	550	↑	770
50	↑	580	↑	840
60	↑	635	↑	900
70	↑	660	5/32	950
80	1/8	690	↑	800
100	↑	500	↑	860
125	↑	550	↑	950
150	#38	570	↑	660
180	↑	--	↑	670
200	↑	--	7/64	700
225	↑	--	↑	730
250	↑	--	#38	760

Capacities given are in pounds of hot condensate per hour at differential indicated.

Weights and Dimensions						Repair Kit
Model Number	Size (in.) NPT	Weight (lbs.)	Dimensions			Specify maximum working pressure when ordering repair kits
			A	B	C	
8080	1/2	5	5.000	5.875	3.125	TA-IB-RK-8080
8080	3/4	5	5.000	5.875	3.125	
8181	1/2	6	5.000	6.875	2.625	TA-IB-RK-8181
8181	3/4	6	5.000	6.875	2.625	
8181	1	6	5.000	6.875	2.625	

