



### Features:

- Available in 1/2", 3/4", 1", 1-1/4", 1-1/2", 2" and 2-1/2" sizes to meet nearly every industrial and process application
- High strength cast iron bodies
- Low maintenance - tolerates dirty steam - for maximum service life and reliability
- Immediate condensate discharge at saturated steam temperature
- Meets MIL Spec WW T 696

### Description:

Designed for extended service and low maintenance with medium and high pressure steam, Barnes & Jones Bucket Traps feature an inverted bucket design with corrosion resistant stainless parts for optimal performance with blast coils, laundry equipment, hot water heaters, steam kettles and a broad range of industrial and process applications.

### Operation:

Key to the reliability of a Barnes & Jones Bucket Trap is that the trap is selected for the actual pressure differential of your application, and the valve seat and plug are in the top, away from the dirt and debris that collects in the trap body. A trap being used for a greater differential than its rating will not open. Conversely, a trap with a rating which exceeds the differential will operate at a reduced capacity.

Barnes & Jones offers seven models in 20 capacities. Using the table on the reverse, specify the B&J trap which delivers the most efficient energy saving operation and lowest maintenance cost.

Initially primed to create a water seal with the bucket in a down (fully open) position, air and water enter the trap through the inlet tube. Air is vented from a small orifice in the top of the bucket, while condensate flows out from under the bucket. When steam enters the trap, it fills the bucket, causing it to become buoyant, overcoming the weight of the bucket, and rising to "snap" the plug into the seat. The trap stays fully shut until sufficient steam has condensed to allow the bucket to immediately drop, and return to its fully open state.

# Engineering Specifications: Capacities (Gross)

lbs. condensate per hour

## DIFFERENTIAL PRESSURE (PSIG)

Model	Pipe Size	PMO	Orifice	1/4	1	5	10	15	20	30	60	70	80	100	125	150	180	200	225	250	
8000	1/2"	20	3/16	140	272	460	560	646	698	-	-	-	-	-	-	-	-	-	-	-	-
	and	80	1/8	48	112	200	310	370	420	510	640	662	690	-	-	-	-	-	-	-	-
	3/4"	125	7/64	24	56	92	150	200	262	350	490	530	570	642	685	-	-	-	-	-	-
		150	#38	20	54	75	112	153	205	275	385	415	442	482	545	572	-	-	-	-	-
8011	1/2"	15	1/4	192	452	835	952	1062	-	-	-	-	-	-	-	-	-	-	-	-	-
	and	30	3/16	125	310	545	672	775	882	1000	-	-	-	-	-	-	-	-	-	-	-
	3/4"	70	5/32	72	170	185	440	500	590	715	905	952	-	-	-	-	-	-	-	-	-
	and	125	1/8	56	135	225	342	396	465	565	715	762	805	862	955	-	-	-	-	-	-
	1"	200	7/64	32	70	155	232	277	338	410	550	582	615	665	740	812	855	865	702	732	765
	250	#38	46	82	100	155	192	243	295	426	455	475	525	576	621	675	702	732	765	-	-
8012	1/2"	15	5/16	350	825	1610	1920	2110	-	-	-	-	-	-	-	-	-	-	-	-	-
	and	30	1/4	285	510	950	1385	1640	1800	2060	-	-	-	-	-	-	-	-	-	-	-
	3/4"	70	3/16	198	425	790	950	1125	1270	1510	2010	2210	-	-	-	-	-	-	-	-	-
		125	5/32	110	310	565	690	820	910	1075	1450	1555	1660	1810	2020	-	-	-	-	-	-
		200	1/8	70	180	330	470	510	585	712	990	1060	1111	1240	1375	1525	1580	1605	-	-	-
	250	7/64	40	130	250	350	375	425	525	725	790	820	915	1020	1111	1180	1230	1285	1320	-	
8013	3/4"	15	1/2	955	1880	2910	3525	3900	-	-	-	-	-	-	-	-	-	-	-	-	-
	and	30	3/8	500	1420	2310	2700	3320	3510	4000	-	-	-	-	-	-	-	-	-	-	-
	1"	60	5/16	350	950	1745	2050	2525	2830	3140	4440	-	-	-	-	-	-	-	-	-	-
		80	9/32	310	740	1355	1600	1960	2220	2450	3500	3825	4025	-	-	-	-	-	-	-	-
		125	1/4	270	620	1110	1320	1620	1820	2020	2850	3120	3320	3610	3925	-	-	-	-	-	-
		180	7/32	185	500	880	1170	1350	1600	2100	2510	2700	2830	3070	3200	3520	3725	-	-	-	-
	250	3/16	140	410	715	960	1125	1310	1710	2060	2220	2320	2510	2610	2715	3030	3225	3410	3500	-	
8014	1"	15	5/8	1410	2920	4825	5810	6500	-	-	-	-	-	-	-	-	-	-	-	-	-
	and	30	1/2	955	2255	3710	4750	5220	6010	6810	-	-	-	-	-	-	-	-	-	-	-
	1-1/4"	60	3/8	510	1775	2960	3560	4000	4725	5420	6810	-	-	-	-	-	-	-	-	-	-
		80	11/32	390	1570	2525	2925	3225	3525	4440	5775	6000	6420	-	-	-	-	-	-	-	-
		125	5/16	320	1210	2000	2500	2750	3125	3510	4820	5275	5625	6220	6710	-	-	-	-	-	-
		180	9/32	275	960	1510	1925	2220	2360	2910	3800	4260	4510	4820	5520	5710	6010	-	-	-	-
	250	1/4	190	590	1010	1260	1465	1810	2220	3160	3360	3520	3810	4310	4460	4710	5330	5525	5725	-	
8015	1-1/4"	15	3/4	2060	4170	7625	9020	10000	-	-	-	-	-	-	-	-	-	-	-	-	-
	and	30	9/16	925	2920	5220	6430	7725	8525	9825	-	-	-	-	-	-	-	-	-	-	-
	1-1/2"	60	7/16	600	2220	3810	5025	6025	6625	7625	9525	-	-	-	-	-	-	-	-	-	-
	and	100	3/8	510	1720	3030	3620	4525	5220	6110	8525	9225	9725	10420	-	-	-	-	-	-	-
		125	11/32	390	1510	2625	3200	3910	4525	5440	7505	8060	8525	9610	10910	-	-	-	-	-	-
		180	5/16	340	1210	2110	2620	3220	3710	4525	6600	7025	7260	8120	8980	9500	10000	-	-	-	-
		225	9/32	310	980	1710	2125	2600	2960	3620	5420	5710	5925	6610	7320	7360	7900	9225	9810	-	-
	250	1/4	260	710	1220	1510	1920	2110	2610	3800	4010	4170	4600	5110	5500	6000	6375	6800	7000	-	
8016	2"	15	1-1/16	4060	8420	14525	17350	19200	-	-	-	-	-	-	-	-	-	-	-	-	-
	and	25	7/8	2090	5500	10000	12950	15620	18525	-	-	-	-	-	-	-	-	-	-	-	-
	2-1/2"	40	3/4	1905	4510	8220	10625	12810	15000	18000	-	-	-	-	-	-	-	-	-	-	-
		60	5/8	1460	3520	6910	8720	10620	12110	14270	19825	-	-	-	-	-	-	-	-	-	-
		80	9/16	1270	3100	6000	7620	9330	10620	12500	17325	18320	19000	-	-	-	-	-	-	-	-
		125	1/2	1065	2620	5000	6410	7820	8900	10500	14525	15420	16330	18100	20000	-	-	-	-	-	-
		180	7/16	915	2220	4190	5550	6660	7525	9250	12420	13330	14200	15800	17500	18500	20000	-	-	-	-
	250	3/8	590	1820	3410	4525	5410	6110	7500	10125	10825	11510	12830	14300	15610	16900	17500	18500	19000	-	

### Dimensions

MODEL #	8000	8011	8012	8013	8014	8015	8016
Pipe Size	1/2"- 3/4"	1/2"- 3/4"- 1"	1/2" - 3/4"	3/4" - 1"	1" - 1-1/4"	1-1/4"-1-1/2"-2"	2" - 2-1/2"
Prime Plug	1/4"	1/4"	1/2"	3/4"	1"	1-1/2"	2"
A Face to Face	5"	5"	6-1/2"	7-3/4"	9"	10-1/4"	13
B Height	5-7/16"	6-7/8"	9-1/16"	11-3/4"	13-5/8"	16-1/4"	21-5/16
C C.L. to bottom	2-3/4"	4-1/4"	5-3/8"	7-1/32"	7-13/16"	8-1/16"	11"
Weight	5#	6#	15#	27-1/2#	44#	71#	131#
Max Op. Press.	150	250	250	250	250	250	250

### List of Materials

Part	Material
Cap & Body	ASTM A48 CI 30
Gasket	Compressed Non Asbestos
Bolt/Nut	Grade 5 or 7
Valve/Valve Seat	Stainless Steel
Retainer	Stainless Steel
Lever	Stainless Steel
Bucket	Stainless Steel

**Barnes & Jones**  
INC.

