



MARSHALL ENGINEERED PRODUCTS CO.

**MEPCO Now Offering an Expanded Line of
In-Line Float and Thermostatic Steam Traps
plus some [new literature](#) for Bucket Traps**

June 14, 2011

Grand Rapids, MI – MEPCO announced today the launch of an expanded and complete line of *In-Line Float and Thermostatic Steam Traps*. The new Inverted Bucket traps have the same construction, design and superior performance features of our current of In-Line Float and Thermostatic Traps.

Below you will find new cut sheets for both the expanded In-Line Float and Thermostatic Traps and for our Bucket Traps. They will also be available on our website on the Literature page. Orders can be placed immediately! As always, if you have any questions, you are welcome to contact customer service.

Ed Gilde



In-Line Float & Thermostatic Steam Traps

(VAC - 125 PSIG)
Series 42

MARSHALL ENGINEERED PRODUCTS COMPANY

Features

- Straight through piping connections
- Unaffected by sudden or wide pressure changes
- Responds quickly to condensate load changes
- Continuous discharge
- Function is not impaired by high back pressure
- Energy efficient
- Simple construction
- On-line repair
- Large air handling capacity
- Conforms to Federal Spec. WWT-696

Description

The Mepco In-Line Float & Thermostatic Traps Series 42 are designed for all types of low pressure or vacuum steam heating systems and steam process equipment. Typical applications include: unit heaters, space heaters, water heaters, pressing machines, low pressure mains and risers, and replacement of inefficient inverted bucket traps.

In-line float and thermostatic traps are especially well suited for apartments, hospitals, office buildings, and schools or wherever quiet operation is necessary.

Materials

PART	DESCRIPTION
Head	Cast Iron, ASTM-A278B Class 30
Body	Cast Iron, ASTM-A278B Class 30
Bolting	Steel, Grade 5
Gaskets	Compressed Graphite
Foat	Stainless Steel
Plug	Stainless Steel
Seat	Stainless Steel

Operation

The opening and closing of the valve is caused by changes in the condensate level within the trap shell. When the water level drops, the weight of the float closes the valve. As condensate enters the traps, the float rises and opens the valve, allowing the condensate to be discharged. The float is designed to provide sufficient buoyancy to overcome the differential pressure across the valve. The internal float and valve configuration is such that the condensate level is always above the valve, creating a continuous water seal at the seat.

Air and other gases are freely discharged as they reach the trap through the air vent. The calibrated thermostatic element will close the air vent immediately when the temperature surrounding the element reaches saturated steam temperature.

Construction

Mepco In-Line Float and Thermostatic Traps are compact, of rugged design, with easy access to all interior parts. The body is cast with in-line pipe connections for simple straight through pipe hook-ups. The air vent valve, seat, and the complete valve mechanism are manufactured from stainless steel. The repair kit consists of a complete factory assembled head which simply bolts on to the body for ease of repair. No pipe connections need to be broken.





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Capacities (Gross) lbs. condensate per hour

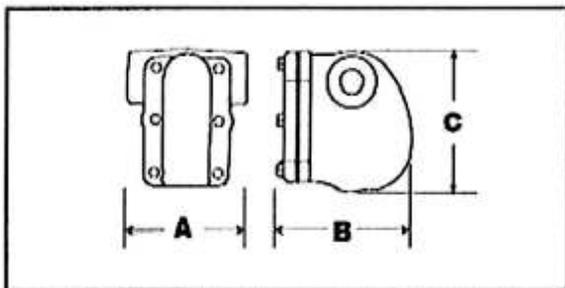
PIPE SIZE	MODEL NO.	PRESSURE DIFFERENTIAL (PSIG)														
		1/4	1/2	1	2	5	10	15	20	25	30	40	50	75	100	125
1/2"	42-115A	293	387	513	683	824	1050	1129	-	-	-	-	-	-	-	-
3/4"	42-215A	293	387	513	683	824	1050	1129	-	-	-	-	-	-	-	-
1"	42-415A	293	387	513	683	824	1050	1129	-	-	-	-	-	-	-	-
1-1/4"	42-515A	630	808	1029	1302	1722	2100	2457	-	-	-	-	-	-	-	-
1-1/2"	42-715A	1155	1785	2620	3465	5250	6930	7980	-	-	-	-	-	-	-	-
2"	42-815A	2415	2940	3780	4883	7245	9450	11445	-	-	-	-	-	-	-	-
1/2"	42-130A	293	387	513	583	824	1050	1129	1271	1375	1439	-	-	-	-	-
3/4"	42-230A	293	387	513	683	824	1050	1129	1271	1375	1439	-	-	-	-	-
1"	42-430A	293	387	513	683	824	1050	1129	1271	1375	1439	-	-	-	-	-
1-1/4"	42-530A	394	525	725	950	1280	1575	1764	1890	1995	2100	-	-	-	-	-
1-1/2"	42-730A	1050	1365	1785	2415	3570	4830	5775	6300	6930	7350	-	-	-	-	-
2"	42-830A	1365	1820	2625	3570	5460	7140	8190	9030	9765	10500	-	-	-	-	-
1/2"	42-175A	168	224	294	383	546	735	835	919	977	1019	1176	1292	1523	-	-
3/4"	42-275A	168	224	294	383	546	735	835	919	977	1019	1176	1292	1523	-	-
1"	42-475A	168	224	294	383	546	735	835	919	977	1019	1176	1292	1523	-	-
1-1/4"	42-575A	410	570	667	956	1397	1943	2258	2520	2730	2940	3203	3465	3990	-	-
1-1/2"	42-775A	557	701	1008	1365	1995	2783	3203	3570	3885	4200	4620	4988	5670	-	-
2"	42-875A	893	1155	1575	2100	3255	4358	4987	5460	5775	6090	6720	7140	8085	-	-
1/2"	42-1125A	105	142	184	242	347	436	525	593	651	698	788	872	1019	1166	1249
3/4"	42-2125A	105	142	184	242	347	436	525	593	651	698	788	872	1019	1166	1249
1"	42-4125A	105	142	184	242	347	436	525	593	651	698	788	872	1019	1166	1249
1-1/4"	42-5125A	294	389	504	662	956	1200	1523	1733	1864	1995	2179	2363	2783	3098	3308
1-1/2"	42-7125A	420	546	714	935	1365	1785	2153	2415	2625	2835	3150	3360	3990	4410	4725
2"	42-8125A	578	709	924	1286	2048	2730	3160	3413	3675	3990	4410	4850	5775	6405	6830

Note on capacity: Trap capacities are based on continuous discharge at steam temperatures. The published figures are the result of an extensive testing program conducted in accordance with ANSI/ASME PTC 39-1-1980. Condensate Removal Devices for Steam Systems, at the Mepco factory. Significantly greater applications are realized when condensate temperature is below saturated steam temperature. A safety factor between 2-4 should be applied to these ratings.

NOTE: FLOAT TRAPS are available for these applications where draining liquids is the only requirement of the trap. In those instances the thermostatic air vent is replaced by a solid plug. All pipe sizes and pressure ratings are available.

Series 42 Dimensions

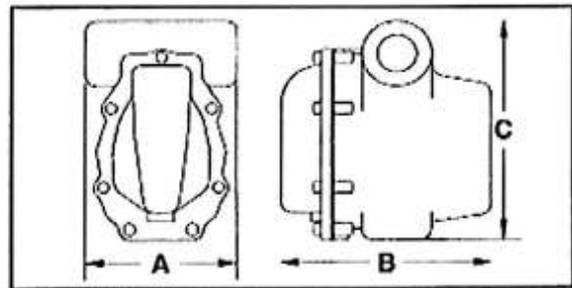
SIZE	MODELS	A	B	C	WT.
1/2" -1"	15 PSIG	5"	6.25"	6.5"	11 lb.
1/2" -1"	30 PSIG	5"	6.25"	6.5"	11 lb.
1/2" -1"	75 PSIG	5"	6.25"	6.5"	11 lb.
1/2" -1"	125 PSIG	5"	6.25"	6.5"	11 lb.
1"-1/4"	15 PSIG	5"	6.25"	6.5"	11 lb.
1"-1/4"	30 PSIG	5"	6.25"	6.5"	11 lb.



1/2", 3/4", 1", 1-1/4", (15/30 PSIG)

Series 42 Dimensions

SIZE	MODELS	A	B	C	WT.
1"-1/4"	75 PSIG	7.5"	10.5"	11.5"	48 lb.
1"-1/4"	125 PSIG	7.5"	10.5"	11.5"	48 lb.
1 1/2" -2"	15 PSIG	7.5"	10.5"	11.5"	47 lb.
1 1/2" -2"	30 PSIG	7.5"	10.5"	11.5"	47 lb.
1 1/2" -2"	75 PSIG	7.5"	10.5"	11.5"	47 lb.
1 1/2" -2"	125 PSIG	7.5"	10.5"	11.5"	47 lb.



1-1/4" (75/125 PSIG) all 1-1/2" and all 2"



MARSHALL ENGINEERED PRODUCTS COMPANY

FORM 1510I

Model IB Bucket Traps

(VAC - 250 PSIG)
Inverted Bucket Design

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. Mepco 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 Mepco 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.

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 full open state.

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



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	
IB00	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	-	-	-	-	-
IB11	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	-	-	-	-	-	-
IB12	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	-	-	-	-	-	-	-	-	-
	and 125	5/32		110	310	565	690	820	910	1075	1450	1555	1660	1810	2020	-	-	-	-	-	-
IB13	1/2"	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	-	-	-	-	-	-	-	-
IB14	1/2"	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	-	-	-	-	-	-	-	-
IB15	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	-	-	-	-	-	-	-
IB16	1/2"	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 #	IB00	IB11	IB12	IB13	IB14	IB15	IB16
Pipe Size	1/2"- 3/4"	1/2"- 3/4"- 1"	1/2" - 3/4"-1"	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

*Face bushed to Size

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

