# CENTRIFUGAL PUMPS

CLOSE COUPLED PUMPS IN-LINE PUMPS BASE MOUNTED PUMPS CIRCULATOR PUMPS DOUBLE VOLUTE PUMPS





MARSHALL ENGINEERED PRODUCTS CO.

Here's a line of centrifugal pumps designed to handle a wide range of applications. Used where water or other general purpose liquids are to be circulated, such as in cooling towers, chilled or hot water circulation systems, drainage and many other institutional, commercial and industrial applications.

# **Close-Coupled & In-Line**

Close-coupled and In-line pumps are used in supply system applications such as boiler feed, processing, drainage, washer service and booster service. These pumps are also used as circulators in evaporative condensers, cooling towers, hot water and chilled water systems.



## **Model PM7**

The MEPCO Type PM7 pump is of the volute type and is for horizontal or vertical position. Fifty-four models are available in the PM7 pump with ranges from 1/4 HP to 25 HP and capacities to 480 GPM, 90 PSI. Refer to Form No. 1470.



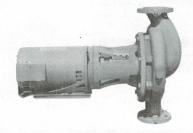
### **Model V**

The MEPCO Type V is of the volute type and is for horizontal or vertical installations. Seventy-five models are available in the V pump with ranges from 1-1/2 HP to 60 HP and capacities to 1200 GPM, 140 PSI. Refer to Form No. 1606.



### **Model C**

The MEPCO Type C is of the volute type for horizontal or vertical installation. Seventy-five models are available in the C pump with ranges from 3 HP to 50 HP and capacities to 1500 GPM, 140 PSI. Refer to Form No. 1604



### **Model DC**

The MEPCO Type DC pump is of the volute type and is for horizontal or vertical installation. Twenty-five models are available in the DC pump with ranges from 1/4 HP to 2 HP and capacities to 200 GPM, 20 PSI. Refer to Form No. 1608.



### Model R5 & R6

The MEPCO Type R5 & R6 pumps are of the volute type for horizontal or vertical installation. Forty models are available in the R5, R6 pumps with ranges from 1/3 HP to 20 HP and capacities to 480 GPM, 75 PSI. Refer to Form Nos. 1602 and 1603.



## Model R7

The MEPCO Type R7 pump is of the volute type for horizontal or vertical installation. Fifty-four (54) models are available in the R7 pump with ranges from 1 HP to 30 HP and capacities to 600 GPM, 110 PSI. Sizes over 2" are with flanged case. Refer to Form No. 1610.



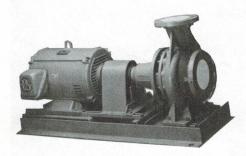
### Model R9

The MEPCO Type R9 pump is of the volute type for horizontal or vertical installation. Forty-one (41) models are available in the R9 pump with ranges from 1 HP to 60 HP and capacities to 500 GPM, 170 PSI. Sizes over 2" are with flanged case. Refer to Form No. 1611.

# of Centrifugal Pumps

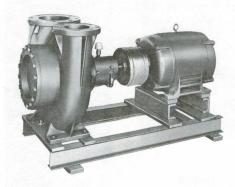
## **Base Mounted**

Base Mounted pumps are most commonly applied for water circulation to be used for heating or air conditioning. The particular quietness of these pumps makes them most suitable for handling hot and chilled water for hydronic systems. They are also very successfully applied for condenser water, domestic hot water and water supply systems.



### Model F

The MEPCO Type F pump is of the volute type and is for horizontal mounting. Fifty models are available in the F pump with ranges from 1 HP to 200 HP and capacities to 3000 GPM, 140 PSI. Refer to Form No. 1605.



### **Model FB11**

The MEPCO Type FB11 pump is of double volute type for horizontal mounting. Particularly suited for applications where net positive suction head available may be limited. Ten models area available with ranges from 7-1/2 HP to 75 HP and capacities to 2600 GPM, 55 PSI. Refer to Form No. 1433.



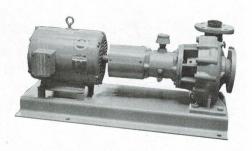
## **Model E**

The MEPCO type E pump is of double volute type for horizontal mounting. Thirty-two models are available in the E pump with ranges from 7-1/2 HP to 150 HP and capacities to 2600 GPM, 100 PSI. Refer to Form No. 1451.



## **Model T**

The MEPCO Type T pump is of the double suction horizontal split type. Fifty models are available in the T pump with ranges from 1 HP to 200 HP and capacities to 6000 GPM, 180 PSI. Refer to Form No. 1607.



## Model B9

The MEPCO Type B9 pump is of the volute type for horizontal mounting. Twenty-eight models are available in the B9 unit with ranges from 1 HP to 25 HP and capacities to 1,000 GPM, 40 PSI. Refer to Form No. 1445.



## **Model AB9**

The MEPCO Type AB9 pump is of the volute type for horizontal mounting. Twenty-five models are available in the AB9 pump with ranges from 3/4 HP to 10 HP and capacities to 450 GPM, 40 PSI. Refer to Form No. 1452.

## **Turbine Pumps**

The Turbine pumps are high pressure / low capacity pumps for non-lubricating fluid handling services. Used for boiler feed, condensate return and other hot water or glycol applications, these pumps are especially designed to handle entrained air or other trapped gases in quantities that will bind normal centrifugal pumps. These pumps are an optimum selection for process, chemical and other services requiring a steep constantly rising performance curve.

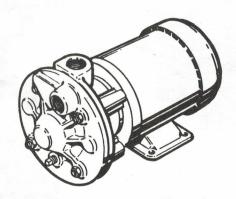
**LOW NPSH REQUIREMENTS** — Pumps have excellent NPSH requirements, which makes them ideally suited for difficult applications.

**MINIMUM SHAFT DEFLECTION** — Provided by heavy duty bearings and large diameter shafts.

**BALANCED AXIAL LOADS** \_Impeller design balances thrust to promote long service life.

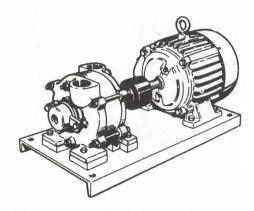
**STANDARD CONSTRUCTION** — Is bronze fitted with bronze shaft sleeve and corrosion resistant mechanical seals.

## **Close-Coupled**



The Close-Coupled Turbine pumps by MEPCO are offered in both 1750 and 3500 RPM. They come in horsepower's ranging from 1/3 HP to 7-1/2 HP. Refer to Form Nos. 1485-1 and 1485-2.

## **Base Mounted**



The Base Mounted Turbine Pumps by MEPCO are offered in 1750 RPM only. They have a horsepower range from 1/3 HP to 7-1/2 HP. Refer to Form Nos. 1485-1 and 1485-2.

Contact MEPCO for more details and application assistance . . . today



MARSHALL ENGINEERED PRODUCTS CO.



## **Sentinel® Control Panel**

MEPCO Sentinel® Control Panel is designed to pair with MEPCO Sentinel® Condensate and Boiler Feed Pump Units. Our control panels are designed to provide optimal operating efficiency and equipment safety. MEPCO recommends a control for all condensate and boiler feed units.

### **Specifications**

Standard MEPCO Duplex control panels (3 HP maximum) include the following: NEMA 1 enclosure, main non-fused disconnect, two fuse blocks, two across the line magnetic starters with over load relays, H-O-A selector switches,. Switch handles are illuminated and double as pump running lights. There is one multi tap (460V-230V-208V-115V/115V) control transformer with primary/secondary protection. Simplex control panels have a similar design but with only one circuit breaker, across the line magnetic starter, H-O-A switch.

Deluxe MEPCO Duplex control panels (and greater than 3 HP) include one NEMA 12 enclosure, UL 508 labeled, a main non-fused disconnect, two fuse blocks, two across the line magnetic starters with over load relay, two test-auto-off (T-O-A) selector switches. Switch handles are illuminated and double as pump running lights. There is one multi tap (460V-230V-208V-115V/115V) control circuit transformer with primary/secondary protection. Simplex control panels have a similar design but with only one of the above specifications.

### **Other Deluxe Options:**

Main disconnect with cover and interlock ● Sealtite conduit ● UL Label ● Low water alarm with horn & light & silencing switch (boiler Feed) ● Low water cut-off (boiler feed) ● High water alarm with horn & light with silencing switch (condensate) ● Set of dry auxiliary contacts ● Test push button ● Pilot light ● Electric alternator ● Transformer Lead/Lag switch ● Fuse blocks **Note:** Some of the above options will require a NEMA 4 or 12 enclosure that is 12" x 12" x 6" or 20" x 20" x 8".





Note: We reserve the right to make revisions to its products, specifications, forms and related information without notice.



### Thermodynamic Disc Trap, Models MD-44, MD-66 & MD-88

### APPLICATION

The MEPCO Thermodynamic Disc Trap is designed to efficiently discharge condensate on applications with working pressures to 600 PSI. This compact, lightweight, simple yet rugged trap will provide economical long-term performance on drip legs, tracing and process services.



#### FEATURES AND BENEFITS

- Easy in-line inspection and maintenace. A simple one piece thermodynamic disc can be inspected, removed or replaced without removing the trap from the line.
- Single moving part. This simple yet effective design utilizes just one moving part for minimal maintenance and long operating life.
- Stainless steel construction is highly resistant to fatigue and corrosion for longer service life.
- High capacities. The optimized porting configuration provides for higher flow capacities than found with other cartidge designs.
- Rugged design that withstands the effects of water hammer, vibration, superheat and corrosive environments.

The MEPCO Thermodynamic trap is available in three sizes; 1/2", 3/4" and 1" for handling pressures ranging from 4 to 600 PSI and temperatures to 800 degrees F and will operate against outlet pressure to 50% of the trap inlet pressure.



3695 44th Street SE | Grand Rapids, Michigan 49512-3946 | Phone 616.971.3420 | Fax 616.971.3421 | www.mepcollc.com FORM 1521B PRINTED IN U.S.A.

### **SPECIFICATIONS**

Capacity Chart - Condensate in Pounds per Hour

Sizes - 1/2", 3/4" and 1" End Connections - threaded NPT

Materials:

Body: Stainless Steel (ASTM A-743, CA 40) Cap: Stainless Steel (ASTM A-743, CA 40)

Disc: Stainless Steel Cartridge: Stainless Steel Seat: Stainless Steel

Maximum Temperature: 800 degrees F.

Maximum Pressure: 600 PSI.

Mounting: any position except upside down:

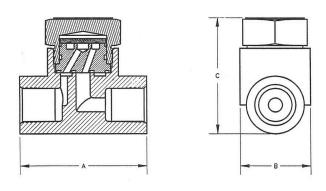
self draining when mounted vertically

downward.

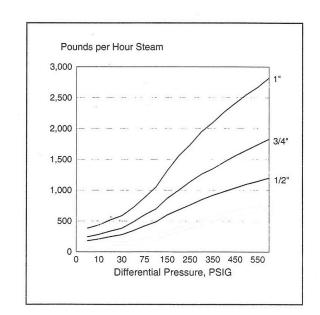
ΔP, psig	1/2"	3/4"	1"
4	180	243	384
10	207	282	435
20	246	336	519
30	279	384	588
50	345	486	720
75	420	600	882
100	486	696	1050
150	600	870	1320
200	684	1002	1560
250	762	1140	1740
300	846	1260	1950
350	918	1350	2100
400	978	1458	2268
450	1038	1560	2412
500	1098	1650	2550
550	1146	174C	2670
600	1200	1830	2820

Note: Capacities are continuous discharge in pounds per hour or condensate at 0 back pressure. Apply safety factor as required by your specific application.

### **DIMENSIONS**



MODEL	SIZE	A	В	С
MD-4	1/2"	2-11/16"	1-17/32"	2-3/8"
MD-6	3/4"	2-13/16"	1-29/32"	2-11/16"
MD-8	1"	3-5/16"	2-1/8"	3-1/16"



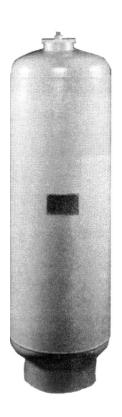




## **HYDRONIC SPECIALTIES**

EXPANSION TANKS
CONVERTERS
AIR SEPARATORS
PUMP DISCHARGE VALVE (PDV)
SUCTION DIFFUSERS





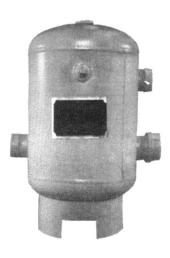
# ASME BAG EXPANSION TANK

The MEPCO Bag Type Expansion Tank contains a full volume flexible bag which separates the water from the air cushion in the tank. The tank may be precharged to the minimum pressure of the system. Upon operation of the system, the water expands due to heating and begins to fill the flexible bag in the tank. As the bag fills with water, the air cushion is compressed causing a rise in pressure in the system. Through proper sizing of the expansion tank, this pressure increase is controlled and kept within the accepted range of the system. The inclusion of the bag in the expansion tank as a barrier between the air and water prevents any loss of precharge due to absorption. *Refer to form number 620.* 

# ASME EXPANSION COMPRESSION TANK



The MEPCO ASME Expansion Compression Tank accomodates the varying water volume in neating or chilled water systems. During system operation the water expands and contracts due to temperature changes. The air in the tank compresses causing a rise in the system pressure. With proper tank sizing, the pressure increase will be controlled and kept within the accepted range of the system. Also, by using fill drain valves, air control and containment of the system air is achievable. Tank capacities range from 15 gallons to 2,000 gallons. Telltale noles furnished in place of inspection openings are standard on all sizes 15 to 135 gallon. Two 2-inch plugged inspection openings are standard on sizes 175 through 505 gallon. An 11-inch by 15-inch manhole is criterion for equipment 525 gallon and larger. *Refer to form number 1575.* 



# ASME TANGENTIAL AIR SEPARATOR

The MEPCO ASME constructed Air Separator helps prevent water logged compression tanks. Its tangential design results in smaller unit requirements than a straight flow separator and provides air free fluid flow that protects against damage and system noise. Features include 125 PSIG design pressure and 500°F maximum operating temperatures. Optional strainers are available. *Refer to form number 1576.* 

## CONVERTER SECTION

TYPE L (Liquid to Liquid)
TYPE S (Steam to Liquid)

The MEPCO Type "S" Steam Converter transfers heat from a steam source to a water supply for building heating applications.

The MEPCO Type "L" Liquid Converters transfer heat from a high temperature and high pressure water source to a low pressure water supply for building heating applications.

U-tube design allows free expansion and contraction of the tubes under changing operating conditions. The tube bundle is removable for inspection or repair purposes. *Refer to form number 1460 (Steam to Liquid) and form number 1461 (Liquid to Liquid).* 

## SUCTION DIFFUSERS

T "SD" SERIES SUCTION DIFFUSER

The MEPCO "SD" Series Suction Diffuser has numerous features built into one unit that provides the optimum flow and protection for the pump. The Suction Diffuser is constructed of cast iron. The cast iron units consist of 15 models, and are available in sizes from 2-inch x  $1^{1}/_{2}$ -inch through 10-inch x 8-inch.



The MEPCO "SD" series is specifically designed to serve the needs of the commercial HVAC and industrial applications. The "SD" Series provides maximum flow efficiency at the suction side of the pump, while reducing space and fitting requirements. The Suction Diffuser eliminates the need for an equivalent length of ten pipe diameters of straight run required at the suction side of the pump by straightening the flow. The "SD" Series saves on the number of fittings by incorporating a system strainer, flow straightening device, and 90 degree elbow into a single unit. The adjustable foot aids in supporting the Suction Diffuser and the suction piping. *Refer to form number 1480*.

# PUMP DISCHARGE VALVE (PDV)



The MEPCO Pump Discharge valve is designed to provide at least one more feature in every area of the valve's construction. First, while not being a check valve, gate valve, and balancing valve, it can also be used for metering the flow. Two Shrader valve metering connections are included as standard with each valve. Internally, the valve includes a bronze gland and stainless steel stem sleeve to assure a lifetime seal and ease of operation after it has been in the line for a period of time. This is unlike other cast iron pump discharge valves which tend to freeze up and render themselves useless for any future adjustments. *Refer to form number 1483*.

# COUNT ON MEPCO FOR PERFORMANCE AND VALUE

Count on MEPCO to supply you with the best steam and hot water systems for churches, schools, offices, hospitals, apartment complexes, and other heating projects.

If you heat with steam or hot water, it pays to work with the heating specialists. Call on your MEPCO sales representative for expert advice today.

At MEPCO, every product reflects 100 years of unmatched engineering and manufacturing expertise.

Contact MEPCO for more details and application assistance... today.



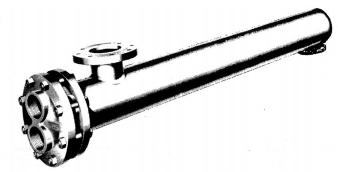


### **HYDRONIC SPECIALTIES SECTION**

Converters - Type L (Liquid to Liquid )

### **APPLICATION**

The MEPCO Type "L" steam converters are used primarily for heating radiation water with steam. Definite advantages are to be found in many types of application. Examples would be large installations when zoning is desirable and steam as the source of heat for the zone may simplify the piping design and reduce the design work required for exclusive use of water.



### **FEATURES**

**U-tube design** allows free expansion and contraction of the tubes under changing operating conditions. The tube bundle can be completely removed from the shell for inspection.

**CODE CONSTRUCTION -** All MEPCO heat exchangers are designed and fabricated in accordance with ASME Section VIII.

- High degree of flexibility in materials to meet varying conditions.
- Available in 2, 4, or 6 pass construction.
- All fabrication done in-house.

#### PRESSURE RATINGS.

**Nuts and Bolts** 

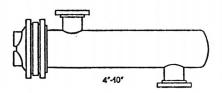
	STANDARD	OPTIONAL
Tubes	150 psig	400 psig
Shell	150 psig	250 psig

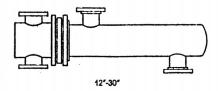
Test Pressure -- 300 psig

Max. Temperature - 375 degrees F

Steel

They are commonly applied for providing heating water for office space in industrial buildings; either in adding this space or at time of initial construction.





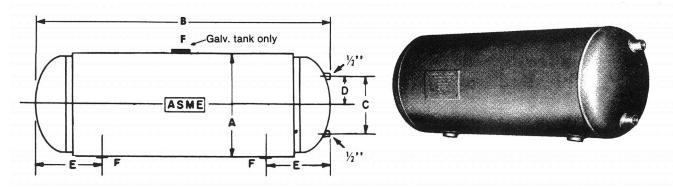
## **MATERIALS OF CONSTRUCTION**

	STANDARD	OPTIONAL
Shell	Steel	304SS, 316SS
Head (4-10")	Cast Iron	Fabricated Steel, Cast Bronze, Fabricated 304SS/316SS
Head (12-30")	Fabricated Steel	Cast Bronze, Fabricated 304SS/316SS
Tubes	3/4x20 BWG Copper	3/4 x 18 BWG Copper, Steel, 304SS/316SS, 90/10 Cu Ni, Admiralty
Tube Sheet	Steel	Bronze, Brass 304SS, 316SS, 90/10 Cu Ni
Separators	Steel	Bronze, Brass, 304SS, 316SS, 90/10 Cu Ni
Tie Rods	Copper	304SS, 316SS



## **HYDRONIC SECTION**

### **ASME Expansion Compression Tank**



Red Oxide		Galvanized				Red		Red Oxide	Galv.				
Part Number		Part Number		Cap. Gal.	Working Pressure	A (inches)	B (inches)	C (inches)	D (inches)	E (inches)	F (inches)	Weight (lbs.)	Weight (lbs.)
15C	*	15CG	*	15	150	12	33	8	4	7	1	45	50
24C	*	24CG	*	24	150	12	501/2	8	4	7	1	63	70
30C	*	30CG	*	30	150	14	48	10	5	83/8	1	65	73
40C	*	40CG	*	40	150	14	63	10	5	83/8	1	83	93
60 C	*	60CG	*	60	150	16	72	12	6	91/4	1	113	127
80C	*	80CG	*	80	125	20	621/2	16	8	10	1	130	145
100C	*	100CG	*	100	125	20	78	16	8	10	1	162	181
120C	*	120CG	*	120	125	24	65	20	10	111/8	1	195	215
135C	*	135CG	*	135	125	24	72	20	10	111/8	1	215	235
175C	*	175CG	*	175	125	30	621/4	22	11	131/2	1 1/2	295	318
220C	*	220CG	*	220	125	30	77	22	11	131/2	1 1/2	355	383
240C	*	240CG	*	240	125	30	84	22	11	131/2	11/2	385	415
305C	*	305CG		305	125	30	1053/4	22	11	131/2	11/2	480	517
285C	*	285CG		285	125	36	711/4	28	14	143/4	11/2	485	515
400C	*	400CG		400	125	36	931/2	28	14	143/4	11/2	634	675
505C	*	505CG		505	125	36	1203/4	28	14	143/4	11/2	789	840
525C	*	525CG		525	125	42	987/8	2 Sets	15" Ctr.	147/16	2	834	882
750C		750CG		750	125	42	1371/8	2 Sets	15" Ctr.	147/16	2	1133	1200
1000C		1000CG		1000	125	48	1311/2	2 Sets	18" Ctr.	153/4	2	1729	1814
1500C		1500CG		1500	125	48	2001/2	2 Sets	18" Ctr.	153/4	2	2319	2421
2000C		2000CG		2000	125	48	2691/2	2 Sets	18" Ctr.	153/4	2	2914	3025

<sup>\*</sup> Sizes normally in stock for prompt shipment.

Telltale holes are furnished in lieu of inspection opening on all sizes through 15 to 135 gallon. Two 2" plugged inspection openings are provided on sizes 175 through 505 gallon. 525 gallon and larger are equipped with an 11 x 15" manhole.

Additional plugged openings may be located on galvanized tanks as required by galvanizing.

Consult the factory for prices on painted expansion tanks 42 x 137% (750 gal.) and larger and galvanized expansion tanks 30 x 105% (305 gal.) and larger.



## **HYDRONIC SECTION**

### **Suction Diffusers**



### **Design Features**

- Designed for direct mounting to the suction side of a pump in either horizontal or vertical position.
- · Integral straightening vanes reduce flow turbulence.
- Iron strainers are complete with FF flanges in accordance with ASME B16.1.
- · Available with equal or reduced outlet flanges.
- · All sizes come complete with O-Ring sealed knob covers.
- Cast on supporting pads for convenient mounting of a standard I.D. support foot.
- All strainers furnished with a removable type 304SS 20 mesh start-up screen.
- · Drain connection furnished with plug as standard.
- · Differential connections are optional.

Parts List and Standard Materials								
Part	Cast Iron							
Body	A126-B							
Cover	A126-B							
Studs (2)	A307-B							
Knobs (2)	A395 Ductile Iron							
Screen (1)	Type 304 SS							
Gasket (1) (3)	Buna-N O-Ring							
Plug (2)	A126-B							

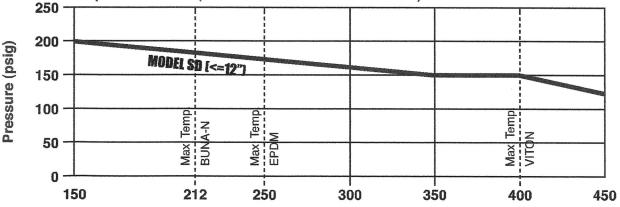
(1) Recommended S	naree

(2) Materials of equivalent strength may be substituted at manufacturer's option.

(3) Other gasket materials are available.

Upper Pressure Limits (Non-Shock)								
MEPCO Model	Bo Mate	M.A.W.P. psig (Bars)						
SD	A12	6-B	200 (13.79)					
Upper Temperature Limits								
Seal Material		Upper Limit °F (°C)						
Buna-N		212 (100)						
EPDM		250 (121)						
Viton		400 (204)						
Lower Tempe	Lower Temperature Limits							
Body Material		Lower Limit °F (°C)						
A126-B		-20 (-28.9)						

### Pressure Temperature Chart (in accordance with ASME B16.1)



Notes:

Temperature (°F)

(1) Max rating temperature limited by codes such as ASME B31.1, ASME B31.5, etc.



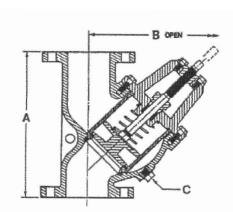
## **HYDRONIC SECTION**

**Pump Discharge Valve, PDV** 

### Capabilities

- Flow Regulator Valve
- Back Flow Preventor
- Positive Shutoff Valve





PART I	NUME	BER	PDV-002	PDV-025	PDV-003	PDV-004	PDV-005	PDV-006	PDV-008	PDV-010	PDV-012	PDV-014
SIZE in		2	2-1/2	3	4	5	6	8	10	12	14	
ے ہاں مار		ım	50	60	80	100	125	150	200	250	300	350
Α		in	8-3/8	10-1/4	11-1/4	15-5/8	16-5/8	19-5/8	25-5/8	28	31-5/8	
Α		mm	238	260	286	397	422	499	651	711	803	
В		in	9-5/8	9-5/8	10-1/8	12-5/8	12-5/8	17-1/2	18	21-3/4	24-1/2	24-1/2
D		mm	244	244	257	321	321	445	457	552	616	622
<b>C</b> N	IDT	in	1/2	1/2	1/2	1/2	1/2	3/4	3/4	1	1	1
CN	IPT	mm	15	15	15	15	15	20	20	25	25	25
WE	EIGI	47						a de la composición del composición de la compos				4.14
		lb	39	47	64	120	173	230	410	550	730	
		kg	17	21	29	54.5	78	104	186	250	331	

MATERIAL OF CONSTRUCTION Body and Yoke

Cast Iron ASTM AI 26-B Ductile Iron ASTM A536

Disc

Stem

Bronze ASTM B21

Seat Guide Bronze

Flanged Gland Cast Iron ASTM AI 26-B

Packing Non Asbestos
Spring 302 Stainless Steel
Stem Guide Ductile Iron ASTM A536

O-Rings EPDM

Other materials available on application.

Workin	g Pressures - Non-Shock
	WOG
2" to 12"	200 PSI @ 150°F (14 bar @ 66°C) 165 PSI @ 300°F
14"	150 PSI @ 150°F (10 bar @ 66°C) 110 PSI @ 300°F



### **HYDRONICS SECTION**

### **ASME Tangential Air Separator (with strainer)**

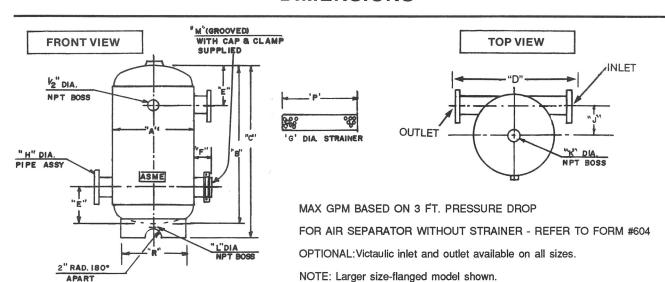
#### **Features**

- 125 PSIG design pressure
- 500° F maximum operating temperature
- Carbon Steel Construction-Painted red oxide
- Tangential design results in smaller unit requirement than straight flow separator
- Provides air free fluid flow which protects against damage and system noise
- compression tanks
- Stainless steel strainer
- Victaulic access to strainer for quick cleaning
- 2" and 21/2" Pipe sizes are NPT
- 3" and larger Pipe sizes are flanged
- 2" and 21/2" strainer access is Pipe Cap



**ASME TANGENTIAL AIR SEPARATOR** (with STRAINER)

### DIMENSIONS



MODEL NO.	A	В	С	D	E	F	G Strainer	Н	J	K	L	M DIA. PIPE	Р	R	WGT.	MAX GPM
2S-W/S	12	191/2	221/2	165/8	51/2	21/8	2	2	45/16	11/4	1	2	161/2	91/2	49	80
2.5S-W/S	12	191/2	221/2	165/8	51/2	23/8	21/2	21/2	41/16	11/4	1	21/2	161/2	91/2	64	130
3S-W/S	12	191/2	221/2	193/4	53/4	21/2	3	3	33/4	11/4	1	3	171/8	91/2	69	190
4S-W/S	14	29	32	213/4	91/8	21/2	4	4	41/4	11/2	2	4	191/2	111/2	111	330
5S-W/S	14	29	32	213/4	91/8	21/2	5	5	33/4	11/2	2	5	193/4	111/2	138	550
6S-W/S	20	41	44	28	131/4	21/2	6	6	61/4	2	2	6	25	18	236	900
8S-W/S	20	41	44	28	131/4	3	8	8	53/16	2	2	8	29	18	359	1500
10S-W/S	30	58	601/2	41	19	31/2	10	10	91/8	2	2	10	251/2	24	663	2600
12S-W/S	30	58	601/2	41	19	31/2	12	12	81/8	2	2	12.	261/2	24	747	3400
14S-W/S	36	751/2	78	463/8	22	31/2	14	14	103/16	2	2	14	421/4	30	1493	4700

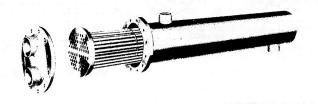


### **HYDRONIC SPECIALTIES SECTION**

**Converters - Type S (Steam to Liquid)** 

### **APPLICATION**

The MEPCO Type "S" steam converters are used primarily for heating radiation water with steam. Definite advantages are to be found in many types of application. Examples would be large installations when zoning is desirable and steam as the source of heat for the zone may simplify the piping design and reduce the design work required for exclusive use of water.



### **FEATURES**

**U-tube design** allows free expansion and contraction of the tubes under changing operating conditions. The tube bundle can be completely removed from the shell for inspection.

**CODE CONSTRUCTION -** All MEPCO heat exchangers are designed and fabricated in accordance with ASME Section VIII.

- High degree of flexibility in materials to meet varying conditions.
- Available in 2, 4, or 6 pass construction.
- All fabrication done in-house.

#### PRESSURE RATINGS -

 STANDARD
 OPTIONAL

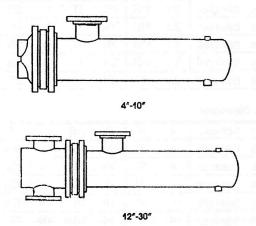
 Tubes
 150 psig
 400 psig

 Shell
 150 psig
 250 psig

 Test Pressure -- 300 psig
 300 psig

Max. Temperature - 375 degrees F

They are commonly applied for providing heating water for office space in industrial buildings; either in adding this space or at time of initial construction.



### **MATERIALS OF CONSTRUCTION**

STANDARD	OPTIONA	11

Shell Steel 304SS, 316SS

Head (4-10") Cast Iron Fabricated Steel, Cast Bronze, Fabricated 304SS/316SS

Head (12-30") Fabricated Steel Cast Bronze, Fabricated 304SS/316SS

Tubes 3/4x20 BWG Copper 3/4 x 18 BWG Copper, Steel, 304SS/316SS, 90/10 Cu Ni, Admiralty

Tube Sheet Steel Bronze, Brass 304SS, 316SS, 90/10 Cu Ni

Separators Steel Bronze, Brass, 304SS, 316SS, 90/10 Cu Ni

Tie Rods Copper 304SS, 316SS

Nuts and Bolts Steel ---

\*125 PSI construction only.