



**BASCO®  
TYPE T and TC  
MOISTURE  
SEPARATORS  
and TRAP**

**API Heat Transfer**

*...world leaders in heat transfer technology*



## Quality, Value and Performance... An API Heat Transfer Tradition

*For over 60 years, original equipment manufacturers and aftermarket professionals have looked to API Heat Transfer for a wide variety of heat transfer products.*

*The Basco Type T and TC Moisture Separators provide long-term reliability and value.*

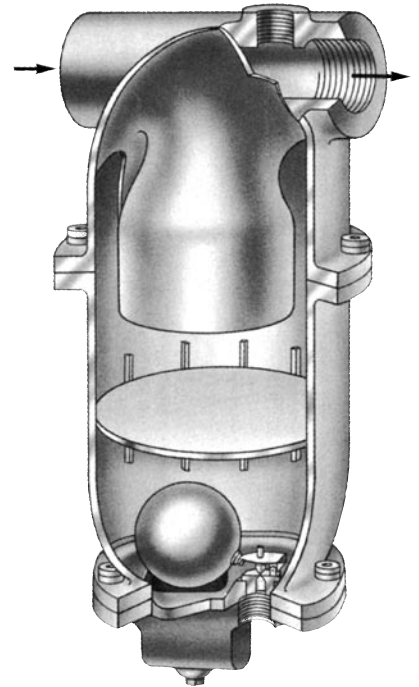


### **The Basic Operation of Type T and TC Separators**

Basco Type T and TC Separators are designed to remove entrained moisture and solids from compressed air or gas streams. When properly installed and drained, we guarantee the removal of 99% of moisture and particles over 10 microns.

The design of the Basco Moisture Separators utilize the principal of centrifugal force to separate entrained moisture and drain it to the bottom reservoir. The removal is accomplished by causing the stream to enter a controlled centrifugal flow forcing entrained liquid and solids to the outer wall.

The Basco trap assembly, whether integral to the separator or purchased as a separate item, includes a corrosion-free, non-magnetic float mechanism. Loss of air is prevented by a positive O-ring seal. All traps are equipped with a deep well to allow for an immersion heater to prevent freeze damage to the trap.



### **Common Features and Differences**

- The Type T Separator is designed without an internal trap. A remote trap assembly may be installed downstream. This is useful where space restrictions force the use of a shorter separator.
- The Type TC Separator has an internal corrosion-free trap assembly.
- Both Type T and Type TC separators and trap can be supported by its piping.
- Type T and TC separators can be furnished with ASME Code (UM) as an option. All models conform to ASTM A 278 Class 35 cast iron specifications.
- Compact design of trap assembly permits convenient removal of the housing for inspection or maintenance.
- Type TC Separators and traps can be furnished with an optional heating element to prevent freezing.
- All separator and trap models are stocked and ready to ship.

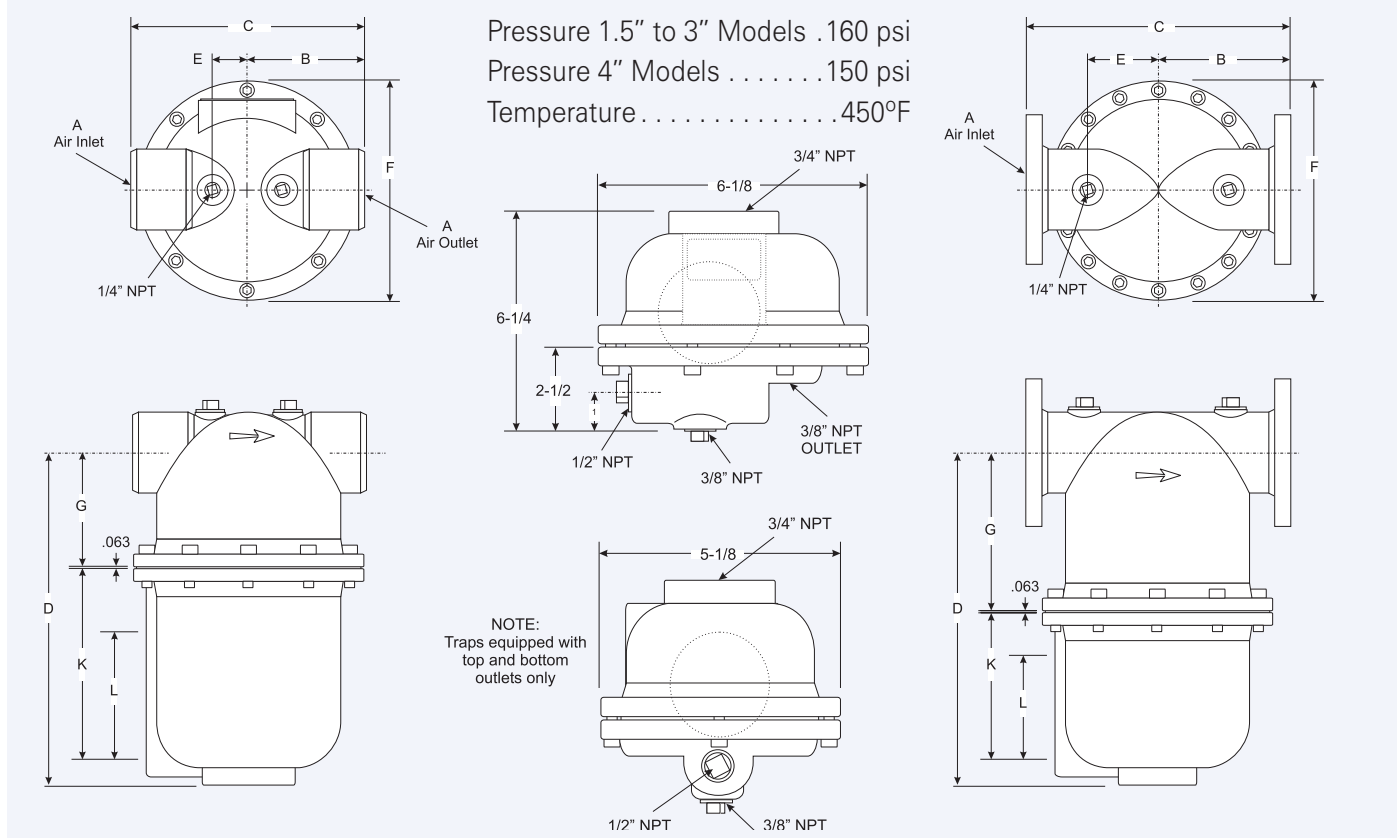
### **We Understand Heat Transfer**

API Heat Transfer manufactures the most extensive selection of heat exchangers in the industry including shell and tube, plate, and brazed aluminum designs. Extensive applications know-how and a wide variety of industrial products allows API Heat Transfer to select the right heat exchanger for your application, and provide innovative alternative designs for your consideration.

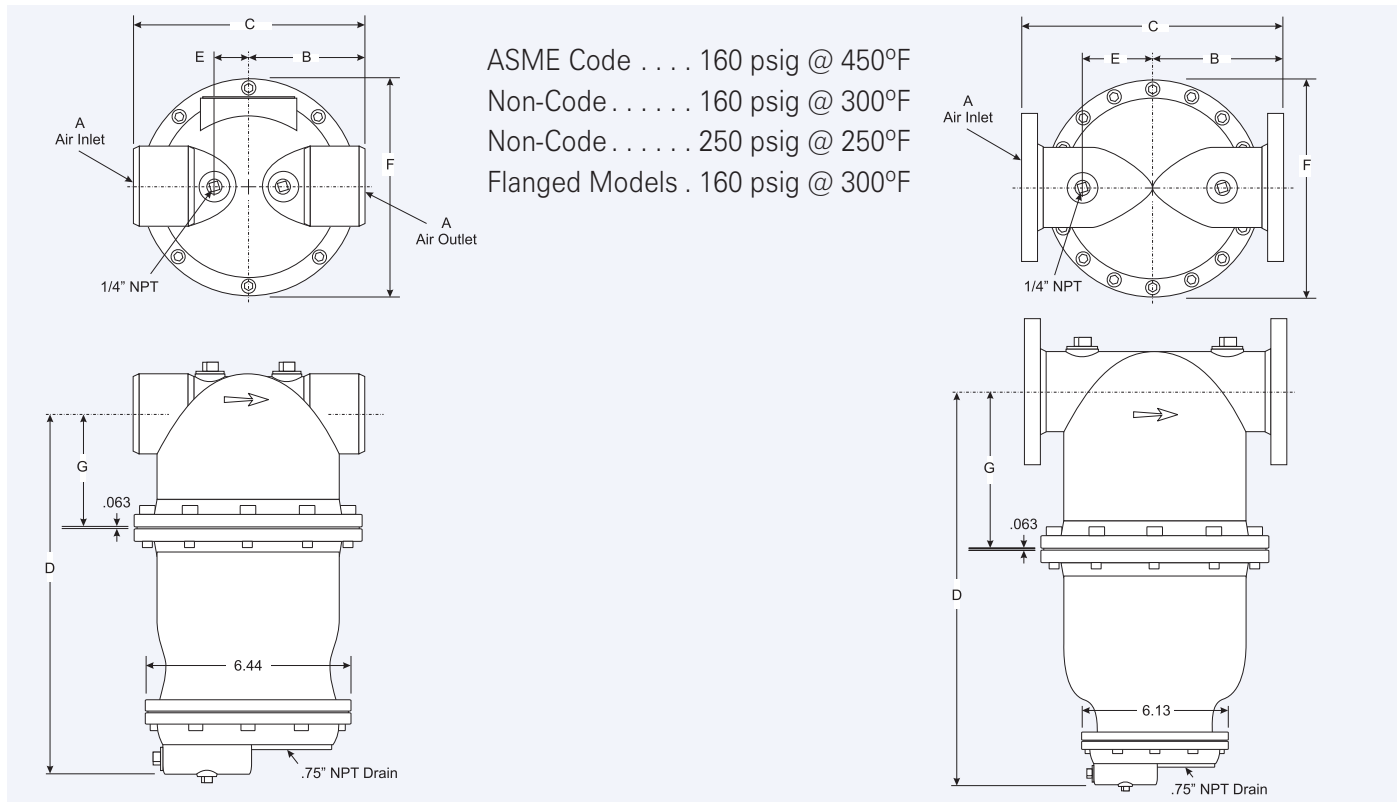
Product diversity. Applications know-how. Manufacturing expertise. Renowned customer service. These ingredients set us apart and assure our customers of ultimate value.

# Type T and TC Separator Dimensions

## Type T Moisture Separator



## Type TC Moisture Separator



# Type T and TC Separator Specifications

## Type T and TC Separator Performance

OPERATING PRESSURE psia*	CAPACITY in SCFM of AIR ( at 14.7 psia & 60°F)*									PRESSURE DROP psi
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	
10	22	22	35	55	80	145	220	330	580	0.63
20	32	32	52	84	120	220	330	490	880	0.75
30	43	43	69	107	153	280	425	630	1100	0.83
40	51	51	82	128	182	330	500	750	1310	0.88
50	58	58	93	145	210	375	580	850	1510	0.93
75	74	74	120	185	253	475	720	1080	1950	1.04
100	86	86	140	220	315	565	865	1300	2300	1.14
125	99	99	160	250	360	645	1000	1500	2600	1.21
150	111	111	180	280	400	715	1100	1650	2900	1.26
200	130	130	210	330	475	850	1300	1950	3450	1.55
250	148	148	240	375	540	980	1500	2200	4000	1.75

\* Add 14.7 to psig

## Discharge Capacity for TC Trap Assembly

TC Trap Inlet	Orifice Diameter	Differential Pressure (psi) / Discharge Capacity (Lbs. per Hour @ 70°F)					
		5 psi	10 psi	25 psi	50 psi	75 psi	100 psi
3/4"	3/32"	88#/Hr	133#/Hr	239#/Hr	385#/Hr	491#/Hr	563#/Hr

Provisions for immersion heater at bottom of trap. Accommodates 5/8" x 2" heater element at 50 watts / 120 VAC. 12" leads S/S NPT, NEMA 1 Box

## Type T and TC Moisture Separator Dimensions

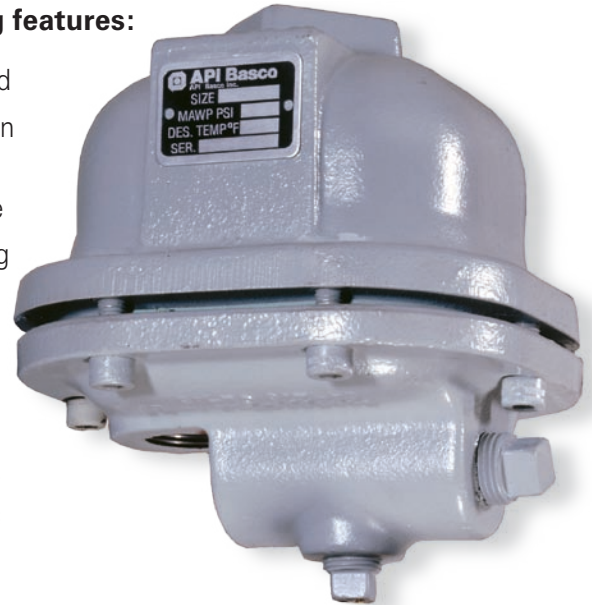
SIZE	TYPE	DIA	A AirConn.	B	C	D	E	F	G	K	L	Drain NPT	Wgt Lbs.
1/2"	TC	4-1/8"	1/2" NPT	2-3/4"	5-1/2"	11-7/8"	1"	5-1/2"	3-3/8"	-	-	3/4"	22
3/4"	TC	4-1/8"	3/4" NPT	2-3/4"	5-1/2"	11-7/8"	1"	5-1/2"	3-3/8"	-	-	3/4"	22
1"	TC	5-1/2"	1" NPT	3"	6"	13-5/8"	1-1/4"	6-1/2"	3-7/8"	-	-	3/4"	27
1-1/4"	TC	5-1/4"	1-1/4" NPT	3"	6"	13-5/8"	1-1/4"	6-1/2"	3-7/8"	-	-	3/4"	27
1-1/2"	TC	5-1/2"	1-1/2" NPT	3-3/4"	7-1/2"	13-5/8"	1-5/8"	7-1/2"	3-7/8"	-	-	3/4"	34
2"	TC	6-5/8"	2" NPT	4-1/16"	8-1/8"	15-3/8"	1-1/2"	8-1/8"	4-3/4"	-	-	3/4"	44
2-1/2"	TC	7-3/4"	2-1/2" NPT	4-11/16"	9-3/8"	19-3/8"	2-1/8"	9-1/2"	6-1/2"	-	-	3/4"	68
3"	TC	9-1/8"	3" NPT	5-1/2"	11"	20-7/8"	2-7/8"	11"	7-3/4"	-	-	3/4"	97
3"	TC	9-1/8"	3" FLG	7-1/8"	14-1/4"	20-3/8"	2-1/2"	11"	7-1/4"	-	-		110
4"	TC	11-1/4"	4" FLG	7-15/16"	15-7/8"	23-1/2"	4-5/8"	13-1/4"	9-1/2"	-	-	2"	150
1-1/2"	T	5-1/4"	1-1/2" NPT	3-3/4"	7-1/2"	11-5/8"	1-5/8"	7-1/2"	3-7/8"	6-3/16"	4-3/4"	1-1/2"	29
2"	T	6-5/8"	2" NPT	4-1/16"	8-1/8"	13"	1-1/2"	8-1/8"	4-3/4"	6-3/16"	4-3/4"	1-1/2"	40
2-1/2"	T	7-3/4"	2-1/2" NPT	4-11/16"	9-3/8"	15"	2-1/8"	9-1/2"	6-1/2"	6-7/16"	4-3/4"	1-1/2"	57
3"	T	9-1/8"	3" NPT	5-1/2"	11"	16-1/4"	2-7/8"	11"	7-3/4"	6-7/16"	4-3/4"	2"	90
4"	T	11-1/4"	4" FLG	7-15/16"	15-7/8"	19-1/2"	4-5/8"	13-1/4"	9-1/2"	7-9/16"	5-3/4"	2"	138

# Manufacturing Expertise

## Rugged Construction and Corrosion-Resistant Trap Assembly

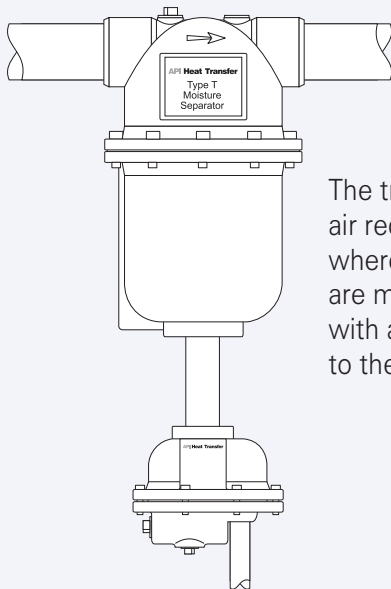
Basco Moisture Separators and Traps include the following features:

- Large Corrosion-Free Float Ball
- Corrosion-Free Mechanism
- Non-Magnetic Valve and Seat
- Heavy Cast Iron Construction
- Accessible for Cleaning
- Ports and Plugs Provided
- Accommodates Immersion Heater
- 250 psi Design Pressure
- Includes Blowdown Plug

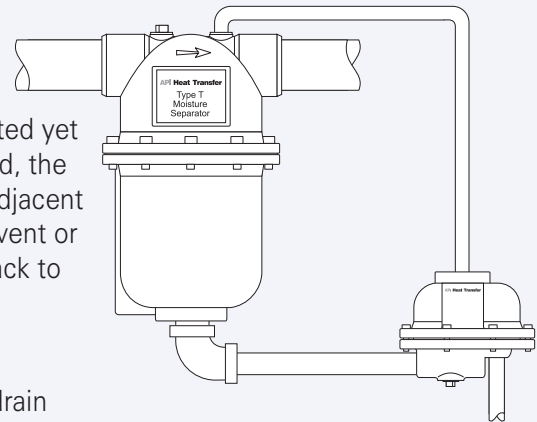


## Common Mounting for Type T Moisture Separators and Traps

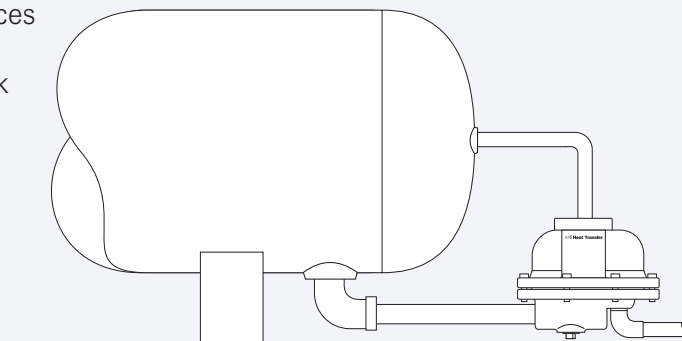
Traps for Type T Models are mounted remotely from the separator. Here the trap is installed directly below the separator and to drain. Traps for Type TC Models are integral to the separator.



If clearances are restricted yet a vertical drain is desired, the trap may be mounted adjacent to the separator with a vent or support line installed back to the separator.



The trap assembly can be installed to drain air receiver tanks. This installation is required where floor clearances are minimal. Shown with a vent line back to the receiver tank.



# API Heat Transfer

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www.apiheattransfer.com

## Divisions:

### API Airtech ISO-9001 Certified

*Air Cooled Aluminum Heat Exchangers*

91 North Street • P.O. Box 68

Arcade, New York 14009-0068

(585) 496-5755 • Fax: (585) 496-5776

### API Basco ISO-9001 Certified

*Basco®/Whitlock® Shell & Tube Heat Exchangers*

2777 Walden Avenue

Buffalo, New York 14225

(716) 684-6700 • Fax: (716) 684-2129

### API Schmidt-Bretten Americas

*Plate Heat Exchangers and Thermal Systems*

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### API Schmidt-Bretten GmbH & Co. KG

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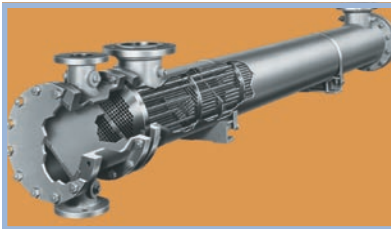
**Contact your local API Sales Representative  
or API Heat Transfer directly**

**toll-free: 1-877-API-HEAT**

**e-mail: sales@apiheattransfer.com**

## Other Products Available from API Heat Transfer

### OptiDesign®



Straight-tube, removable bundle exchangers made from standard components. Floating tube sheet for seal leak detection and easy maintenance. Diameters from 3" (7.62 cm) to 42" (106.68 cm). ASME, API, TEMA, ABS and other codes available.

### TEMA Shell and Tube



A wide variety of TEMA types are available using pre-engineered or custom designs in various sizes and materials. Shell diameters from 6" (15.24 cm) to 60" (152.4 cm), ASME, TEMA, API, ABS, TUV, PED and other code constructions available.

### Extended Surface "ES" Exchangers



Unique, patented plate-fin design for centrifugal or axial compressor intercooler and aftercooler applications and minimal pressure loss. Design eliminates separators. ASME code design is standard. Diameters from 20" (50.8 cm) to 120" (304.8 cm).

### Gasketed Plate Heat Exchangers



The Schmidt line of gasketed plate & frame heat exchangers provide excellent heat transfer in a compact space. Plates are pressed from stainless steel, titanium and other alloys. Gaskets of nitrile, EPDM, Viton®, compressed fiber and Teflon® are used. Capacities range from 0.5 to 10,000 GPM.

### Type 500 Shell and Tube Heat Exchangers



General purpose exchangers designed to cool oil, compressed air and other industrial fluids. A variety of constructions, port configurations and materials are available. ASME and TEMA-C available. Diameters from 3" (7.62 cm) to 12" (30.48 cm).

### Brazed Plate Heat Exchangers



Off-the-shelf, standard units reflect the latest in plate heat exchanger technology for maximum performance and low cost. Ideal for OEM or aftermarket applications. Many models stocked and ready to ship. Models for process or refrigeration applications.

### Air-Cooled Heat Exchangers



High efficiency, brazed aluminum coolers for cooling a wide variety of liquids and gases with ambient air. Lightweight, yet rugged. Capable of cooling multiple fluids in single unit. Models can be supplied with cooling fan and a variety of drives.

### Pipeline Aftercoolers



Straight tube, counterflow aftercoolers designed to yield cool, dry compressed air. Available with or without accompanying moisture separators and constructed to a wide variety of design codes. Diameters from 6" (15.24 cm) to 42" (106.68 cm).