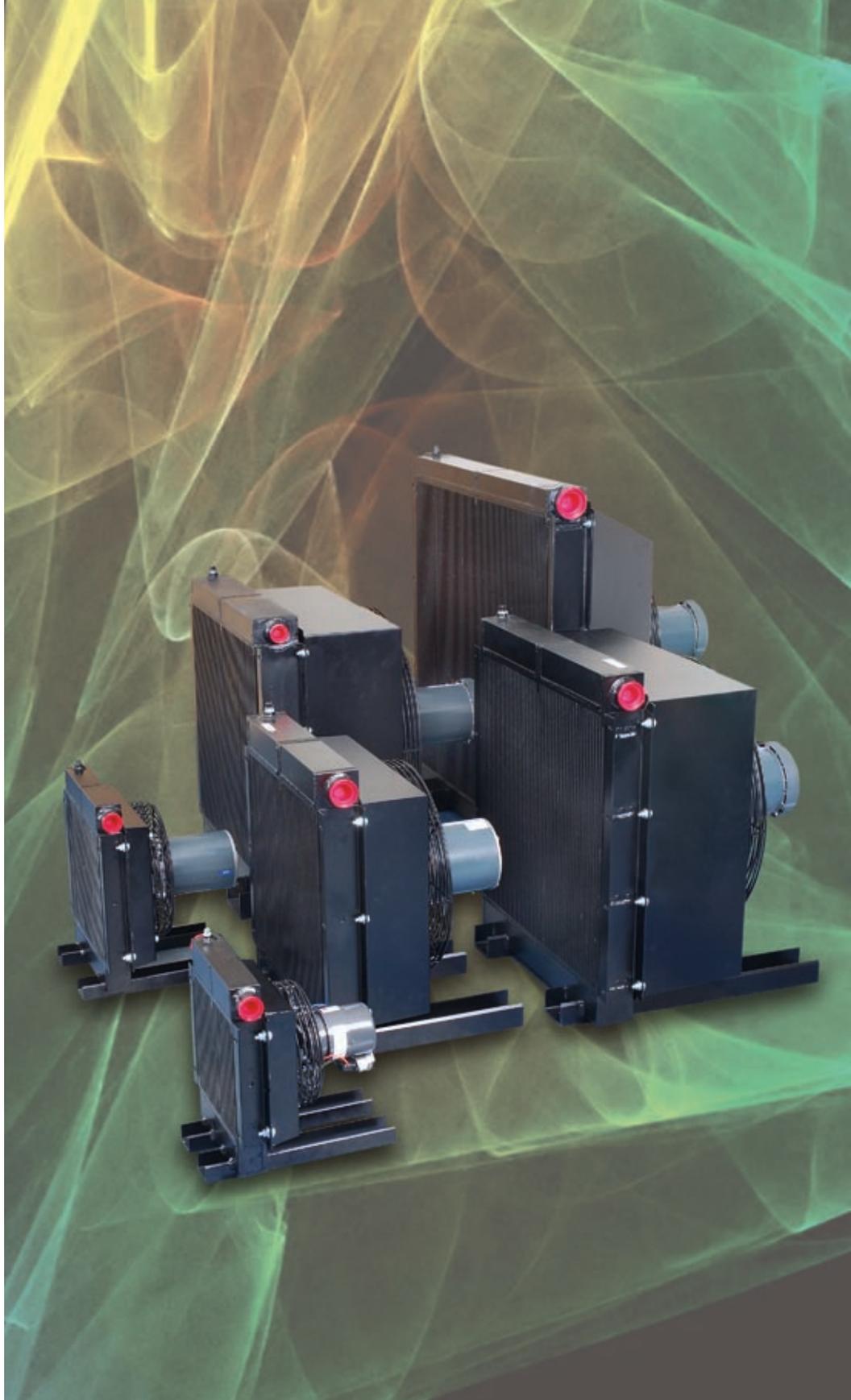


AIRTECH



**AIRTECH
FAN COOLED
OIL COOLERS
AFTERCOOLERS
60 HZ AC/12VDC**

API Heat Transfer

...world leaders in heat transfer technology



**Pre-engineered
...for Fast Delivery**

**High Quality
...for Dependable
Service**

**Full Range
...for any Capacity**

*Free-standing Airtech
Fan Cooled Units are
an excellent choice for
remote oil cooling and
aftercooling applications.*

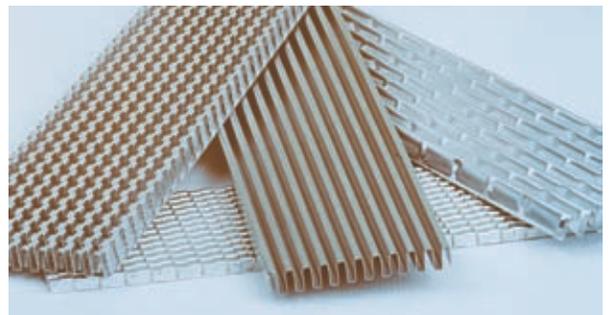
Full-Service Capabilities

API Heat Transfer is a global supplier of both standard and custom heat exchangers designed and manufactured to serve a wide variety of industrial end markets including Compressor, Off-Highway Vehicles, On-Highway Buses & RV's, Power Generation, Chemical & Process, Air Separation, Refrigerant Air Dryers, and Food & Beverage among others. We service our customers from our manufacturing facilities in the US, Europe and China, as well as sales offices located around the world.



Fan Cooled Heat Exchangers

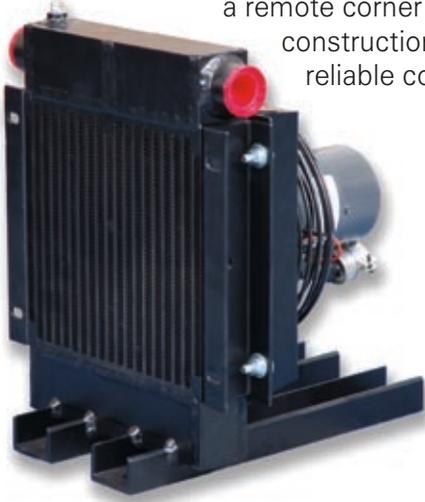
Our line of Airtech Fan Cooled Heat Exchangers provides a standardized, reliable, and self-contained solution for cooling requirements in both the Industrial and Mobile Markets. These compact, high-efficiency Oil Coolers and Aftercoolers can be the perfect answer for applications where cooling requirements are remotely located, cooling water is unavailable or impractical, or where coolants may be subject to freezing. These pre-engineered packages include an all-aluminum vacuum brazed bar & plate heat transfer core that provides superior durability in a cost-effective, compact, light-weight construction. Our vacuum brazing process allows the use of higher strength materials that result in a ruggedly bonded unitary core, assuring trouble-free operation even under the most challenging operating conditions.



API Heat Transfer uses state-of-the-art computer modeling to develop high-efficiency process and ambient fin geometries that optimize turbulence to maximize heat transfer while minimizing pressure drop and power costs.

Oil Coolers

Our family of pre-engineered, standard Airtech Fan Cooled Oil Coolers offers dependable, proven performance for virtually any oil cooling application. Whether located right next to the machinery, in a remote corner of the plant, or on the back of a construction vehicle, these oil coolers provide reliable cooling in the harshest environments.



Aftercoolers

The Airtech Aftercoolers are designed for virtually any compressor application to lower the air temperature and significantly reduce the moisture present in the compressed air. These fan cooled aftercoolers provide dependable, low cost air cooling by eliminating costly water and sewage charges.

Standard Features

- Design operating pressure is 400 psig at 250°F
- All weather construction
- High efficiency fins
- Aerodynamically designed sparkless fans
- Direct drive, UL approved motors
- Fan guard and shroud protect vulnerable parts of unit as well as operating personnel
- Precision fit of fan and shroud effectively channels the air flow for maximum cooling efficiency
- Most sizes available from stock or with a short lead time



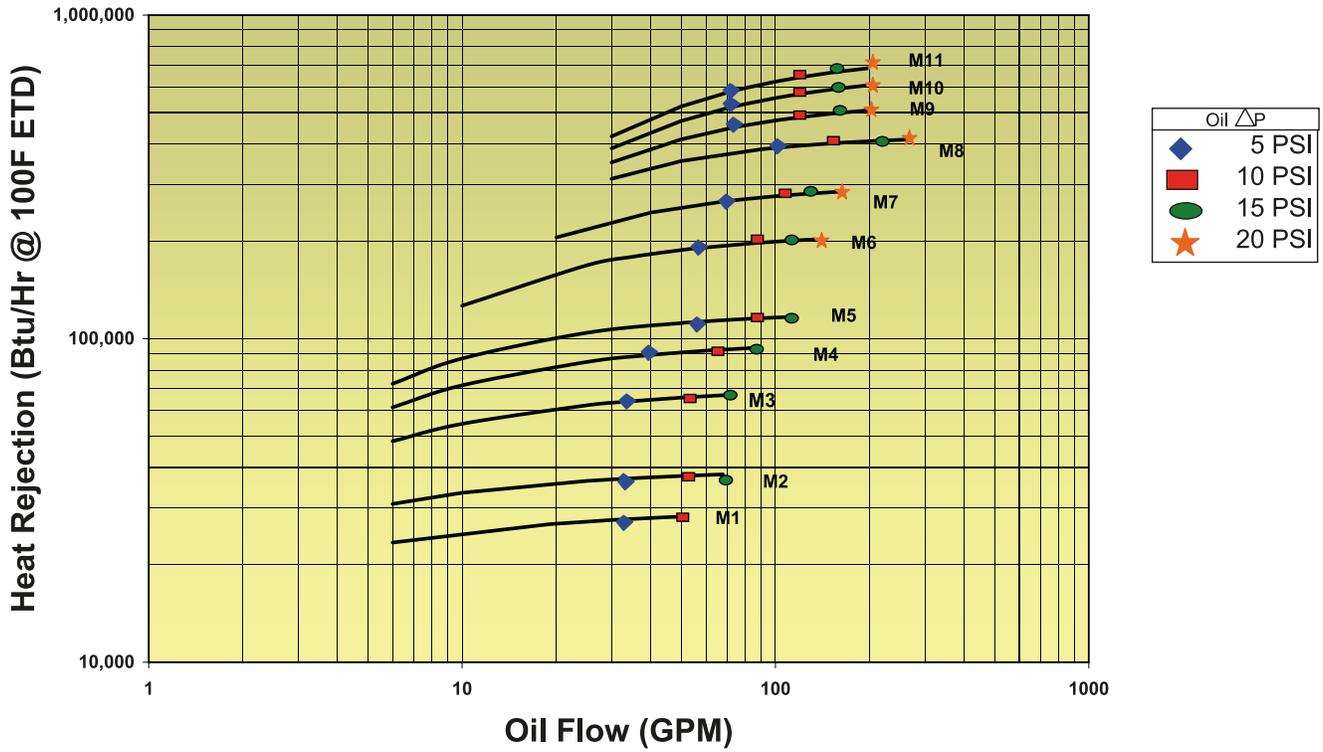
Typical Applications Include

- Construction Equipment
- Off-Highway Vehicles
- On-Highway Vehicles
- Hydraulic Circuits
- Hydraulic Motors
- Hydraulic Presses
- Compressor Aftercooling
- Machine Tools
- Gear Reduction

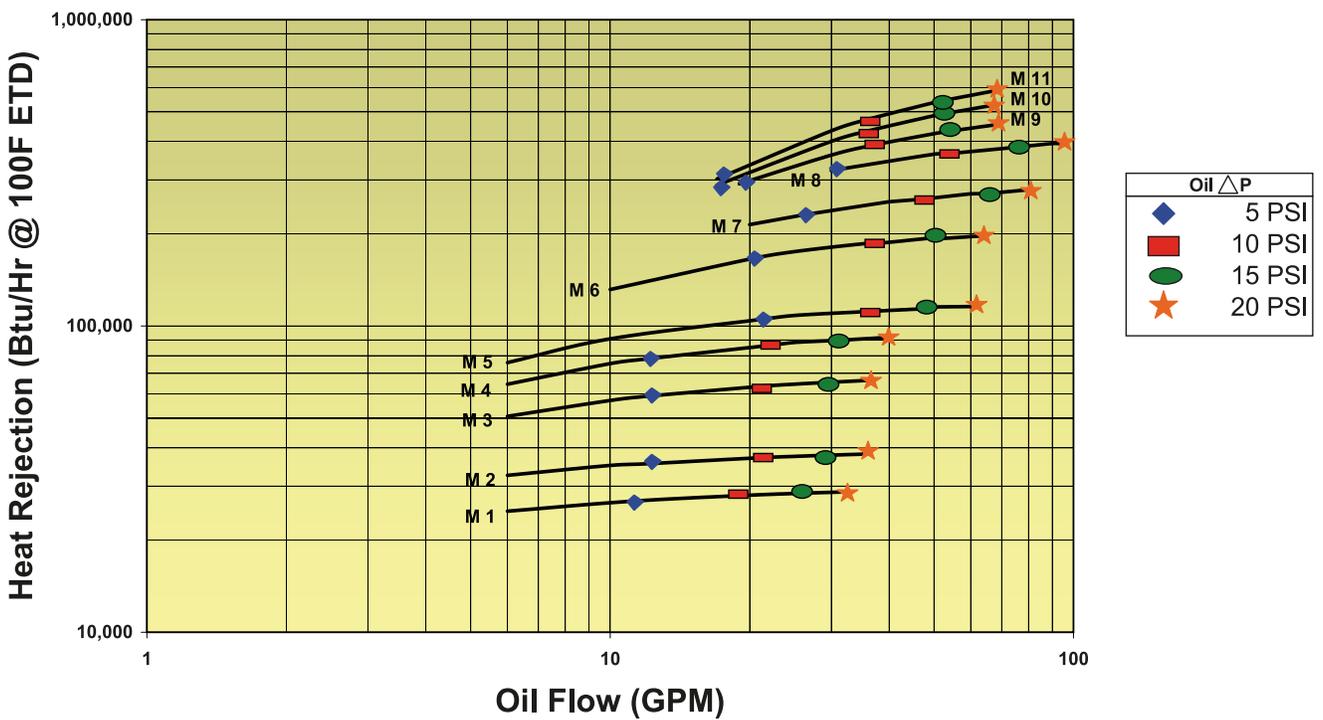


Oil Cooler Capacities

Single-Pass Flow



Two-Pass Flow



Aftercooler Capacities and Data

Aftercooler Flow Capacities

Inlet Temp Deg. F°	Approach Temp Deg. F°	Flow Capacity (SCFM) 80 to 125 PSIG										
		Aftercooler Model Numbers										
		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
150	5	52	82	139	223	305	566	820	1340	1452	1722	2079
	10	78	120	201	318	430	790	1140	1825	2000	2390	2853
	15	106	158	267	418	560	1025	1475	2320	2553	3064	3634
	20	139	204	345	535	712	1293	1860	2885	3178	3827	4513
200	5	45	72	121	195	270	505	725	1205	1305	1545	1872
	10	63	98	166	264	361	670	965	1560	1713	2040	2450
	15	81	123	209	329	447	822	1185	1895	2088	2494	2977
	20	100	150	253	398	535	982	1412	2235	2470	2960	3516
250	5	40	65	110	179	249	465	671	1125	1212	1432	1742
	10	55	87	147	236	324	602	870	1420	1552	1843	2222
	15	69	107	180	286	391	722	1040	1680	1848	2202	2640
	20	83	126	213	337	457	841	1210	1935	2137	2552	3047
300	5	38	61	103	168	233	440	635	1070	1145	1352	1643
	10	51	80	135	217	300	560	807	1330	1443	1711	2069
	15	62	97	163	260	356	660	951	1550	1695	2015	2424
	20	73	113	170	301	410	758	1092	1760	1933	2303	2759
350	5	36	58	98	160	223	422	608	1025	1095	1290	1575
	10	47	75	127	204	283	528	763	1260	1363	1614	1956
	15	57	90	151	242	332	617	890	1455	1586	1882	2270
	20	67	103	174	277	379	700	1010	1637	1791	2131	2560
400	5	34	56	94	154	215	406	586	990	1053	1240	1518
	10	45	71	121	194	269	505	728	1210	1301	1538	1867
	15	54	84	142	228	315	586	845	1387	1502	1781	2152
	20	62	96	163	259	356	660	952	1550	1685	2003	2410

NOTES:

- 1) Above capacities are based on air at 68°F, 14.7 PSIA and 36% RH at compressor suction.
- 2) Compressed air pressure drop will be less than 2 PSI at rated capacity.

Aftercooler Selection Procedure

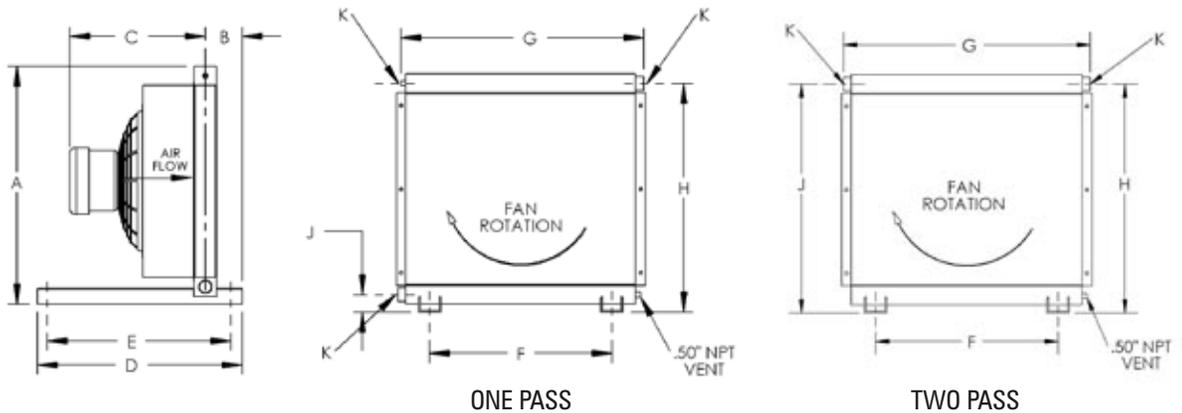
- 1) Enter chart on left side at appropriate Air Inlet Temperature and desired approach temperature.
- 2) Read across to an equal or higher rating in CFM, and up to determine proper Model Number.
- 3) Consult factory for larger capacities.

Aftercooler Standard Unit Data

Model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Weight - AC Motor	73#	79#	83#	96#	111 #	165#	199#	244#	270#	330#	390#
Core Height	10.4"	13.7"	16.4"	19.6"	19.6"	25.5"	25.5"	36.4"	37.8"	37.8"	44.2"
Core Width	10"	13"	16"	19"	19"	25"	25"	36"	37.5"	37.5"	43.75"
Core Depth	2.25"	2.25"	2.25"	2.25"	3.5"	3.5"	4.5"	4.5"	3.50"	3.50"	3.50"
Conn Size - NPT	1.25"	1.25"	1.25"	1.50"	1.50"	1.50"	1.50"	2.50"	4" FLG	4"FLG	4" FLG
Nom Fan Dia	8"	12"	14"	18"	18"	24"	24"	24"	30"	30"	36"
Motor HP	1/4	1/4	1/4	1/4	1/3	1/2	2	2	1	3	3
Motor RPM	3000	1750	1750	1750	1750	1140	1750	1750	1200	1200	1200
Voltage Phase/Cycle	115/230 1/60	115/230 1/60	115/230 1/60	115/230 1/60	115/230 1/60	115/230 1/60	230/460 3/60	230/460 3/60	230/460 3/60	230/460 3/60	230/460 3/60

Dimensional Data – Models 1 through 8

Vertical Oil Cooler
or Aftercooler with
Horizontal Flow -
Models 1 through 8



Oil Cooler – One and Two Pass

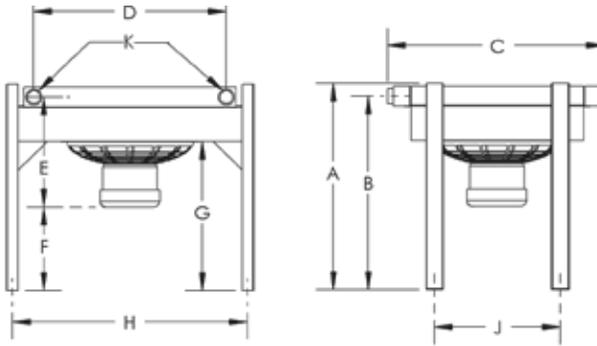
Model Number	A	B	C		D	E	F	G	H	J		K
			AC	DC						1 Pass	2 Pass	
Model 1	16.32"	3.13"	11.37"	6.10"	15.00"	12.00"	5.15"	12.60"	14.72"	2.12"	14.72"	1 5/16-12
Model 2	19.33"	3.13"	13.75"	6.82"	15.00"	12.00"	8.40"	15.85"	17.72"	2.12"	17.72"	1 5/16-12
Model 3	22.33"	3.13"	15.75"	8.82"	15.00"	12.00"	11.10"	17.54"	20.73"	2.13"	20.73"	1 5/16-12
Model 4	25.59"	3.13"	17.25"	10.39"	21.00"	18.00"	12.09"	22.15"	24.00"	2.25"	24.00"	1 5/8-12
Model 5	26.59"	3.75"	17.87"	11.02"	24.00"	21.00"	12.09"	22.15"	24.50"	2.75"	24.50"	1 5/8-12
Model 6	32.54"	3.75"	24.25"	15.52"	24.00"	21.00"	15.98"	28.50"	30.06"	2.75"	30.50"	1 5/8-12
Model 7	32.09"	4.25"	26.75"	16.02"	28.00"	25.00"	15.54"	28.62"	30.06"	3.75"	30.06"	1 5/8-12
Model 8	43.09"	4.25"	26.75"	16.02"	28.00"	25.00"	22.36"	38.86"	40.94"	3.75"	40.94"	2 1/2-12

Aftercooler – One Pass

Model Number	A	B	C		D	E	F	G	H	J	K
			AC	DC							
Model 1	16.32"	3.13"	11.37"	NA	15.00"	12.00"	5.15"	12.60"	14.72"	2.12"	1.25"NPT
Model 2	19.33"	3.13"	13.75"	NA	15.00"	12.00"	8.40"	15.85"	17.72"	2.12"	1.25"NPT
Model 3	22.33"	3.13"	15.75"	NA	15.00"	12.00"	11.10"	17.54"	20.73"	2.13"	1.25"NPT
Model 4	25.59"	3.13"	17.25"	NA	21.00"	18.00"	12.09"	22.15"	24.00"	2.25"	1.50" NPT
Model 5	26.59"	3.75"	17.87"	NA	24.00"	21.00"	12.09"	22.15"	24.50"	2.75"	1.50" NPT
Model 6	32.54"	3.75"	24.25"	NA	24.00"	21.00"	15.98"	28.50"	30.50"	2.75"	1.50" NPT
Model 7	32.09"	4.25"	26.75"	NA	28.00"	25.00"	15.54"	28.62"	30.06"	3.75"	1.50" NPT
Model 8	43.09"	4.25"	26.75"	NA	28.00"	25.00"	22.36"	38.86"	40.94"	3.75"	2.50" NPT

Dimensional Data – Models 9 through 11

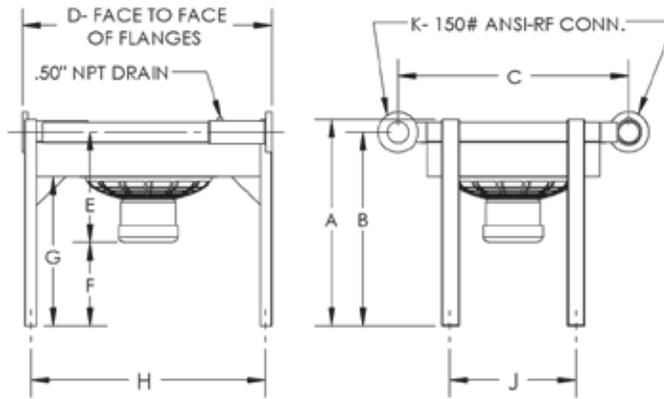
Horizontal Oil Cooler with Vertical Flow - Models 9 through 11



Oil Cooler – One & Two Pass

Model Number	A	B	C	D	E	F	G	H	J	K
Model 9	31.25"	27.50"	43.81"	34.54"	19.12"	8.38"	18.75"	42.62"	29.75"	2" NPT
Model 10	31.25"	27.50"	43.81"	34.54"	24.72"	2.78"	18.75"	42.62"	29.75"	2" NPT
Model 11	36.25"	32.50"	50.06"	40.92"	24.22"	8.28"	23.75"	49.00"	36.00"	2" NPT

Horizontal Aftercooler with Vertical Flow - Models 9 through 11



Oil Cooler – One Pass

Model Number	A	B	C	D	E	F	G	H	J	K
Model 9	31.25"	27.50"	46.50"	45.25"	19.12"	8.38"	18.75"	42.62"	29.75"	4" FLG
Model 10	31.25"	27.50"	46.50"	45.25"	24.72"	2.78"	18.75"	42.62"	29.75"	4" FLG
Model 11	36.25"	32.50"	52.00"	52.00"	24.22"	8.28"	23.75"	49.00"	36.00"	4" FLG

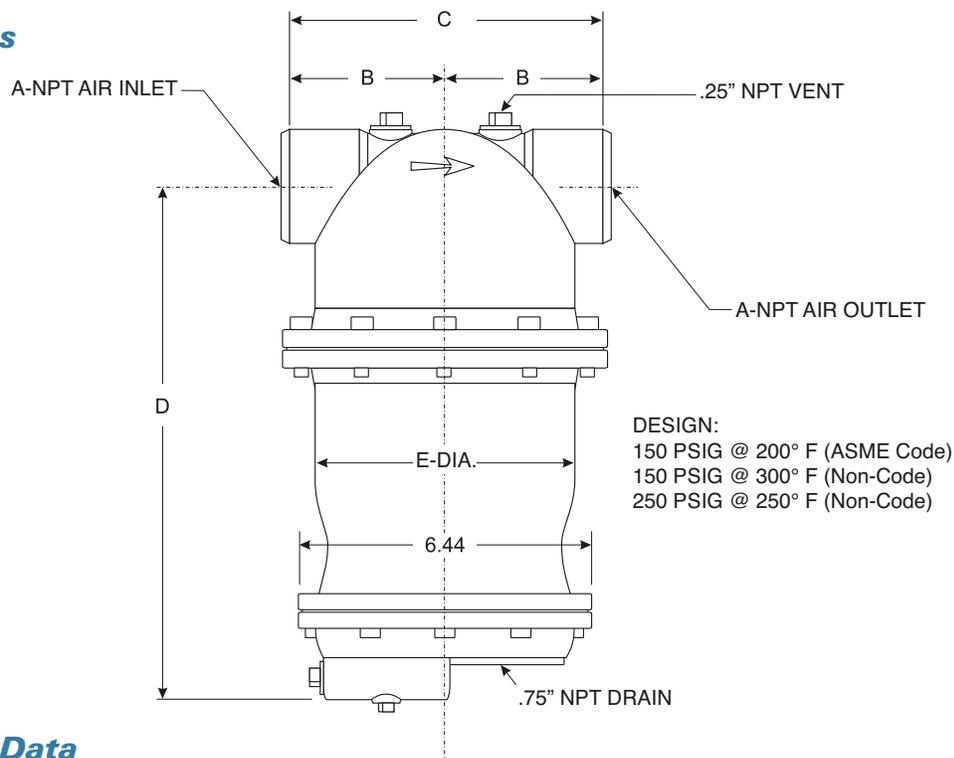
Standard Fan Cooled Nomenclature

Example

1	–	03	–	2	–	AC	–	PH
Product	Model Number	Passes	Motor	Push or Pull				
1 - Oil Cooler	01 - Model 1	07 - Model 7	1 - Single Pass	AC - Alternating Current	PH - Push Air			
2 - Aftercooler	02 - Model 2	08 - Model 8	2 - Two Pass	DC - Direct Current XX - Without Motor	PL - Pull Air			
	03 - Model 3	09 - Model 9						
	04 - Model 4	10 - Model 10						
	05 - Model 5	11 - Model 11						
	06 - Model 6							

Moisture Separators

Specifications



Dimensional Data

Size	Part Number	A	B	C	D	E	Weight
.50" x .50"	1590-05-005-000	.50"	2.75"	5.50"	11.88"	4.13"	22#
.75" x .75"	1590-08-008-000	.75"	2.75"	5.50"	11.88"	4.13"	22#
1.00" x 1.00"	1590-10-010-000	1.00"	3.00"	6.00"	13.63"	5.25"	27#
1.25" x 1.25"	1590-13-013-000	1.25"	3.00"	6.00"	13.63"	5.25"	27#
1.50" x 1.50"	1590-15-015-000	1.50"	3.75"	7.50"	13.63"	5.88"	34#
2.00" x 2.00"	1590-20-020-000	2.00"	4.06"	8.13"	15.38"	6.63"	44#
2.50" x 2.50"	1590-25-025-000	2.50"	4.68"	9.38"	19.38"	7.75"	68#
3.00" x 3.00"	1590-30-030-001	3.00"	5.50"	11.00"	20.88"	9.13"	97#

Separator Capacities

Operating Pressure PSIA*	Nominal Capacity in SCFM of Air							Pressure Drop PSI
	1/2" 3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	
10	22	35	55	80	145	220	330	0.63
20	32	52	84	120	220	330	490	0.75
30	43	69	107	153	280	425	630	0.83
40	51	82	128	182	330	500	750	0.88
50	58	93	145	210	375	580	850	0.93
75	74	120	185	253	475	720	1080	1.04
100	86	140	220	315	565	865	1300	1.14
125	99	160	250	360	645	1000	1500	1.21
150	111	180	280	400	715	1100	1650	1.26
200	130	210	330	475	850	1300	1950	1.55
250	148	240	375	540	980	1500	2200	1.75

*Add 14.7 to gauge pressure

API Heat Transfer

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Buffalo, New York 14225
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www.apiheattransfer.com

Divisions:

API Airtech ISO-9001 Certified

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or API Heat Transfer directly

toll-free: 1-877-API-HEAT

e-mail: sales@apiheattransfer.com

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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.

SigmaWig Welded Plate Heat Exchangers



Fully welded and require no gaskets. Available in all 316SS construction, titanium and other higher alloy materials. These units have a design temperature of 750°F and can handle operating pressures as high as 360 psi with an ASME Code stamp.

Hubbed Shell and Tube Heat Exchangers



Straight or U-tube, fixed or removable tubesheet general purpose exchangers designed to cool oil, water, compressed air and other industrial fluids. A variety of port configurations and materials are available. Diameters from 3" (7.62 cm) to 12" (30.48 cm).

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).

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.

TEMA Shell and Tube



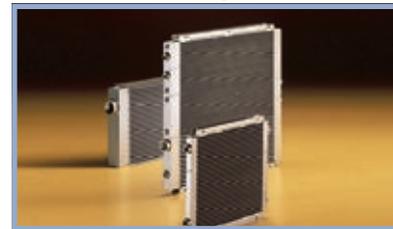
A wide variety of TEMA types are available using pre-engineered or custom designs in various sizes and materials. Shell diameters from 6" (15.24 cm) to 60" (152.4 cm), ASME, TEMA, API, ABS, TUV, PED and other code constructions available.

Extended Surface



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).

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.