

MODEL AP

BRAZED PLATE HEAT EXCHANGERS

AP Model	# of Plates	Width	Length	Depth	Connections	Capacity	Side A (Boiler)		Side B (Radiant)		Weight
		(Inches)	(Inches)	(Inches)	MPT	(BTU/hr)	GPM	PD (psi)	GPM	PD (psi)	(lbs)
AP2H-8	8	3.4	8.9	1.1	3/4"	37,109	3.8	5.0	3.7	3.0	2.7
AP2H-10	10	3.4	8.9	1.3	3/4"	49,804	5.1	5.0	5.0	3.5	2.9
AP2H-12	12	3.4	8.9	1.4	3/4"	61,034	6.3	5.0	6.2	3.8	3.2
AP2H-14	14	3.4	8.9	1.6	3/4"	71,776	7.3	5.0	7.2	4.0	3.4
AP2H-16	16	3.4	8.9	1.8	3/4"	82,030	8.4	5.0	8.3	4.1	3.7
AP2H-20	20	3.4	8.9	2.1	3/4"	101,073	10.4	5.0	10.2	4.4	4.1
AP2H-24	24	3.4	8.9	2.5	3/4"	117,186	12.0	5.0	11.8	4.6	4.6
AP2H-30	30	3.4	8.9	3.0	3/4"	136,717	14.0	5.0	13.8	4.7	5.3
AP2H-40	40	3.4	8.9	3.9	3/4"	161,130	16.5	5.0	16.3	4.8	6.5
AP2H-50	50	3.4	8.9	4.8	3/4"	175,779	18.0	5.0	17.7	4.9	7.7
AP4H-8	8	5.1	13.3	1.1	3/4"	43,456	4.4	5.0	4.4	3.1	2.7
AP4H-10	10	5.1	13.3	1.3	3/4"	57,738	5.9	5.0	5.8	3.5	2.9
AP4H-12	12	5.1	13.3	1.4	3/4"	71,776	7.3	5.0	7.2	3.7	3.2
AP4H-14	14	5.1	13.3	1.6	3/4"	85,936	8.8	5.0	8.7	3.9	3.4
AP4H-16	16	5.1	13.3	1.8	3/4"	100,096	10.3	5.0	10.1	4.1	3.7
AP4H-20	20	5.1	13.3	2.1	1"	128,904	13.2	5.0	13.0	4.3	4.1
AP4H-24	24	5.1	13.3	2.5	1"	156,248	16.0	5.0	15.8	4.5	4.6
AP4H-30	30	5.1	13.3	3.0	1"	197,263	20.2	5.0	19.9	4.6	5.3
AP4H-36	36	5.1	13.3	3.5	1"	235,348	24.1	5.0	23.7	4.7	6.1
AP4H-40	40	5.1	13.3	3.9	1-1/4"	259,762	26.6	5.0	26.2	4.7	6.5
AP4H-50	50	5.1	13.3	4.8	1-1/4"	322,261	33.0	5.0	32.5	4.9	7.7
AP4H-60	60	5.1	13.3	5.6	1-1/4"	375,971	38.5	5.0	37.9	4.9	8.9
AP4H-70	70	5.1	13.3	6.5	1-1/4"	424,798	43.5	5.0	42.8	4.9	10.1
AP4H-80	80	5.1	13.3	7.4	1-1/4"	468,743	48.0	5.0	47.3	4.9	11.3
AP4H-90	90	5.1	13.3	8.2	1-1/4"	512,688	52.5	5.0	51.7	5.0	12.5
AP4H-100	100	5.1	13.3	9.1	1-1/4"	546,867	56.0	5.0	55.2	5.0	13.7
AP4H-110	110	5.1	13.3	10.0	1-1/4"	576,163	59.0	5.0	58.1	5.0	14.9
AP4H-120	120	5.1	13.3	10.8	1-1/4"	605,460	62.0	5.0	61.1	5.0	16.1

NOTES:

- For ASME versions, put "-UM" after the model number.
Example: AP4H-20-UM (1" MPT)-UM
- For International versions, connections are BSPT.
Example: AP5x12-20 (1-1/4" BSPT)
- Design Pressure Ratings:
All models are 450 psig.
APSMO models are 300 psig.

A	#	D		D ₁	C	G	A (B)		B (C)		H
		()	()				G	D ()	G	D ()	
AP57H-20	20	9.8	20.3	2.5	1-1/2"	202,145	20.7	5.0	20.4	4.3	51.0
AP57H-24	24	9.8	20.3	2.9	1-1/2"	248,043	25.4	5.0	25.0	4.5	55.4
AP57H-30	30	9.8	20.3	3.6	2"	315,425	32.3	5.0	31.8	4.6	62.0
AP57H-36	36	9.8	20.3	4.2	2"	380,854	39.0	5.0	38.4	4.7	68.6
AP57H-40	40	9.8	20.3	4.6	2"	424,798	43.5	5.0	42.8	4.8	73.0
AP57H-50	50	9.8	20.3	5.7	2-1/2"	532,219	54.5	5.0	53.7	4.9	84.0
AP57H-60	60	9.8	20.3	6.7	2-1/2"	634,756	65.0	5.0	64.0	4.9	95.0
AP57H-70	70	9.8	20.3	7.7	2-1/2"	737,294	75.5	5.0	74.4	4.9	106.0
AP57H-80	80	9.8	20.3	8.8	2-1/2"	834,949	85.5	5.0	84.2	5.0	117.0
AP57H-90	90	9.8	20.3	9.8	2-1/2"	932,604	95.5	5.0	94.1	5.0	128.0
AP57H-100	100	9.8	20.3	10.9	2-1/2"	1,025,376	105.0	5.0	103.4	5.1	139.0
AP57H-110	110	9.8	20.3	11.9	2-1/2"	1,108,382	113.5	5.0	111.8	5.0	150.0
AP57H-120	120	9.8	20.3	12.9	2-1/2"	1,191,389	122.0	5.0	120.2	5.1	161.0
AP57H-130	130	9.8	20.3	14.0	2-1/2"	1,269,513	130.0	5.0	128.1	5.1	172.0
AP57H-140	140	9.8	20.3	15.0	2-1/2"	1,347,637	138.0	5.0	135.9	5.1	183.0
AP57H-150	150	9.8	20.3	16.1	2-1/2"	1,415,995	145.0	5.0	142.8	5.1	194.0
AP57H-160	160	9.8	20.3	17.1	2-1/2"	1,484,353	152.0	5.0	149.7	5.1	205.0
AP57H-170	170	9.8	20.3	18.1	2-1/2"	1,542,946	158.0	5.0	155.6	5.1	216.0
AP57H-180	180	9.8	20.3	19.2	2-1/2"	1,601,539	164.0	5.0	161.5	5.1	227.0
AP57H-190	190	9.8	20.3	20.2	2-1/2"	1,660,132	170.0	5.0	167.5	5.1	238.0
AP57H-200	200	9.8	20.3	21.3	2-1/2"	1,708,959	175.0	5.0	172.4	5.1	249.0
AP10H-50	50	15.2	34.5	5.6	3" FLG	800,770	82.0	5.0	80.8	4.8	227.1
AP10H-60	60	15.2	34.5	6.5	3" FLG	961,900	98.5	5.0	97.0	4.9	255.1
AP10H-70	70	15.2	34.5	7.4	3" FLG	1,127,913	115.5	5.0	113.8	4.9	283.1
AP10H-80	80	15.2	34.5	8.4	3" FLG	1,298,809	143.0	5.0	131.0	5.0	311.1
AP10H-90	90	15.2	34.5	9.3	3" FLG	1,455,057	149.0	5.0	146.8	5.0	339.1
AP10H-100	100	15.2	34.5	10.2	4" FLG	1,140,756	167.0	5.0	115.1	5.0	367.1
AP10H-110	110	15.2	34.5	11.1	4" FLG	445,959	183.0	5.0	45.0	0.4	395.1
AP10H-120	120	15.2	34.5	12.1	4" FLG	484,950	199.0	5.0	48.9	0.4	423.1
AP10H-130	130	15.2	34.5	13.0	4" FLG	523,941	215.0	5.0	52.8	0.4	451.1
AP10H-140	140	15.2	34.5	13.9	4" FLG	562,932	231.0	5.0	56.8	0.4	479.1
AP10H-150	150	15.2	34.5	14.9	4" FLG	604,360	248.0	5.0	61.0	0.4	507.1
AP10H-160	160	15.2	34.5	15.8	4" FLG	640,914	263.0	5.0	64.6	0.4	535.1
AP10H-170	170	15.2	34.5	16.7	4" FLG	626,658	278.0	5.0	68.3	0.4	563.1
AP10H-180	180	15.2	34.5	17.7	4" FLG	718,896	295.0	5.0	72.5	0.4	591.1
AP10H-190	190	15.2	34.5	18.6	4" FLG	755,450	310.0	5.0	76.2	0.4	619.1
AP10H-200	200	15.2	34.5	19.5	4" FLG	794,440	326.0	5.0	80.1	0.4	647.1
AP10H-220	220	15.2	34.5	21.4	4" FLG	865,112	355.0	5.0	87.3	0.4	703.1
AP10H-240	240	15.2	34.5	23.2	4" FLG	935,783	384.0	5.0	94.4	0.4	759.1
AP10H-260	260	15.2	34.5	25.1	4" FLG	1,004,017	412.0	5.0	101.3	0.4	815.1
AP10H-280	280	15.2	34.5	27.0	4" FLG	1,067,377	438.0	5.0	107.7	0.4	871.1
AP10H-300	300	15.2	34.5	28.8	4" FLG	1,133,174	465.0	5.0	114.3	0.4	927.1

NOTES:

- For ASME versions, put "-UM" after the model number.
Example: AP57H-20 (1-1/2" MPT)-UM
- For International versions, connections are BSPT.
Example: AP57H-20 (1-1/2" BSPT)

Models	Length	Width	Depth	A	B	C (Min)	C (Max)	D	E	Approximate Weight (lbs)
AP2H	7.8	3.3	0.094 #p ates + 0.36	1.6	6.1	0.88	1.00	C/	3.0	0.107 #p ates + 1.8
AP4H	12.2	4.9	0.094 #p ates + 0.36	2.7	9.9	1.13	1.38	2.5	3.5	0.328 #p ates + 3.1
AP57H	20.3	9.8	0.094 #p ates + 0.36	6.5	17.0	1.47	1.77	4.0	5.5	1.1 #p ates + 10.7
AP10H						6.50	7.00			0.328 #p ates + 3.1

NOTES:

1. All dimensions are in inches.
2. Connect on the same on both sides.
3. Heat exchanger may be installed in vertical or horizontal position (except steam applications).
4. Heat exchanger must be piped in counterflow arrangement.
5. A water strainer must be installed in the water inlet circuit (16-20 mesh minimum; 20-40 mesh recommended).
6. Water quality should be maintained at a PH of 6.5 to 8.0.
7. Use APS-O Series for steam, chlorinated water and pool water applications.

STANDARD SIZES:

- 1/4-20 11/16" on a AP2H models
- 3/8-24 7/8" on a AP4H models
- 1/2-13 1-3/8" standard on a AP57H models

SPECIFICATIONS:

- Plate material 316 Stainless Steel
- Brake material Copper
- Maximum working temperature 350.F
- Minimum working temperature -320.F
- Maximum working Pressure 450 psig for all models (excluding APS-O models)
- 300 psig for APS-O models

APPROVALS:

- UL (Underwriters Laboratories) USA and Canada-standard
- ASME Certification (optional)
- Canadian CR
- CE (optional)
- Optional Floor Mount Brackets and Strainers
- Standard and Custom units available in nickel brazed, (300 psi) versions.

LISTED

AURORA 1081BP SERIES

MODEL APSMO

BRAZED PLATE HEAT EXCHANGERS

Connections (a)		
# of Plates	Standard Threaded (MPT)	C
APSMO5x12		
4 - 16	1	1.250
20 - 80	1-1/4	1.375
APSMO10x20L		
20 - 24	1-1/2	1.500
30 - 40	2	1.750
50 - 200	2-1/2	2.000

Models	Length	Width	Depth	A	B	C (Min)	C (Max)	D	E	Approximate Weight (lbs)
APSMO5 12	12.2	4.9	0.094 # ae + 0.36	2.7	9.9	1.13	1.38	2.5	3.5	0.328 # ae + 3.1
APSMO10 20L	20.3	9.8	0.094 # ae + 0.36	6.5	17.0	1.50	2.00	4.0	5.5	1.1 # ae + 10.7

NOTES:

1. All dimensions are in inches.
2. Connections are standard NPT.
3. Heat exchanger is a brazed plate heat exchanger (see drawing).
4. Heat exchanger is a counter flow exchanger.
5. All dimensions are based on standard sizes (16-20 plates; 20-40 plates included).
6. Water should be a maximum of 200°F.
7. Design flow should be added to capacity.
8. All dimensions are based on standard sizes.

SPECIFICATIONS:

Plate Material	254SMO Stainless Steel
Body Material	316L Stainless Steel
Maximum Working Temperature	350°F
Maximum Working Pressure	320 PSI
Maximum Working Pressure	300 PSI
Orientation	Vertical or Horizontal
Orientation	Vertical or Horizontal

STUD BOLTS:

- 3/8-24 7/8" L for APSMO5 12 Model
- 1/2-13 1-3/8" L for APSMO10 20L Model



AURORA 1081BP SERIES

MODEL APSMO BRAZED PLATE HEAT EXCHANGERS

AP Model	# of Plates	Boiler Water: 180°F Supply, 130°F Return					Pool Water: 70°F Return, 107°F Supply					Weight (lbs)
		Width (Inches)	Length (Inches)	Depth (Inches)	Connections PT	Capacity (BTU/hr)	Side A (Boiler)		Side B (Radiant)			
		GP	PD (psi)	GP	PD (psi)							
A 5 12-4	4	4.9	12.2	0.7	1"	32,587	1.3	5.0	1.8	2.5	3.7	
A 5 12-6	6	4.9	12.2	0.9	1"	64,929	2.7	5.0	3.5	4.3	4.4	
A 5 12-8	8	4.9	12.2	1.1	1"	98,006	4.0	5.0	5.3	5.4	5.0	
A 5 12-10	10	4.9	12.2	1.3	1"	129,858	5.3	5.0	7.0	6.1	5.7	
A 5 12-12	12	4.9	12.2	1.4	1"	161,710	6.6	5.0	8.7	6.5	6.3	
A 5 12-16	16	4.9	12.2	1.8	1"	224,189	9.1	5.0	12.1	7.1	7.6	
A 5 12-20	20	4.9	12.2	2.2	1"	289,731	11.8	5.0	15.6	7.6	8.9	
A 5 12-24	24	4.9	12.2	2.5	1-1/4"	358,476	14.6	5.0	19.4	8.1	10.1	
A 5 12-30	30	4.9	12.2	3.1	1-1/4"	443,815	18.1	5.0	24.0	8.1	12.1	
A 5 12-40	40	4.9	12.2	4.0	1-1/4"	581,568	23.8	5.0	31.4	8.1	15.3	
A 5 12-50	50	4.9	12.2	4.9	1-1/4"	737,496	30.1	5.0	40.0	8.8	18.5	
A 5 12-60	60	4.9	12.2	5.8	1-1/4"	857,554	35.0	5.0	46.5	8.8	21.7	
A 5 12-70	70	4.9	12.2	6.7	1-1/4"	980,061	40.0	5.0	53.2	8.8	24.9	
A 5 12-80	80	4.9	12.2	7.6	1-1/4"	1,092,768	44.6	5.0	59.3	8.9	28.1	
A 5 12-90	90	4.9	12.2	8.5	1-1/4"	1,188,324	48.5	5.0	64.5	8.9	31.3	
A 5 12-100	100	4.9	12.2	9.4	1-1/4"	1,298,581	53.0	5.0	70.5	9.2	34.5	
A 5 12-110	110	4.9	12.2	10.3	1-1/4"	1,382,131	56.4	5.0	75.0	9.2	37.7	
A 5 12-120	120	4.9	12.2	11.2	1-1/4"	1,396,587	57.0	5.0	75.8	9.2	40.9	
A 10 20 -20	20	9.8	20.3	2.2	1-1/2"	1,114,820	45.5	5.0	60.5	7.7	43.8	
A 10 20 -24	24	9.8	20.3	2.5	1-1/2"	1,359,835	55.5	5.0	73.8	8.0	47.9	
A 10 20 -30	30	9.8	20.3	3.1	2"	1,702,856	69.5	5.0	92.4	8.2	54.0	
A 10 20 -36	36	9.8	20.3	3.6	2"	2,033,627	83.0	5.0	110.4	8.4	60.1	
A 10 20 -40	40	9.8	20.3	4.0	2"	2,254,141	92.0	5.0	122.4	8.6	64.2	
A 10 20 -50	50	9.8	20.3	4.9	2-1/2"	2,778,474	113.4	5.0	150.8	8.8	74.4	
A 10 20 -60	60	9.8	20.3	5.8	2-1/2"	3,185,199	130.0	5.0	172.9	8.8	84.6	
A 10 20 -70	70	9.8	20.3	6.7	2-1/2"	3,577,223	146.0	5.0	194.2	8.8	94.8	
A 10 20 -80	80	9.8	20.3	7.6	2-1/2"	3,920,245	160.0	5.0	212.8	8.9	105.0	
A 10 20 -90	90	9.8	20.3	8.5	2-1/2"	4,304,919	173.0	5.0	230.1	8.9	115.2	
A 10 20 -100	100	9.8	20.3	9.4	2-1/2"	4,496,031	183.5	5.0	244.0	8.9	125.4	
A 10 20 -110	110	9.8	20.3	10.3	2-1/2"	4,753,297	194.0	5.0	258.0	9.1	135.6	
A 10 20 -120	120	9.8	20.3	11.2	2-1/2"	4,949,309	202.0	5.0	268.6	9.0	145.8	
A 10 20 -130	130	9.8	20.3	12.1	2-1/2"	5,120,820	209.0	5.0	278.0	9.0	156.0	
A 10 20 -140	140	9.8	20.3	13.0	2-1/2"	5,267,829	215.0	5.0	285.9	9.0	166.2	
A 10 20 -150	150	9.8	20.3	13.9	2-1/2"	5,414,838	221.0	5.0	293.9	9.1	176.4	
A 10 20 -160	160	9.8	20.3	14.8	2-1/2"	5,537,346	226.0	5.0	300.6	9.1	186.6	
A 10 20 -170	170	9.8	20.3	15.7	2-1/2"	5,635,352	230.0	5.0	305.9	9.1	196.8	
A 10 20 -180	180	9.8	20.3	16.6	2-1/2"	5,733,358	234.0	5.0	311.2	9.1	207.0	
A 10 20 -190	190	9.8	20.3	17.5	2-1/2"	5,819,114	237.5	5.0	315.9	9.1	217.2	
A 10 20 -200	200	9.8	20.3	18.4	2-1/2"	5,892,618	240.5	5.0	319.8	9.1	227.4	

APSMO S
 P 1. 254
 D 2.
 APSMO N, 254SMO A CA :
 200 GPM A APSMO
 300
 APSMO
Process **Swimming Pool**
 B S P B
 S F S P H P L
 S C F
 C
 L A C



Models	No. of Plates	Width	Length	Length	Connections (MPT)	GPM @ 5 psi (Side-A & B)
APDW10-6	6	9.8	20.3	1.0	1"	1.8
APDW10-10	10	9.8	20.3	1.4	1"	3.7
APDW10-14	14	9.8	20.3	1.8	1"	5.5
APDW10-18	18	9.8	20.3	2.1	1"	7.5
APDW10-22	22	9.8	20.3	2.5	1"	9.2
APDW10-30	30	9.8	20.3	3.3	1-1/4"	12.1
APDW10-42	42	9.8	20.3	4.4	1-1/4"	16.3
APDW10-50	50	9.8	20.3	5.1	1-1/2"	19.2
APDW10-62	62	9.8	20.3	6.3	1-1/2"	23.6
APDW10-74	74	9.8	20.3	7.4	1-1/2"	28.0
APDW10-94	94	9.8	20.3	9.3	2"	35.1