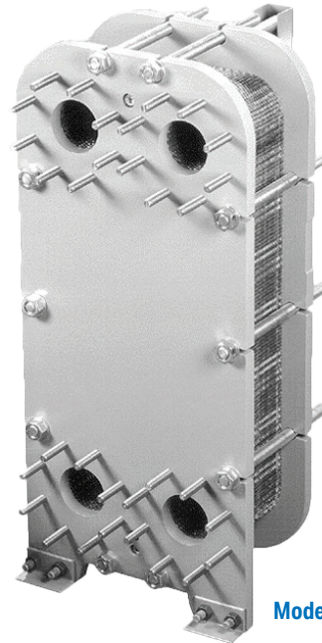


## Eliminate Fouling on Cooling Surfaces

Plate and frame type heat exchangers offer more heat transfer in less space. The Conair Tower Isolation PF Series perform with one third to one fifth the surface area of conventional shell and tube heat exchangers for the same application. By isolating the tower water from the plant cooling passages the reduction in preventative maintenance reduces staffing and quickly pays for itself.



Model PF 3-60

## Maintenance Saving Tower Water Isolation

Cooling towers, while very efficient in cooling processes, also collect debris and grow dangerous biologicals in the water. The Conair Tower Isolation Heat Exchangers PF Series isolate the contaminated water to the tower pump, filter and heat exchanger only.

These components, while still requiring consistent preventative maintenance for peak performance, isolate any biologicals from the rest of the facility. Biocide in the evaporative towers does not flow freely throughout the plant.

The PF Series Heat Exchangers are available in 3-degree and 5-degree approach models. Process water can get to within 3° or 5°F {1.6° or 2.8°C} of the tower temperature at a designated day. The 10°F {5.6°C} standard range (difference of inlet and outlet temperatures) works with standard tower designs.

### ► Superior heat transfer

Get the most heat transfer with the least temperature difference. And keep tower process water to within 3° or 5°F {1.6° or 2.8°C} of the actual tower water at design heat load.

### ► True countercurrent flow

All heat exchangers perform most efficiently and output the smallest approach with countercurrent flow. Multipass shell and tube types lose some of this effectiveness.

### ► Expandable design

Many models are expandable to meet increasing loads just by adding plates. The unit can be backflushed to clean, and disassembled to restore original performance after long periods of use.

### ► Low pressure drop

Pressure drops of 10 psi or less at design keeps pump power losses to a minimum and energy costs low.

### ► Reduced mineralization

Since plant process water is not continuously concentrated plating of minerals on heat transfer surfaces is significantly reduced and preventative maintenance nearly eliminated.

# Specifications

5F° Approach Models	Duty, Tower Tons (15,000 BTU/hr)	Duty BTU/hr	Hot / Cold Flow Rate GPM	ΔP Both Sides*	Connections	Length inches	Width inches	Height inches	Weight lbs	
									Dry	Wet
PF3-20	19.88	298200	60	4.00	2" FNPT	31.42	12.13	47.0	464	504
PF3-30	29.82	447300	90	4.23	2" FNPT	31.42	12.13	47.0	509	569
PF3-40	39.76	596400	120	4.52	2" FNPT	47.26	12.13	47.0	592	672
PF3-50	49.70	745500	150	5.00	2" FNPT	47.26	12.13	47.0	630	727
PF3-60	59.60	894700	180	10.00	4" 150 lb	34.49	20.50	72.1	1497	1637
PF3-75	74.60	1118300	225	10.00	4" 150 lb	34.49	20.50	72.1	1541	1680
PF3-85	84.50	1267400	255	10.00	4" 150 lb	34.49	20.50	72.1	1581	1743
PF3-100	99.40	1491100	300	10.00	4" 150 lb	50.21	20.50	72.1	1678	1859
PF3-115	114.30	1714800	345	9.80	4" 150 lb	50.21	20.50	72.1	1727	1937
PF3-125	124.26	1863900	375	9.90	4" 150 lb	50.21	20.50	72.1	1766	1999
PF3-170	169.00	2534900	510	10.00	4" 150 lb	50.21	20.50	72.1	1916	2236
PF3-175	174.00	2609500	525	10.00	4" 150 lb	50.21	20.50	72.1	1934	2264
PF3-185	184.00	2758600	555	10.00	4" 150 lb	50.21	20.50	72.1	1969	2318
PF3-210	208.70	3131400	630	10.00	4" 150 lb	62.09	20.50	72.1	2117	2525
PF3-240	238.60	3578800	720	10.00	4" 150 lb	62.09	20.50	72.1	2240	2719
PF3-270	268.40	4026100	810	10.00	4" 150 lb	69.89	20.50	72.1	2412	2972
PF3-300	298.20	4473500	900	10.20	4" 150 lb	89.57	20.50	72.1	2587	3203
PF3-340	338.00	5069900	1020	10.00	6" 150 lb	90.31	25.70	77.6	2849	3714
PF3-370	367.80	5517300	1110	9.90	6" 150 lb	90.31	25.70	77.6	2944	3887
PF3-475	477.20	7157600	1440	10.00	6" 150 lb	110.00	25.70	77.6	3430	4693
PF3-500	497.00	7455800	1500	10.00	6" 150 lb	110.00	25.70	77.6	3508	4836
PF3-600	596.50	8947000	1800	10.00	6" 150 lb	110.00	25.70	77.6	3820	5393
PF3-630	628.30	9424200	1896	10.00	8" 150 lb	95.01	31.50	87.3	6078	7882

5F° Approach Models	Duty, Tower Tons (15,000 BTU/hr)	Duty BTU/hr	Hot / Cold Flow Rate GPM	ΔP Both Sides*	Connections	Length inches	Width inches	Height inches	Weight lbs	
									Dry	Wet
PF5-20	19.87	298100	60	9.8	2" FNPT	23.62	12.13	47.00	408	432
PF5-30	29.81	447100	90	9.9	2" FNPT	31.42	12.13	47.00	453	489
PF5-40	39.74	596200	120	10	2" FNPT	31.42	12.13	47.00	480	527
PF5-50	49.68	745200	150	9.9	2" FNPT	34.53	20.50	46.63	900	958
PF5-60	59.62	894300	180	9.3	4" 150 lb	34.53	20.50	46.63	950	1018
PF5-75	74.53	1117800	225	10	4" 150 lb	50.21	20.50	46.63	1004	1091
PF5-85	84.46	1266900	255	9.9	4" 150 lb	49.49	20.50	46.63	1033	1133
PF5-100	99.36	1490500	300	9.9	4" 150 lb	50.21	20.50	46.63	1062	1182
PF5-115	114.27	1714000	345	9.9	4" 150 lb	50.21	20.50	46.63	1096	1233
PF5-125	124.21	1863100	375	9.9	4" 150 lb	50.21	20.50	46.63	1116	1264
PF5-170	168.92	2533800	510	10.0	4" 150 lb	62.09	20.50	46.63	1253	1455
PF5-175	173.90	2608400	525	10.0	4" 150 lb	62.09	20.50	46.63	1260	1465
PF5-185	183.83	2757400	555	10.0	4" 150 lb	62.09	20.50	46.63	1287	1508
PF5-210	208.67	3130000	630	10.0	4" 150 lb	69.89	20.50	46.63	1380	1638
PF5-240	238.48	3577200	720	10.0	4" 150 lb	89.57	20.50	46.63	1530	1835
PF5-270	268.29	4024300	810	10.0	4" 150 lb	89.57	20.50	46.63	1617	1970
PF5-300	298.10	4471500	900	9.9	4" 150 lb	62.71	25.70	77.60	2338	2791
PF5-340	337.85	5067700	1020	9.9	6" 150 lb	62.71	25.70	77.60	2282	2796
PF5-370	367.66	5514900	1110	10.0	6" 150 lb	62.71	25.70	77.60	2344	2908
PF5-475	476.96	7154400	1440	10.0	6" 150 lb	70.63	25.70	77.60	2613	3367
PF5-500	496.84	7452500	1500	10.0	6" 150 lb	70.63	25.70	77.60	2657	3447
PF5-600	596.21	8943000	1800	10.0	6" 150 lb	90.31	25.70	77.60	2998	3970
PF5-630	628.00	9420000	1896	10.0	6" 150 lb	90.31	25.70	77.60	3125	4152

### Specification Notes

- \* Pressure drops are measured on new, clean equipment at design flow rates.
- Specifications may change without notice. Consult with a Conair representative for the most current information.

