Fluoropolymer
HEAT EXCHANGERS

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FLUOROPOLYMER PRODUCTS
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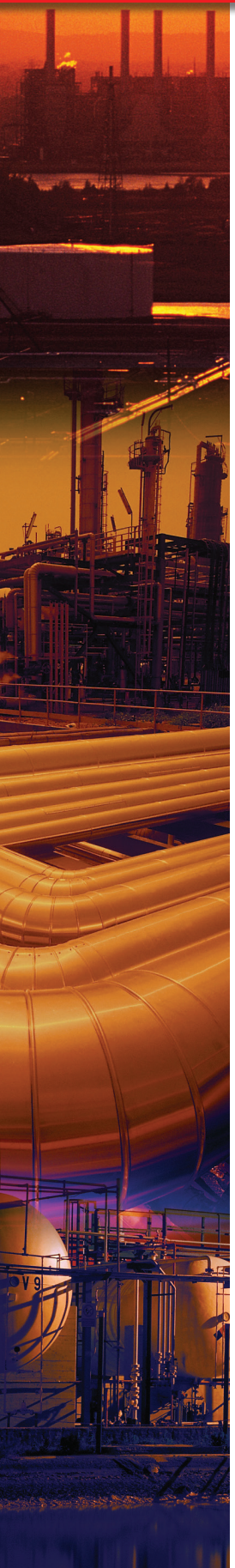
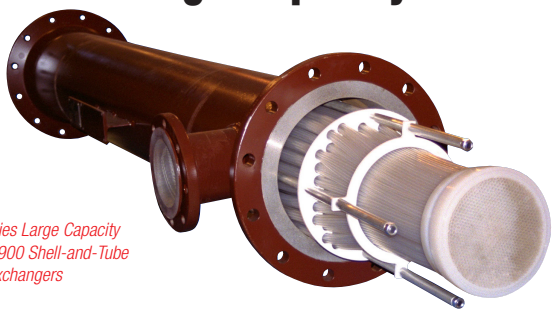
SHELL AND TUBE HEAT EXCHANGERS



Shell & Tube Heat Exchangers 30-Series Large Capacity Model 900 (14 inch shell)

- *High flow capacity*
- *Low pressure drop*
- *Unmatched corrosion resistance*
- *FEP and PFA series tubing*



30-Series Large Capacity Model 900 Shell-and-Tube Heat Exchangers

AMETEK 900 Series Heat Exchangers have twice the capacity of our previous shell-and-tube units and feature the unmatched, corrosion-resistant qualities of fluoropolymer resins. Manufactured for over fifty years, AMETEK Fluoropolymer Heat Exchangers using honeycomb tubing construction are inert to virtually all types of chemicals.

Model 900 Heat Exchangers still incorporate this proven technology and are available with carbon steel (CT) shell designs, as well as with other construction materials including fluoropolymer-lined carbon steel, and stainless steel (SS). AMETEK 900 CT Series Heat Exchangers are ASME coded and the end fittings conform to TEMA and ANSI standards.

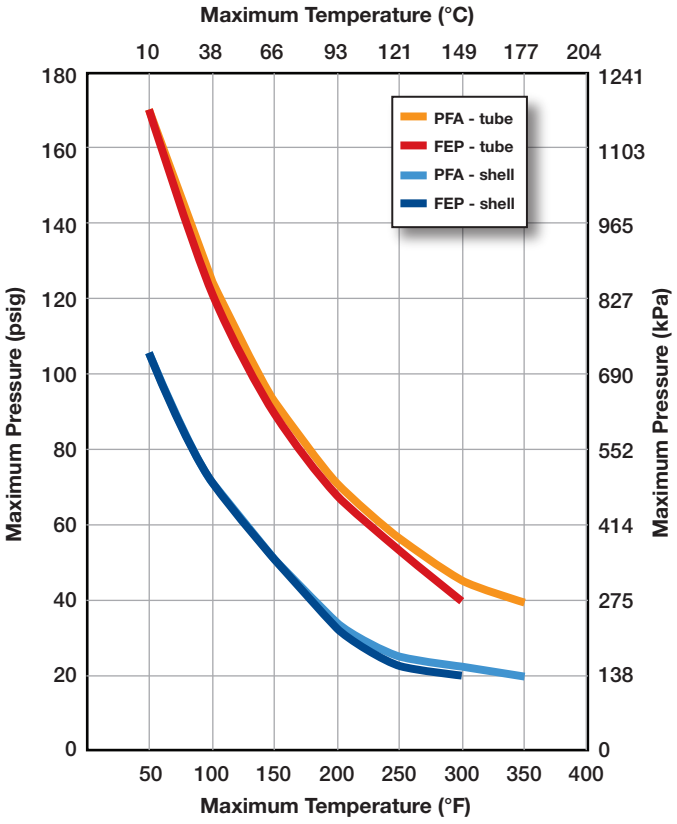
Specifications

Model Number	900
Tube Outside Diameter	.250" (6.35mm)
Tube Wall Thickness	.025" (.635mm)
Typical Heat Transfer Coefficient (U) FEP & PFA	30-60 BTU/Hr.-ft.^{2}-°F (171-341 watts/m^2-°K)
Shell Diameter	14" (305 mm)
Shell Construction†	Carbon Steel, unlined or lined with Fluoropolymer
Nominal Lengths	102-1400 ft. (9.5-130.1 m)
Area for Heat Transfer	4.4-33.4 ft.^{2} (.4-3.1 m^2)
Bundle Configuration	Cross Flow Baffle*

Model Number

EXAMPLE: P 900 CT 30 8 V E		
Q	TUBING	P = PFA *(blank)* = FEP
900	MODEL NUMBER	
CT	SHELL†	CT = Carbon Steel ST = Stainless steel shell† LT = Fluoropolymer lined†
M	END CONNECTIONS	B = None (bundle only) M = Metric *(blank)* = ANSI
30	GENERATION	
8	NOMINAL LENGTH (ft.)	
V	O-RING SEAL MATERIAL	V = VITON® E = Ethylene propylene T = Fluoropolymer encapsulated VITON® K = KALREZ®
E	ENVELOPE GASKET MATERIAL	V = VITON® E = Ethylene propylene

Operating Limits



NOTE: The curves on the chart are for the fluoropolymer bundles only.

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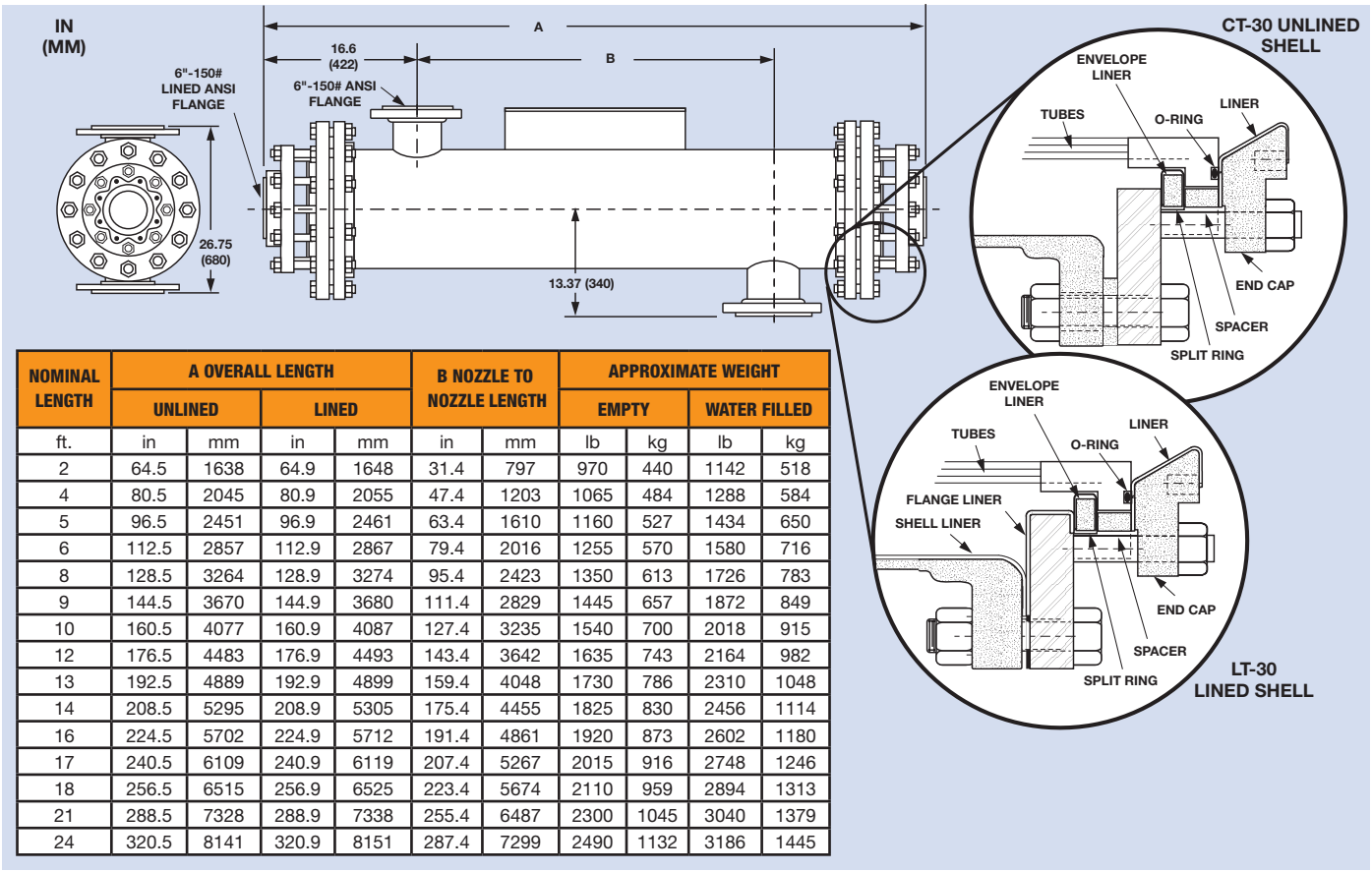
* *Special order bundle configuration.*

† *Typical shell construction. Special material such as PP, CPVC, stainless steel or other metal alloys, are available by special order. Custom configurations also available.*

Dimensions – Model 900



NOMINAL LENGTH	A OVERALL LENGTH				B NOZZLE TO NOZZLE LENGTH		APPROXIMATE WEIGHT			
	UNLINED		LINED				EMPTY		WATER FILLED	
ft.	in	mm	in	mm	in	mm	lb	kg	lb	kg
2	64.5	1638	64.9	1648	31.4	797	970	440	1142	518
4	80.5	2045	80.9	2055	47.4	1203	1065	484	1288	584
5	96.5	2451	96.9	2461	63.4	1610	1160	527	1434	650
6	112.5	2857	112.9	2867	79.4	2016	1255	570	1580	716
8	128.5	3264	128.9	3274	95.4	2423	1350	613	1726	783
9	144.5	3670	144.9	3680	111.4	2829	1445	657	1872	849
10	160.5	4077	160.9	4087	127.4	3235	1540	700	2018	915
12	176.5	4483	176.9	4493	143.4	3642	1635	743	2164	982
13	192.5	4889	192.9	4899	159.4	4048	1730	786	2310	1048
14	208.5	5295	208.9	5305	175.4	4455	1825	830	2456	1114
16	224.5	5702	224.9	5712	191.4	4861	1920	873	2602	1180
17	240.5	6109	240.9	6119	207.4	5267	2015	916	2748	1246
18	256.5	6515	256.9	6525	223.4	5674	2110	959	2894	1313
21	288.5	7328	288.9	7338	255.4	6487	2300	1045	3040	1379
24	320.5	8141	320.9	8151	287.4	7299	2490	1132	3186	1445

Heat Transfer Area

NOMINAL LENGTH (t)	MODEL 900	
	FT^2	M^2
2	102	9.5
4	183	17
5	264	24.5
6	345	32
8	425	39.5
9	508	47.2
10	589	54.7
12	670	62.2
13	750	69.7
14	831	77.2
16	914	84.9
17	995	92.9
18	1075	99.9
21	1237	114.9
24	1400	130.1

FEP and PFA Series coils are considered inert to corrosive chemicals. Contact an AMETEK representative for chemical resistance data on your specific application.
Q-Series heat exchangers are inert to most corrosive chemicals except for certain concentrated hot, oxidizing acids.

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Fluoropolymer resins are generally considered inert to most chemicals. Under certain conditions of pressure and temperature, or combinations of chemicals, fluoropolymer tubing should not be used. Please contact AMETEK for discussion of your specific process to be certain that our products are appropriate for your intended use.

Adequate ventilation should be used where fluoropolymers are heated during tube repairs. Flu-like symptoms may occur from exposure to vapors evolved from fluoropolymers at very high temperatures, up to 800°F or from smoking materials that contain particles of fluoropolymers. Symptoms pass within 48 hours and are the only adverse effects observed in humans to date. Unheated fluoropolymers are essentially inert and are nonirritating to the skin.

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