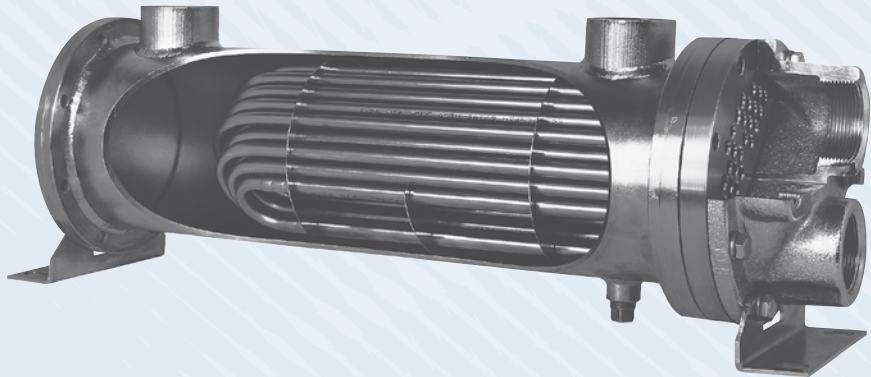


FLUID COOLING | Shell & Tube USSC Series

COPPER & STEEL CONSTRUCTION

Features

- Steam & Large Temperature Differentials
- Removable Tube Bundle for Servicing
- Reduces Thermal Expansion Stresses
- 3/8" Tubes
- Built-In Expansion Chamber
- Threaded or Flanged Connections
- Mounting Brackets Included
- Steel Shell Assembly



OPTIONS

Wide Variety of Materials Available

Custom Sizes/Designs

Stainless Steel Hardware and Mounting

Ratings

USSC SERIES

Maximum Shell Pressure 250 psi

Maximum Tube Side Pressure 150 psi

Maximum Temperature 400° F

Materials USSC Series

Tubes 316L Stainless Steel

Tube Sheets 316L Stainless Steel

Shell 316L Stainless Steel

Shell Connections 316L Stainless Steel

Baffles 316L Stainless Steel

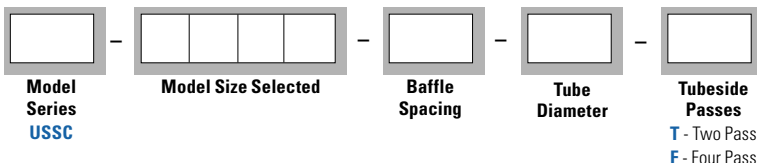
End Bonnets 316L Stainless Steel

Mounting Brackets Steel

Gaskets Non-Asbestos Fiber/Nitrile Rubber

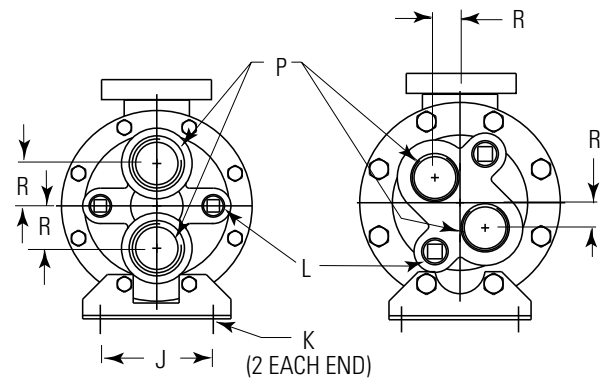
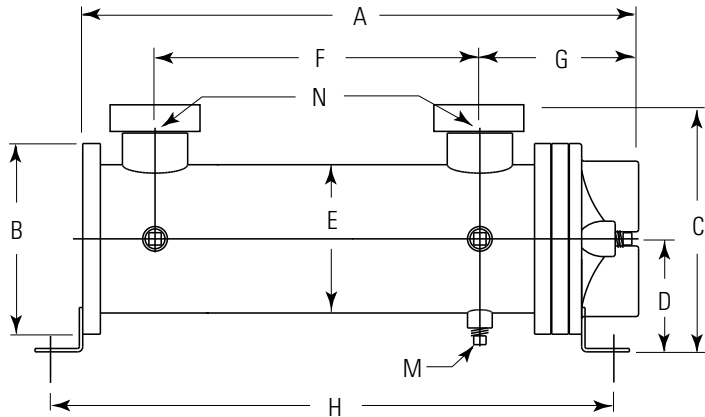
Nameplate Aluminum Foil

How to Order



Dimensions

USSC Two Pass



All models except
UC-800 & UC-1200 Series

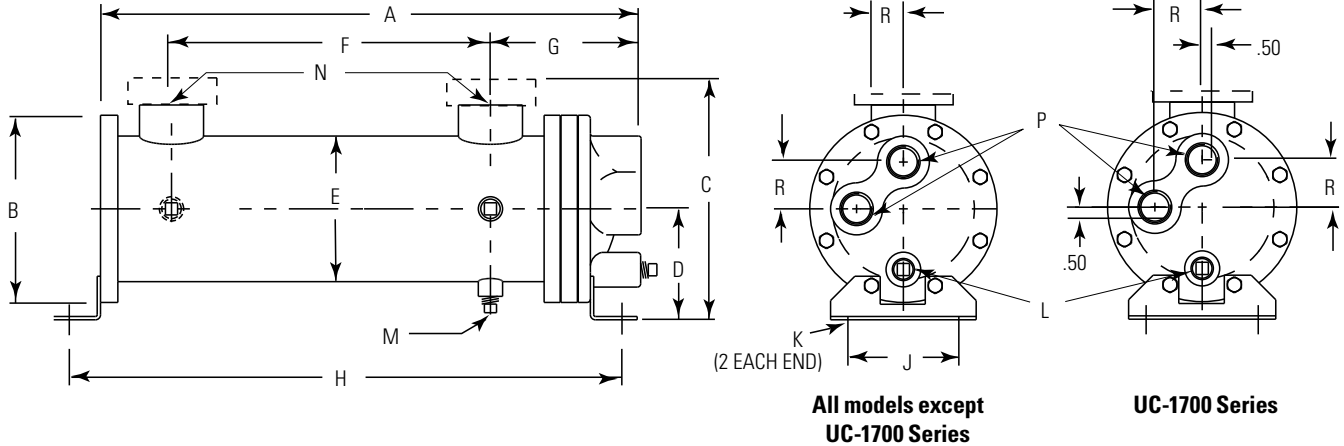
UC-800 &
UC-1200 Series

MODEL	A	B DIA	C		D	E DIA	F	G	H	J	K	L NPT	M NPT	N NPT	P NPT	R	FT ² SURFACE AREA
			NPT	ASME* FLANGE													
612	17.22	4.50	5.38	6.75	2.75	3.25	11.25	4.03	17.66	3.25	.44 DIA	(2) .38	(3) .25	1.00	1.00	—	2.4
624	29.22						23.25										29.66
812	19.47	6.00	6.75	8.25	3.50	4.25	12.38	4.97	19.65	3.50	.44 DIA	(2) .38	(3) .25	1.50	1.25	0.75	4.0
824	31.47						24.38										31.65
836	43.47	6.75	7.75	9.25	4.00	5.25	36.38	5.62	43.65	4.00	.50 x .75 SLOT	(2) .38	(3) .38	1.50	1.50	1.50	11.9
1012	19.68						11.50										19.94
1024	31.68	7.75	8.75	10.38	4.50	6.25	23.50	5.89	31.94	5.00	.50 x .75 SLOT	(2) .50	(3) .38	2.00	2.00	1.10	14.5
1036	43.68						35.50										43.94
1218	26.22	7.75	8.75	10.38	4.50	6.25	17.38	5.89	26.12	5.00	.50 x .75 SLOT	(2) .50	(3) .38	2.00	2.00	1.10	15.3
1224	32.22						23.38										32.12
1236	44.22	10.50	11.58	13.00	5.75	8.62	35.38	7.81	44.12	7.00	.62 x .88 SLOT	(2) .50	(3) .38	3.00	2.50	2.25	31.3
1248	56.22						47.38										56.12
1724	34.69	10.50	11.58	13.00	5.75	8.62	23.50	7.81	34.27	7.00	.62 x .88 SLOT	(2) .50	(3) .38	3.00	2.50	2.25	47.7
1736	46.69						35.50										46.27
1748	58.69	10.50	11.58	13.00	5.75	8.62	47.50	7.81	58.27	7.00	.62 x .88 SLOT	(2) .50	(3) .38	3.00	2.50	2.25	92.5
1760	70.69						59.50										70.27

*150# ASME/ANSI Flange (Optional). NOTE: We reserve the right to make reasonable design changes without notice. Consult factory. All dimensions are inches.

Dimensions

USSC Four Pass



All models except UC-1700 Series

UC-1700 Series

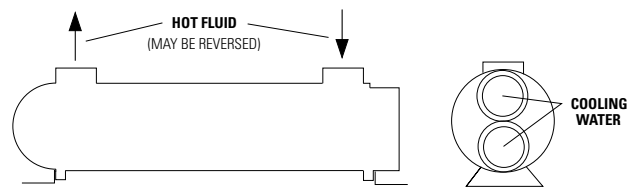
MODEL	A	B DIA	C		D	E DIA	F	G	H	J	K	L NPT	M NPT	N NPT	P NPT	R	FT ² SURFACE AREA
			NPT	ASME* FLANGE													
612	17.20	4.50	5.38	6.75	2.75	3.25	11.25	4.01	17.66	3.25	.44 DIA	—	(3)	1.00	.75	1.00	2.4
624	29.20						23.25		29.66			—	.25				4.7
812	19.47	6.00	6.75	8.25	3.50	4.25	12.00	4.97	19.65	3.50	.44 DIA	(2) .38	(3) .25	1.50	.75	1.25	4.0
824	31.47						24.00		31.65								7.9
836	43.47						36.00		43.65								11.9
1012	19.50	6.75	7.75	9.25	4.00	5.25	11.50	5.43	19.95	4.00	.50 x .75 SLOT	(2) .38	(3) .38	1.50	1.00	1.69	7.4
1024	31.50						23.50		31.95								14.5
1036	43.50						35.50		43.95								21.5
1218	26.22						17.38		26.12								15.3
1224	32.22	7.75	8.75	10.38	4.50	6.25	23.38	5.89	32.12	5.00	.50 x .75 SLOT	(2) .38	(3) .38	2.00	1.50	2.00	21.1
1236	44.22						35.38		44.12								31.3
1248	56.22						47.38		56.12								41.6
1724	34.69						23.50		34.27								47.7
1736	46.69	10.50	11.58	13.00	5.75	8.62	35.50	7.81	46.27	7.00	.62 x .88 SLOT	(2) .38	(3) .38	3.00	2.00	2.50	70.1
1748	58.69						47.50		58.27								92.5
1760	70.69						59.50		70.27								114.8

*150# ASME/ANSI Flange (Optional). NOTE: We reserve the right to make reasonable design changes without notice. Consult factory. All dimensions are inches.

UC Applications

U-Tube Heat Exchangers allow the shell and tube bundle to expand and contract independently with temperature fluctuation. This reduces temperature dependent stresses so they are ideal in applications with large temperature differentials. Some typical examples for **UC** units include quench oil coolers, liquid to liquid heaters, and barrel oil coolers for plastic extrusion machines. The removable bundle design allows for easier cleaning of the shell side cavity when the bundle is removed.

Piping Hook-up



Specific applications may have different piping arrangements. Consult factory for assistance.