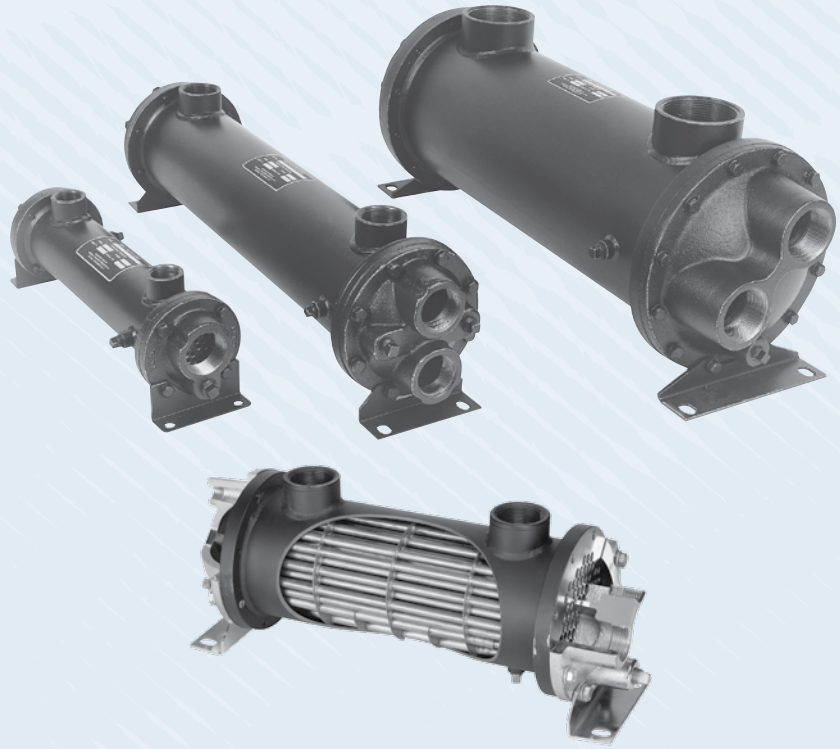


# FLUID COOLING | Shell & Tube HC Series

## Features

- Custom Designs Available
- Competitively Priced
- NPT, SAE O-Ring, SAE Flange, or BSPP Shell Side Connections Available
- End Bonnets Removable for Servicing
- Mounting Feet Included (May be rotated in 90° increments)



## Ratings Standard

- Maximum Shell Pressure** 300 psi
- Maximum Tube Side Pressure** 150 psi
- Maximum Temperature** 300°F

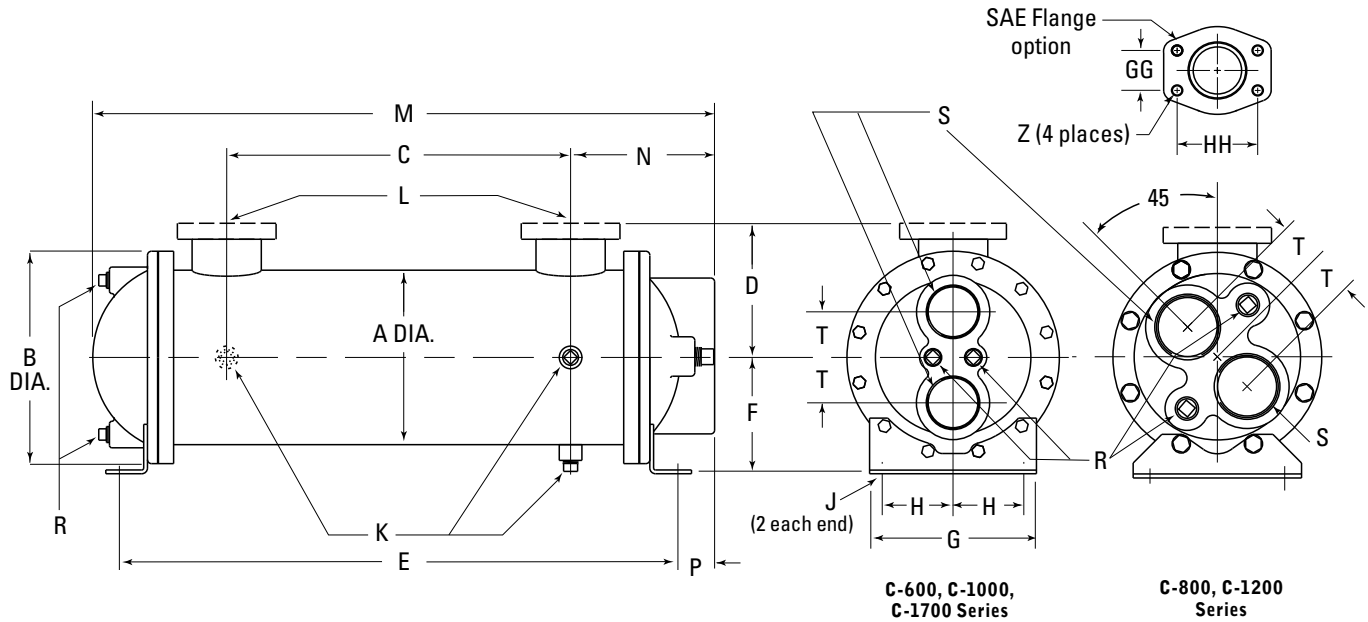
## Materials C Series

- Tubes** Copper Nickel
- Headers** Copper Nickel
- Shell** Steel
- Shell Connections** Steel
- Baffles** Brass
- End Bonnets** Bronze
- Mounting Brackets** Steel
- Gaskets** Nitrile Rubber/Cellulose Fiber
- Nameplate** Aluminum Foil

**C** = NPT Shell side connections; NPT Tube side connections  
**CS** = SAE O-Ring Shell side connections; NPT Tube side connections  
**CM** = BSPP Shell side connections; BSPP Tube side connections  
**CF** = SAE Flange (with UNC threads) Shell side connections; NPT Tube side connections  
**CFM** = SAE Flange (with Metric threads) Shell side connections; BSPP Tube side connections  
**SSC** = NPT Shell side connections; NPT Tube side connections  
**SSCS** = SAE O-Ring Shell side connections; NPT Tube side connections  
**SSCM** = BSPP Shell side connections; BSPP Tube side connections  
**CA/SSCA** = 150# ASME RF Flanges on Shell; NPT Tube side connections

# Dimensions

## Two Pass



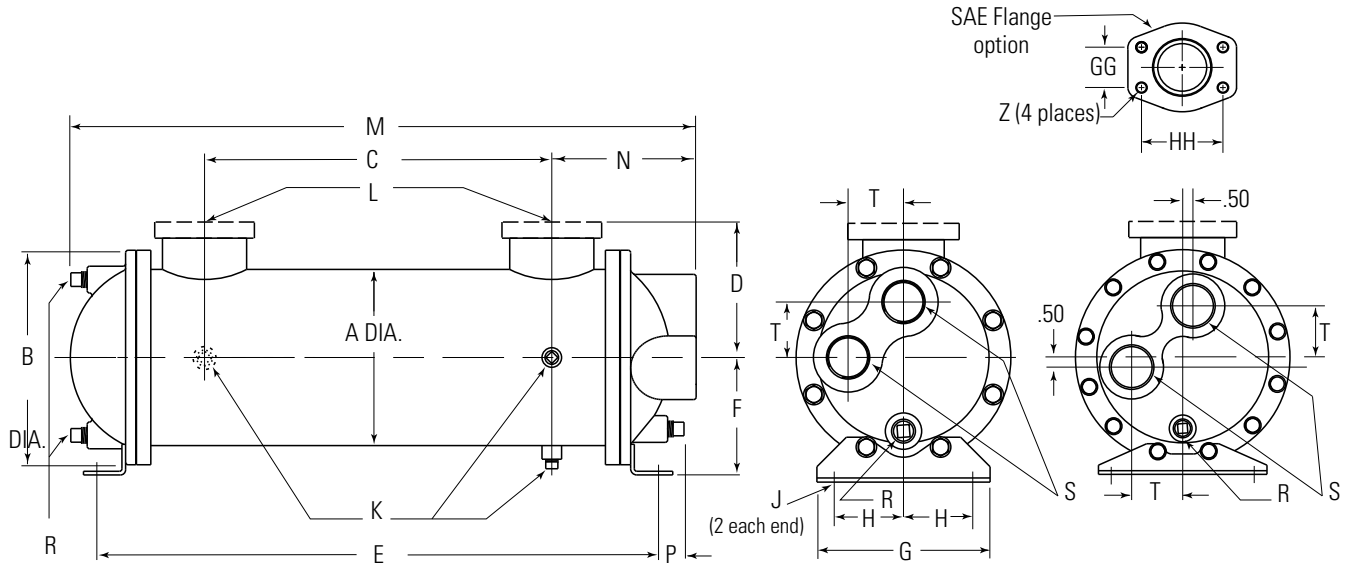
Flange Size	GG	HH	Z - CF	Z - CFM
1	1.03	2.06	3/8-16 UNC	M-10
1.50	1.41	2.75	1/2-13 UNC	M-12
2	1.69	3.06		
3	2.44	4.19	5/8-11 UNC	M-16

MODEL SIZE	A	B	C	D		E	F	G	H	J	K NPT	L		M	N	P	R NPT	S NPT/BSPP	T
				NPT/BSPP SAE O-RING	SAE FLANGE							NPT/BSPP FLANGE	SAE O-RING						
614	3.25	4.50	10.00	2.62	2.88	16.38	2.75	4.18	1.62	.44	(3)	1.00	#16 1 <sup>5</sup> / <sub>16</sub> -12 UNF-2B	17.12	3.56	.38	(2)	1.00	1.00
624			20.00			26.38								27.12					
814	4.25	6.00	9.00	3.25	3.50	16.62	3.50	4.25	1.75	.50	(3)	1.50	#24 1 <sup>7</sup> / <sub>8</sub> -12 UN-2B	17.88	4.44	.63	.38	1.25	1.06
824			19.00			26.62								27.88					
836			31.00			38.62								39.88					
1014	5.25	6.75	9.00	3.75	4.00	17.12	4.00	5.25	2.00	.75	(3)	2.00	#32 2 <sup>1</sup> / <sub>2</sub> -12 UN-2B	18.62	5.00	.94	(4)	1.50	1.50
1024			19.00			27.12								28.62					
1036			31.00			39.12								40.62					
1224	6.25	7.75	18.25	4.25	4.88	27.13	4.50	6.25	2.50	.75	(3)	2.00	#32 2 <sup>1</sup> / <sub>2</sub> -12 UN-2B	29.02	5.43	1.00	(4)	2.00	1.56
1236			30.25			39.13								41.03					
1248			42.25			51.13								53.03					
1260			54.25			63.13								65.03					
1724	8.62	10.50	17.00	5.84	6.81	27.50	5.75	8.25	3.50	.88	(3)	3.00	-	30.62	7.06	1.81	(4)	2.50	2.25
1736			29.00			39.50								42.62					
1748			41.00			51.50								54.62					
1760			53.00			63.50								66.62					
1772			65.00			75.50								78.62					

NOTE: We reserve the right to make reasonable design changes without notice. Consult factory. All dimensions are inches.

# Dimensions

## Four Pass



All Models except C-1700 Series

C-1700 Series

Flange Size	GG	HH	Z - CF	Z - CFM
1	1.03	2.06	3/8-16 UNC	M-10
1.50	1.41	2.75	1/2-13 UNC	M-12
2	1.69	3.06		
3	2.44	4.19	5/8-11 UNC	M-16

MODEL SIZE	A	B	C	D		E	F	G	H	J	K NPT	L		M	N	P	R NPT	S NPT/BSPP	T
				NPT/BSPP SAE O-RING	SAE FLANGE							NPT/BSPP FLANGE	SAE O-RING						
614	3.25	4.50	10.00	2.62	2.88	16.38	2.75	4.18	1.62	.44	(3)	1.00	#16 15/16-12 UNF-2B	17.12	3.56	.38	(2)	.38	1.00
624			20.00			26.38								27.12					
814	4.25	6.00	9.00	3.25	3.50	16.62	3.50	4.25	1.75	.44	(3)	1.50	#24 1 7/8-12 UN-2B	17.88	4.44	.63	(3)	.75	1.25
824			19.00			26.62								27.88					
836			31.00			38.62								39.88					
1014	5.25	6.75	9.00	3.75	4.00	17.12	4.00	5.25	2.00	.50	(3)	2.00	#32 2 1/2-12 UN-2B	18.81	4.81	.75	(3)	1.00	1.69
1024			19.00			27.12								28.81					
1036			31.00			39.12				.75				40.81					
1224	6.25	7.75	18.25	4.25	4.88	27.13	4.50	6.25	2.50	.50	(3)	2.00	#32 2 1/2-12 UN-2B	29.13	5.44	1.00	(3)	1.50	2.00
1236			30.25			39.13								41.13					
1248			42.25			51.13								53.13					
1260			54.25			63.13								65.13					
1724	8.62	10.50	17.00	5.84	6.81	27.50	5.75	8.25	3.50	.62	(3)	3.00	-	29.86	7.06	1.81	(3)	2.00	2.50
1736			29.00			39.50								41.86					
1748			41.00			51.50								53.86					
1760			53.00			63.50								65.86					
1772			65.00			75.50								77.86					

NOTE: We reserve the right to make reasonable design changes without notice. Consult factory. All dimensions are inches.