

C Series R-410A

R-410A

Thermal Expansion Valves

The C series is a balanced ported valve designed for high efficiency R-410A air-conditioning and heat pump applications. C valves operate over widely varying operating conditions.

Features

- Precision superheat control optimized for R-410 A systems
- Stainless steel power element eliminates corrosion and prevents valve failure
- Laser etched identification markings for permanent legibility
- Hermetic, leak-free construction of all joints
- Compact size allows installation in limited spaces
- Bi-Flow capability allows one valve to control the superheat in both cooling and heating modes for close-coupled or packaged heat pump applications
- Balance port construction compensates for changes in operating pressures due to varying ambients, gas defrost, heat reclaim, or widely varying evaporator loads
- External equalizer is standard
- Screens on ODF inlet connections

Specifications

- Maximum working pressure (MWP): 700 psig
- R-410A operating range: -20°F to +50°F
- UL/CUL file number: SA 5312



Non-Adjustable

Adjustable

Options

- High flow internal check valve allows reverse flow for heat pump applications, eliminating the need for external check valve and improving overall system efficiency
- Adjustable or non-adjustable superheat
- Bleed type pressure equalization available to accommodate PSC type compressors
- ODF connections are standard - Chatleff, Aeroquip, or SAE connections are available
- External equalizer 1/8" tube with 45° end cut is standard - terminations are available

Nomenclature example: CA 24K ZAA B15%

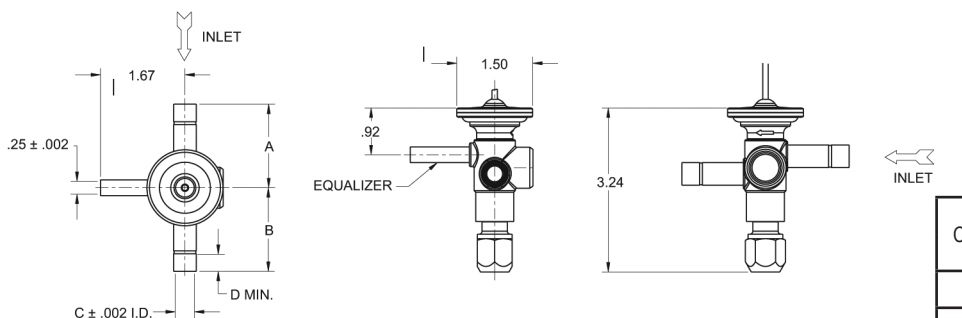
C	A	24K	ZAA	B15%
Valve Series	Body Type A = Adjustable, With Check, Straight-Through B = Adjustable, No Check, Straight-Through C = Non-Adjustable, With Check, Straight-Through D = Non-Adjustable, No Check, Straight-Through	Capacity 12K = 1 Ton 18K = 1 1/2 Ton 24K = 2 Ton 36K = 3 Ton 48K = 4 Ton 60K = 5 Ton 72K = 6 Ton 84K = 7 Ton	Charge R-410A	Bleed % (optional)

Ordering Information

Adjustable, straight-through body style, individually packaged, 5 ft. remote bulb capillary tube

Refrigerant	Tons (Btuh)	Check Valve	Bleed	Inlet x Outlet	External Equalizer	PCN
R-410A	1(12K)	✓	-	3/8 ODF x 1/2 ODF	1/4 ODF	093086
		✓	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093087
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093088
		✓	-	3/8 ODF x 1/2 ODF	5 ft With Angle Cut	093093
		-	-	3/8 ODF x 1/2 ODF	1/4 ODF	093089
		-	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093090
	1-1/2 (18K)	✓	-	3/8 ODF x 1/2 ODF	1/4 ODF	093078
		✓	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093007
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093014
		✓	-	3/8 ODF x 1/2 ODF	5 ft With Angle Cut	093000
		-	-	3/8 ODF x 1/2 ODF	1/4 ODF	093021
		-	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093082
	2 (24K)	✓	-	3/8 ODF x 1/2 ODF	1/4 ODF	093072
		✓	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093008
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093015
		✓	-	3/8 ODF x 1/2 ODF	5 ft With Angle Cut	093001
		-	-	3/8 ODF x 1/2 ODF	1/4 ODF	093022
		-	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093083
	3 (36K)	✓	-	3/8 ODF x 1/2 ODF	1/4 ODF	093073
		✓	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093009
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093016
		✓	-	3/8 ODF x 1/2 ODF	5 ft With Angle Cut	093002
		-	-	3/8 ODF x 1/2 ODF	1/4 ODF	093023
		-	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093084
	4 (48K)	✓	-	3/8 ODF x 1/2 ODF	1/4 ODF	093074
		✓	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093010
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093017
		✓	-	3/8 ODF x 1/2 ODF	5 ft With Angle Cut	093003
		-	-	3/8 ODF x 1/2 ODF	1/4 ODF	093024
		-	15%	3/8 ODF x 1/2 ODF	1/4 ODF	093081
	5 (60K)	✓	-	1/2 ODF x 5/8 ODF	1/4 ODF	093075
		✓	15%	1/2 ODF x 5/8 ODF	1/4 ODF	093011
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093018
		✓	-	1/2 ODF x 5/8 ODF	5 ft With Angle Cut	093004
		-	-	1/2 ODF x 5/8 ODF	1/4 ODF	093025
		-	15%	1/2 ODF x 5/8 ODF	1/4 ODF	093085
	6 (72K)	✓	-	1/2 ODF x 5/8 ODF	1/4 ODF	093076
		✓	15%	1/2 ODF x 5/8 ODF	1/4 ODF	093012
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093019
		✓	-	1/2 ODF x 5/8 ODF	5 ft With Angle Cut	093005
		-	-	1/2 ODF x 5/8 ODF	1/4 ODF	093026
		-	15%	1/2 ODF x 5/8 ODF	1/4 ODF	093079
	7 (84K)	✓	-	5/8 ODF x 7/8 ODF	1/4 ODF	093077
		✓	15%	5/8 ODF x 7/8 ODF	1/4 ODF	093013
		✓	-	Chatteff x Chatteff	5 ft With 1/4 SAE Flare Nut	093020
		✓	-	5/8 ODF x 7/8 ODF	5 ft With Angle Cut	093006
		-	-	5/8 ODF x 7/8 ODF	1/4 ODF	093027
		-	15%	5/8 ODF x 7/8 ODF	1/4 ODF	093080

C-Series Dimensional Data (in)



Adjustable - ODF Connections with 1/4 ODF Equalizer Shown

Connections	Dimension			
	A	B	C	D
3/8 ODF	1.65	1.65	0.379	0.34
1/2 ODF	1.65	1.65	0.504	0.48
5/8 ODF	2.15	2.15	0.629	0.75
7/8 ODF	2.15	2.15	0.879	0.75
Chatteff	1.80	1.36	-	-
Aeroquip	1.71	1.30	-	-

Non-Adjustable - ODF Connections with 1/4 ODF Equalizer Shown