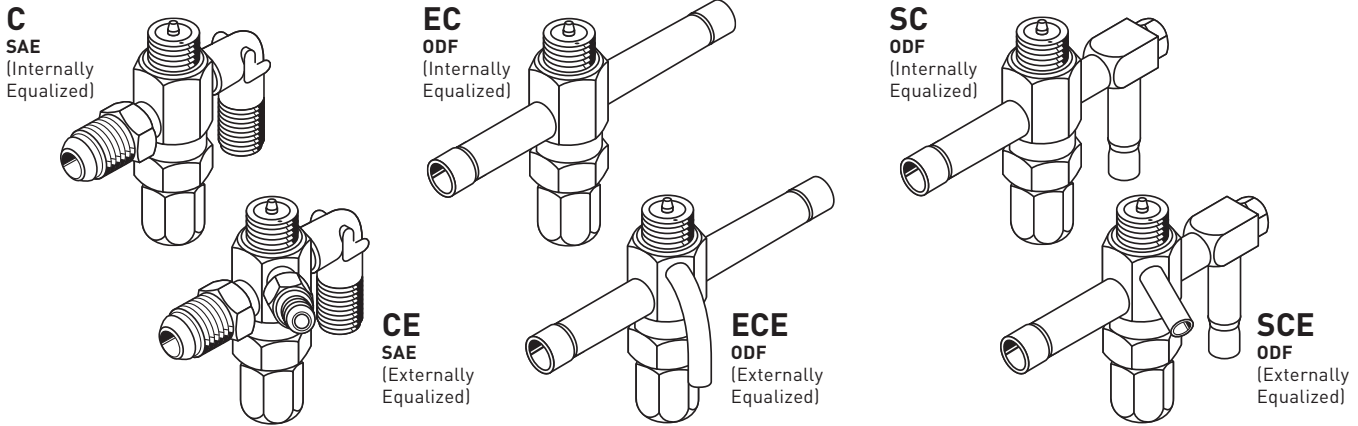


C Series Interchangeable Valve

Selecting Components

■ Body

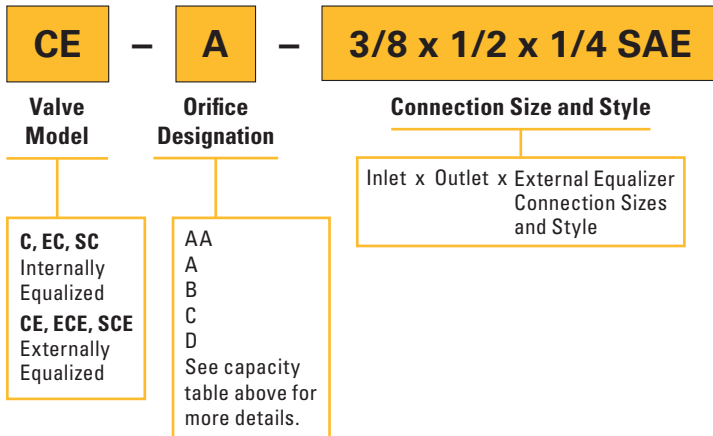


Capacities

Nominal Capacity - Tons (Capacity Range of Valve to be Replaced - Tons)									Orifice Designation Letter Code	Available Valve Body Configurations*
R-12	R-22 R-407C R-422D	R-134a	R-401A R-401B	R-402A R-402B	R-404A	R-410A	R-502	R-507		
1/4 (1/6 to 1/4)	1/2 (1/3 to 1/2)	1/4 (1/6 to 1/4)	1/4 (1/6 to 1/4)	1/4 (1/6 to 1/4)	1/4 (1/6 to 1/4)	1/2 (1/3 to 1/2)	1/4 (1/6 to 1/4)	1/4 (1/6 to 1/4)	AA	C - AA - 1/4 X 1/2 SAE CE - AA - 1/4 X 1/2 X 1/4 SAE EC - AA - 3/8 X 1/2 ODF ECE - AA - 3/8 X 1/2 X 1/4 ODF SC - AA - 3/8 X 1/2 ODF SCE - AA - 3/8 X 1/2 X 1/4 ODF
1 (1/2 to 1)	1-1/2 (3/4 to 1-1/2)	1 (1/2 to 1)	1 (1/2 to 1)	1 (1/2 to 1)	1 (1/2 to 1)	1-1/2 (3/4 to 1-1/2)	1 (1/2 to 1)	1 (1/2 to 1)	A	C - A - 1/4 X 1/2 SAE CE - A - 1/4 X 1/2 X 1/4 SAE EC - A - 3/8 X 1/2 ODF ECE - A - 3/8 X 1/2 X 1/4 ODF SC - A - 3/8 X 1/2 ODF SCE - A - 3/8 X 1/2 X 1/4 ODF
2 (1 to 2)	3 (1-1/2 to 3)	2 (1 to 2)	2 (1 to 2)	2 (1 to 2)	2 (1 to 2)	3 (1-1/2 to 3)	2 (1 to 2)	2 (1 to 2)	B	CE - B - 1/4 X 1/2 X 1/4 SAE ECE - B - 3/8 X 1/2 X 1/4 ODF SCE - B - 3/8 X 1/2 X 1/4 ODF
3 (2 to 3)	5 (3 to 5)	3 (2 to 3)	3 (2 to 3)	3-1/2 (2 to 3-1/2)	3-1/2 (2 to 3-1/2)	5 (3 to 5)	3-1/2 (2 to 3-1/2)	3-1/2 (2 to 3-1/2)	C	CE - C - 1/4 X 1/2 X 1/4 SAE ECE - C - 3/8 X 1/2 X 1/4 ODF SCE - C - 3/8 X 1/2 X 1/4 ODF
5 (3 to 5)	8 (5 to 8)	5 (3 to 5)	5 (3 to 5)	6 (3-1/2 to 6)	6 (3-1/2 to 6)	8 (5 to 8)	6 (3-1/2 to 6)	6 (3-1/2 to 6)	D	ECE - D - 3/8 X 1/2 X 1/4 ODF

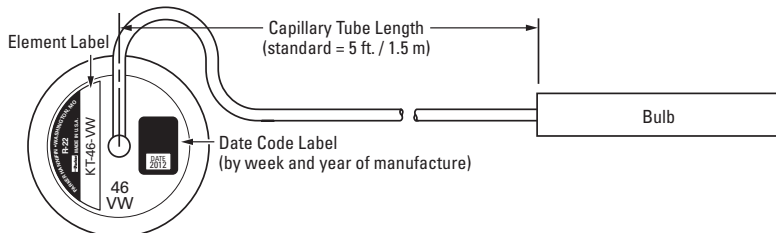
*See Pages 5 through 8 for Valve Assembly Dimensions.

Body Nomenclature (Example)

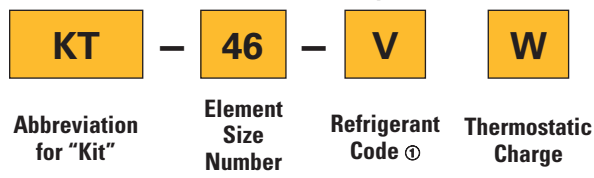


C Series Interchangeable Valve

■ Element



Element Nomenclature (Example)



① While many new refrigerants and refrigerant blends have a unique letter code, many use the same thermostatic element as the traditional refrigerant they replace. Refer to the table below to select the correct thermostatic element.

Recommended Thermostatic Valve Charges**

Application	Applicable Evaporator Temperature Range	Refrigerants			
		22 407C	12 134a	502 404A	410A
Low Temperature Refrigeration	-40°F to 0°F	VZ	-	SZ	-
Commercial Refrigeration	-30°F to +60°F	VW	JW	SW	-
Low Temperature Pressure Limiting	-40°F to +0°F	VX35	-	SX35	-
Commercial Pressure Limiting	-10°F to +60°F	VX100	JX60	-	ZX200
Air Conditioning	+30°F to +60°F	VX100	JX60	-	ZX200

Rainbow Charge Refrigerant Designation

J	R-134a, R-401A (MP39), R-401B (MP66), R-12
V	R-407C (AC9000), R-22
S	R-125, R-404A (HP62), R-402A (HP80), R-402B (HP81), R-507 (AZ50)
Z	R-410A (AZ20)

Refrigerant Color Code

- R-12 - yellow
- R-134a - light blue
- R-22 - green
- R-402A - light brown (sand)
- R-402B - olive
- R-404A - orange
- R-407C - medium brown
- R-410A - rose
- R-502 - purple
- R-507 - teal

**Application Factors:

1. The Type "X" thermostatic charges have essentially the same characteristics as the conventional Z cross charges with one exception: they produce a pressure limit or MOP. The "X" charges are not intended as replacements for the Z charges - they should only be used where a definite pressure limit is required to prevent motor overloading.
2. All air conditioning and heat pump charges are intended for use with externally equalized valves.
3. For dual temperature applications, use the "W" charge.
4. The "W" charge may be used on applications down to -30°F (-34°C) on R-22, R-404A and R-507.
5. R-410A elements for use with ECE only.

†Charge Type

"W" (all-purpose) liquid charge maintains nearly flat superheat control over a -10°F to +60°F (-23°C to +15°C) evaporator temperature range.

"Z" (low temperature) charge provides fast pulldown benefits like a gas charge with the non-migrating benefits of a liquid charge; usable over a -40°F to 0°F (-40°C to -18°C) evaporator temperature range.

"X" (damped response) gas charge provides a pressure limiting (MOP) charge with anti-hunt characteristics over a -40°F to +60°F (-40°C to +15°C) evaporator temperature range.

Notes: M.O.P. not available on "W" or "Z" charge.

1. Maximum operational pressure 500 psig (35 bar) high side and 275 psig (19 bar) low side.
 2. Maximum storage temperature 130°F (55°C).
 3. Consult Parker for pressure and temperature exceptions.
 4. Do not use "W" or "Z" liquid charges in applications where bulb temperatures can exceed 130°F (55°C).
- For these applications use type "X" MOP gas charge **only**.