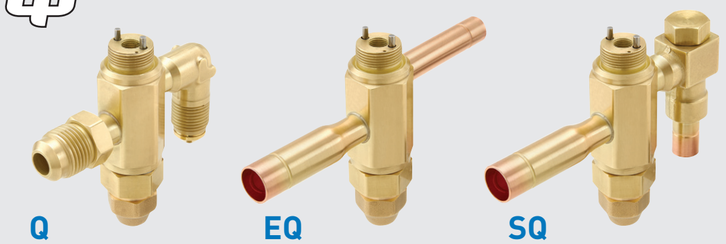
Q SERIES Interchangeable Cartridge Style TEVs

Q Conventional Port TEVs | **BQ** Balanced Port TEVs

SPORLAN

1 BODY

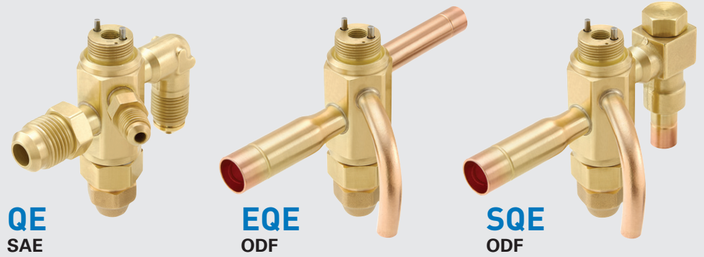
Q



Q
SAE
(Internally Equalized)

EQ
ODF
(Internally Equalized)

SQ
ODF
(Internally Equalized)

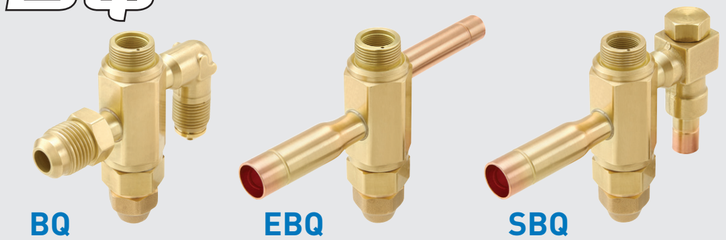


QE
SAE
(Externally Equalized)

EQE
ODF
(Externally Equalized)

SQE
ODF
(Externally Equalized)

BQ



BQ
SAE
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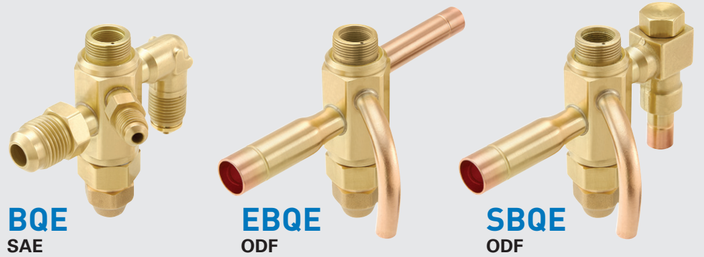
EBQ
ODF
(Internally Equalized)

SBQ
ODF
(Internally Equalized)



BQE
SAE
(Externally Equalized)

EBQE
ODF
(Externally Equalized)

SBQE
ODF
(Externally Equalized)

2 CARTRIDGE

Q

Top surface is color coded to identify cartridge capacity.

Capacity code on cartridge.

Identification tag with cartridge number (bends around capillary tubing).

NOMINAL CAPACITY (Tons) of the Valve to be REPLACED					Q VALVE CARTRIDGE	
R-22 / R-422D	R-134a / R-513A	R-404A / R-507	R-407A/C/F	R-448A / R-449A	SIZE	COLOR CODE
1/4	1/8	1/8	1/4	1/4	0	RED
1/3	1/6	1/6	1/3	1/3		
1/2 or 3/4	1/4	1/4	1/2 or 3/4	1/2 or 3/4	1	YELLOW
1	1/2	1/2	1	1	2	GREEN
1-1/2	1	1	1-1/2	1-1/2	3	BLUE
2 or 2-1/2	1-1/2	1-1/2	2 or 2-1/2	2 or 2-1/2	4	PINK
3	2	2	3	3	5	BLACK
4 or 5	2-1/2 or 3	3	4 or 5	4 or 5	6	WHITE

BQ

Top surface is color coded to identify cartridge capacity.

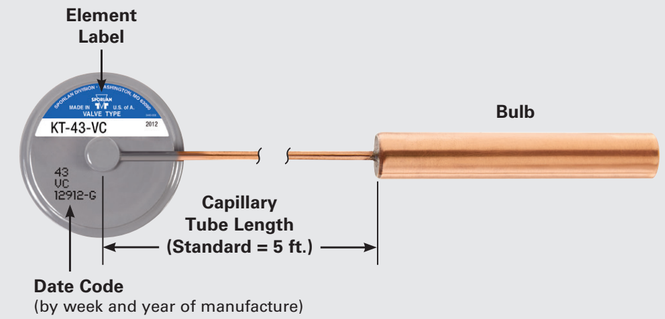
Capacity code on cartridge.

Identification tag with cartridge number (bends around capillary tubing).

NOMINAL CAPACITY (Tons) of the Valve to be REPLACED						BQ VALVE CARTRIDGE	
R-22 / R-422D	R-134a / R-513A	R-404A / R-507	R-407A/C/F	R-410A	R-448A / R-449A	SIZE	COLOR CODE
1/8 thru 1/3	1/8 thru 1/5	1/8 thru 1/5	1/8 thru 1/3	1/4 thru 1/3	1/8 thru 1/3	AAA	RED
1/2 thru 2/3	1/4 thru 1/3	1/4 thru 1/3	1/2 thru 2/3	1/2 thru 3/4	1/2 thru 2/3	AA	YELLOW
3/4 thru 1-1/2	1/2 thru 1	1/2 thru 1	3/4 thru 1-1/2	1 thru 1-3/4	3/4 thru 1-1/2	A	BLUE
1-3/4 thru 3	1-1/4 thru 1-3/4	1-1/4 thru 2	1-3/4 thru 3	2 thru 3-1/2	1-3/4 thru 3	B	PINK
3-1/4 thru 5-1/2	2 thru 3	2-1/4 thru 3	3-1/4 thru 5-1/2	4 thru 6	3-1/4 thru 5-1/2	C	WHITE

NOTE: BQ cartridge AA, A, B and C are also available with 15% bleed for R-22 and R-410A.

3 ELEMENT



KT	–	43	–	V	–	C
Abbreviation for "Kit"		Element Size Number		*Refrigerant Code		Thermostatic Charge

* 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.

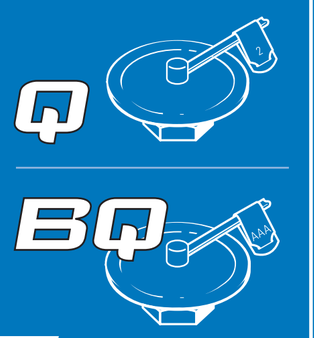
RECOMMENDED THERMOSTATIC ELEMENTS

APPLICATION	REFRIGERANT										THERMOSTATIC ELEMENT	SYSTEM MOP psig
	22	134a	404A	407A	407C	407F	410A	448A	449A	507	513A	
AIR CONDITIONING	–	X	–	–	–	–	–	–	–	–	X	KT-43-JCP60	50
	X	–	–	X	X	X	–	X	X	–	–	KT-43-VCP100	90
	X	–	–	X	X	X	–	X	X	–	–	KT-43-NGA	–
	–	–	X	–	–	–	–	–	–	–	–	KT-43-SCP115	105
	–	–	–	–	–	–	X	–	–	–	–	KT-45-ZGA	–
	–	–	–	–	–	–	X	–	–	–	–	KT-45-ZCP180	170
COMMERCIAL REFRIGERATION 50°F to -10°F	–	X	–	–	–	–	–	–	–	–	X	KT-43-JC	–
	X	–	–	X	–	X	–	X	X	–	–	KT-43-VC	–
	–	–	X	–	–	–	–	–	–	X	–	KT-43-SC/PC	–
LOW TEMPERATURE REFRIGERATION 0°F to -40°F	X	–	–	X	X	X	–	X	X	–	–	KT-43-VZ	–
	X	–	–	X	X	X	–	X	X	–	–	KT-43-VZP40	30
	–	–	X	–	–	–	–	–	–	X	–	KT-43-SZ	–
	–	–	X	–	–	–	–	–	–	X	–	KT-43-SZP	35

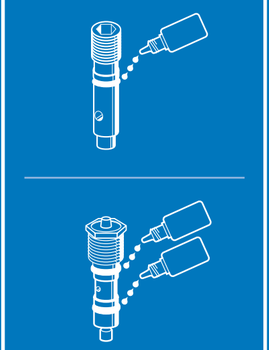
The Sporlan type ZP thermostatic charges have essentially the same characteristics as the conventional Z cross charges with one exception: they produce a pressure limit or MOP. The ZP charges are not intended as replacements for the Z charges - they should only be used where a definite pressure limit is required to prevent overloading the compressor motor.

ASSEMBLY

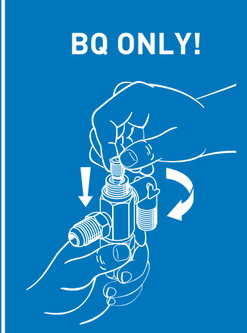
① Attach cartridge tag to capillary tube.



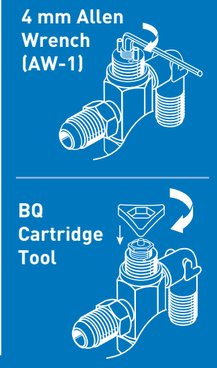
② Lubricate (oil) o-ring(s) on cartridge.



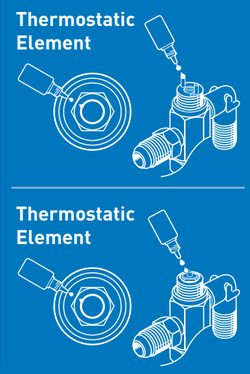
③ Turn clockwise and apply downward force.



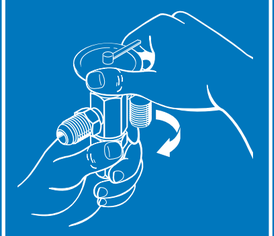
④ Turn clockwise until seated.



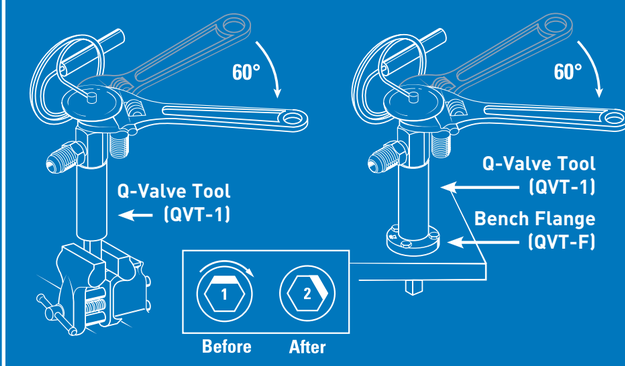
⑤ Lubricate (oil) lock ring and top of push rod(s).



⑥ Hand tighten element.



⑦ After hand tight, turn element clockwise 60° (or movement equal to one hex flat).



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