

Thermo™-expansion valve series T with exchangeable power assemblies and orifices

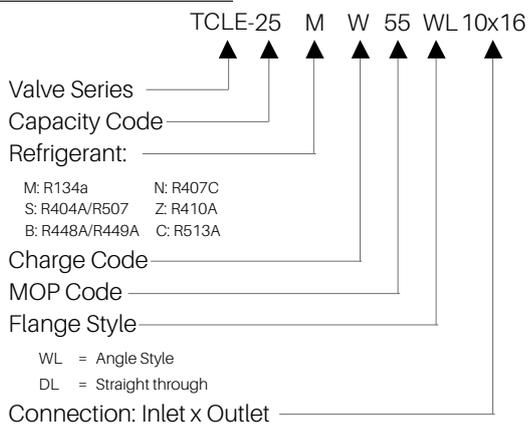
Features

- Modular design for economical logistics and easy assembly and servicing
- Very good stability due to large diaphragm diameter
- Constant superheat across a wide application range
- Superior partial load performance due to double seat orifice design (TJRE, TERE, TIRE & THRE)
- Bi-flow capability for applications in heat pumps
- Capillary tube length 1.5 m (TCLE, TJRE) and 3m (TERE, TIRE & THRE)
- Max. allowable pressure PS:
 - 46 bar with XB power assembly
 - 31 bar with XC power assembly
- Medium Temperature range TS: -45...+75°C
- Flanges: brazing ODF/ODM connection

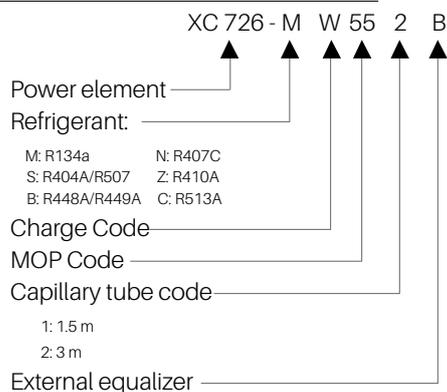


TCLE

Type code valve



Type code power element



Nominal capacities for orifices

Valve Series	Type	Nominal Capacity (kW)					Type	Nominal Capacity (kW)		Orifice Type	Power Element Type
		R134a	R513A*	R450A*	R1234yf*	R1234ze*		R404A / R507	R452A*		
TCLE-	25MW	1.5	1.3	1.3	1.1	1.1	25SW	1.3	1.4	X22440-B1B	XB1019 ...1B
	75MW	2.9	2.6	2.5	2.1	2.2	75SW	2.6	2.8	X22440-B2B	
	150MW	6.1	5.5	5.4	4.4	4.8	150SW	5.6	6.0	X22440-B3B	
	200MW	9.3	8.3	8.1	6.6	7.2	200SW	8.4	9.0	X22440-B3,5B	
	250MW	13.5	12.1	11.8	9.6	10.5	250SW	12.2	13.1	X22440-B4B	
	350MW	17.3	15.5	15.1	12.4	13.4	400SW	15.7	16.8	X22440-B5B	
	550MW	23.6	21.2	20.7	17.0	18.4	600SW	21.5	23.0	X22440-B6B	
	750MW	32.0	28.7	28.0	22.9	24.8	850SW	29.0	31.1	X22440-B7B	
	900MW	37.2	33.4	32.6	26.7	28.9	1000SW	33.8	36.2	X22440-B8B	
TJRE-	11MW	45.0	40.5	39.6	32.3	35.1	12SW	40.0	43.9	X11873-B4B	XB1019 ...1B
	13MW	57.0	51.7	50.5	41.3	44.7	14SW	51.0	56.0	X11873-B5B	
TERE-	16MW	71.0	63.5	62.1	50.7	55.0	18SW	63.0	68.9	X9117-B6B	XC726...2B
	19MW	81.0	72.6	70.9	58.0	62.9	20SW	72.0	78.7	X9117-B7B	
	25MW	112.0	99.8	97.5	79.7	86.4	27SW	99.0	108.3	X9117-B8B	
	31MW	135.0	121.5	118.7	97.0	105.2	34SW	120.0	131.7	X9117-B9B	
TIRE-	45MW	174.0	155.7	152.1	124.3	134.8	47SW	154.0	168.8	X9166-B10B	XC726...2B
THRE-	55MW	197.0	176.6	172.5	141.1	152.9	61SW	174.0	191.5	X9144-B11B	
	68MW	236.0	210.8	205.9	168.4	182.5	77SW	209.0	228.6	X9144-B13B	

Valve Series	Type	Nominal Capacity (kW)			Type	Nominal Capacity (kW)		Type	Nominal Capacity (kW)		Orifice Type	Power Element Type
		R448A	R449A	R454A*		R407C	R454C		R410A	R32		
TCLE-	55BW	1.9	1.9	1.8	50NW	2.1	1.6	50ZW	2.2	3.3	X22440-B1B	XB1019 ...1B
	100BW	3.7	3.6	3.5	100NW	4.0	3.0	100ZW	4.3	6.4	X22440-B2B	
	250BW	7.9	7.8	7.5	200NW	8.5	6.5	250ZW	9.2	13.7	X22440-B3B	
	350BW	11.9	11.7	11.3	300NW	12.9	9.7	400ZW	13.9	20.7	X22440-B3,5B	
	500BW	17.3	17.0	16.4	400NW	18.7	14.2	600ZW	20.2	30.0	X22440-B4B	
	650BW	22.1	21.8	21.0	550NW	24.0	18.2	750ZW	25.9	38.5	X22440-B5B	
	850BW	30.3	29.9	28.8	750NW	32.9	24.9	1000ZW	35.5	52.8	X22440-B6B	
	1150BW	41.0	40.4	38.9	1000NW	44.4	33.6	1400ZW	48	71.4	X22440-B7B	
	1350BW	47.7	47.0	45.3	1150NW	51.7	39.1	1600ZW	55.8	83.0	X22440-B8B	
TJRE-	17BW	57.8	57.0	54.9	14NW	62.0	47.4	19ZW	67.7	100.7	X11873-B4B	XB1019 ...1B
	21BW	73.8	72.8	70.1	17NW	80.0	60.5	25ZW	86.4	128.5	X11873-B5B	
TERE-	26BW	90.7	89.5	86.2	21NW	99.0	74.4	-	-	-	X9117-B6B	XC726...2B
	30BW	103.7	102.3	98.5	25NW	112.0	85.1	-	-	-	X9117-B7B	
	41BW	142.6	140.6	135.4	33NW	155.0	117.0	-	-	-	X9117-B8B	
	50BW	173.5	171.1	164.8	42NW	188.0	142.3	-	-	-	X9117-B9B	
TIRE-	64BW	222.4	219.3	211.2	52NW	241.0	182.4	-	-	-	X9166-B10B	XC726...2B
THRE-	72BW	252.3	248.8	239.6	71NW	273.0	207.0	-	-	-	X9144-B11B	
	86BW	301.1	297.0	286.0	94NW	327.0	247.0	-	-	-	X9144-B13B	

Note 1: Nominal conditions: Evaporating Temperature +4°C (dew point), Condensing Temperature +38°C (bubble point), Subcooling 1 K

Note 2: *) Superheat readjustment required - see Operating Instruction

Note 3: For selection of other operation conditions, please use the "Select" tool.

Selection table power element and recommended flanges

Valve Series	Orifice Type	Angle Style Type	Straight Through Type	Connection (inlet x Outlet)		Power Element Type
				Metric	Imperial	
TCLE	X22440-B1B / B2B/ B3B / B3.5B / B4B	C501-5	9761-3	-	3/8" x 5/8" ODF	XB1019...2B
		C501-5mm	9761-3mm	10 x 16 mm ODF	-	
	X22440-B5B / B6B	C501-7	9761-4	-	1/2" x 5/8" ODF	
		C501-7mm	9761-4mm	12 x 16 mm ODF	-	
	X22440-B7B / B8B	-	6346-17	16 x 22 mm ODF	5/8" x 7/8" ODF	
		A576	-	-	5/8" x 7/8" ODF 7/8" x 1-1/8" ODM	
A576-mm		-	16 x 22 mm ODF 22 x 28 mm ODM	-		
TJRE	X11873-B4B / B5B	10331	10332	22 x 22 mm ODF	7/8" x 7/8" ODF 1-1/8" x 1-1/8" ODM	
TERE	X9117-B6B / B7B / B8B / B9B	9153 9153-mm	9152 9152-mm	22 x 22 mm ODF 22 x 28 mm ODM	7/8" x 7/8" ODF 1-1/8" x 1-1/8" ODM	XC726...2B
TIRE						
THRE	X9144-B11B / B13B	9149	9148	22 x 22 mm ODF	7/8" x 7/8" ODF 1-1/8" x 1-1/8" ODM	

MOP charges T-series

MOP		Evaporating Temperature Range				
Code	bar	R134a MW	R404A/ R507 SW	R407C NW	R410A ZW	R448A/ R449A BW
15	1.0	-45...-16°C				
30	2.1					-45...-18°C
35	2.4	-45...0°C				
40	2.8		-45...-18°C			
55	3.8	-45...+11°C	-45...-10°C			
75	5.2		-45...-2°C			
80	5.5		-45...0°C			
100	6.9			-45...+14°C		
175	12.1				-45...+16°C	

Accessories and spare parts

Description	Type	Part No.
Service Tool for T, ZZ, L and 935 Series valves	X 99999	800005
Gasket sets for T, ZZ, L and 935 Series valves	X 13455-1	027579
Steel Screws for flange types: C501, 9761, 6346, A576	Screw ST 32	803573
Steel Screws for flange types: 9148, 9149, 9152, 9153, 10331, 10332	Screw ST 48	803574
Bulb clamp for XB1019	XA 1728-4	803260
Bulb clamp for XC726	XA 1728-5	803261