

Thermo™-Expansion Valve Series T Exchangeable Power Assemblies and Orifices

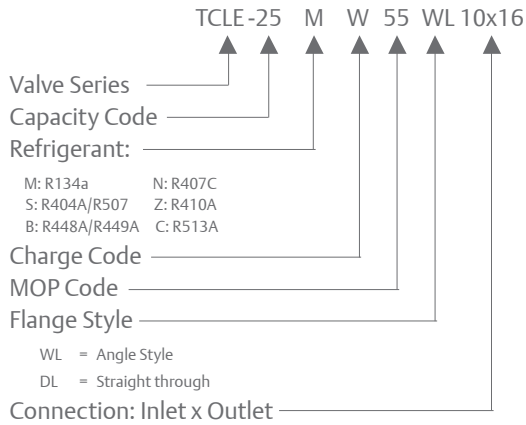
Features

- 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. working 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

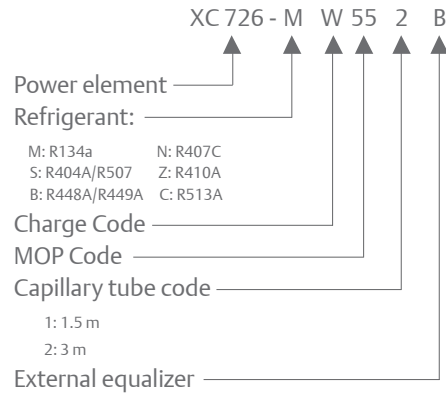


TCLE

Type Code Valve



Type Code Power Element



Nominal Capacities for Orifices

Valve Series	R134a/R513A/R450A			R404A/R507 R452A			R448A/R449A		R407C		Orifice Type	Power Element Type
	Type	R134a (kW)	R513A/R450A (kW)	Type	R404A/R507 (kW)	R452A (kW)	Type	R448A/R449A (kW)	Type	R407C (kW)		
TCL-	25 MW	1.5	1.3	25 SW	1.3	1.4	25 BW	1.9	50 NW	2.1	X 22440-B1B	XB1019...1B
	75 MW	2.9	2.6	75 SW	2.6	2.8	100 BW	3.7	100 NW	4.0	X 22440-B2B	
	150 MW	6.1	5.6	150 SW	5.5	6.0	200 BW	7.9	200 NW	8.5	X 22440-B3B	
	200 MW	9.3	8.4	200 SW	8.3	9.0	250 BW	11.9	300 NW	12.9	X 22440-B3.5B	
	250 MW	13.5	12.2	250 SW	12.1	13.1	300 BW	17.3	400 NW	18.7	X 22440-B4B	
	350 MW	17.3	15.7	400 SW	15.5	16.8	500 BW	22.1	550 NW	24.0	X 22440-B5B	
	550 MW	23.6	21.5	600 SW	21.2	23.0	800 BW	30.3	750 NW	32.9	X 22440-B6B	
	750 MW	32.0	29.0	850 SW	28.7	31.1	1100 BW	41.0	1000 NW	44.4	X 22440-B7B	
	900 MW	37.2	33.8	1000 SW	33.4	36.2	1300 BW	47.7	1150 NW	51.7	X 22440-B8B	
TJRE-	11 MW	45	40	12 SW	40	43.9	15 BW	58	14 NW	62	X 11873-B4B	XC726...2B
	13 MW	57	52	14 SW	51	56	18 BW	74	17 NW	80	X 11873-B5B	
TERE-	16 MW	71	64	18 SW	63	69	23 BW	91	21 NW	99	X 9117-B6B	
	19 MW	81	73	20 SW	72	79	26 BW	104	25 NW	112	X 9117-B7B	
	25 MW	112	100	27 SW	99	108	35 BW	143	33 NW	155	X 9117-B8B	
	31 MW	135	121	34 SW	120	132	44 BW	174	42 NW	188	X 9117-B9B	
TIRE-	45 MW	174	156	47 SW	154	169	60 BW	222	52 NW	241	X 9166-B10B	
THRE-	55 MW	197	177	61 SW	174	192	78 BW	252	71 NW	273	X 9144-B11B	
	68 MW	236	211	77 SW	209	229	98 BW	301	94 NW	327	X 9144-B13B	

Note 1: R450A, R513A can be used with MW charge. For valve readjustment see HFO/HFO blends Product Guide.

Note 2: R452A can be used with SW charge. For valve readjustment see R452A Product Guide.

Note 3: R410A available with Power element XB1019-ZW175-1B. Nominal capacity range 2.2...86.4 kW.

The Nominal Capacity is Based on the Following Conditions:

Refrigerant	Evaporating temperature	Condensing temperature	Subcooling
R134a, R404A, R507, R513A, R1234ze, R410A	+4°C dew point	+38°C bubble/ +38°C dew point	1K
R450A		+38°C bubble/ +38.6°C dew point	
R448A, R449A,		+38°C bubble/ +42.6°C dew point	
R407C		+38°C bubble/ +42.9°C dew point	
R452A		+38°C bubble/ +41.6°C dew point	

For selection of other operating conditions, please use “Controls Navigator“ selection program.

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	
TJLE	X22440-B1B / B2B/ B3B / B3.5B / B4B	C501-5	9761-3	-	3/8"x5/8" ODF	XB1019...1B
		C501-5mm	9761-3mm	10x16 mm ODF	-	
	X22440-B5B / B6B	C501-7	9761-4	-	1/2"x5/8" ODF	
		C501-7mm	9761-4mm	12x16 mm ODF	-	
	X22440-B7B / B8B	-	6346-17	16x22 mm ODF	5/8"x7/8" ODF	
		A576	-	-	5/8"x7/8" ODF 7/8"x1-1/8" ODM	
A576-mm		-	16x22 mm ODF 22x28 mm ODM	-		
TJRE	X11873-B4B / B5B	10331	10332	22x22 mm ODF	7/8"x7/8" ODF 1-1/8"x1-1/8" ODM	
TERE	X9117-B6B / B7B / B8B / B9B	9153 9153-mm	9152 9152-mm	22x22 mm ODF 22x28 mm ODM	7/8"x7/8" ODF 1-1/8"x1-1/8" ODM	XC726...2B
THRE	X9144-B11B / B13B	9149	9148	22x22 mm ODF	7/8"x7/8" ODF 1-1/8"x1-1/8" ODM	

MOP Charges T-Series

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

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