

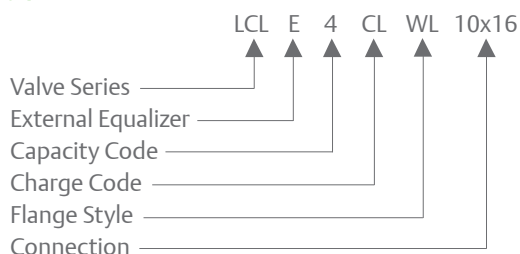
# Thermo™-Expansion Valves L-Series Exchangeable Power Assemblies and Orifices

## Features

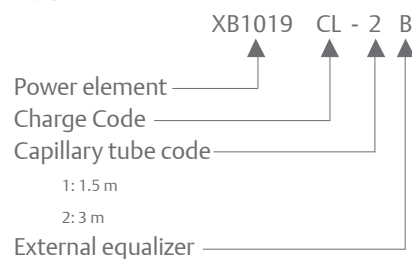
- Applications for Series L valves include superheat control (desuperheating of suction gas i.e., in hotgas bypass systems and interstage cooling in multiple stage compressors)
- Modular design for economical logistics and easy assembly and servicing
- Very good stability is attained because of the large forces generated by the large diaphragm diameter
- High-quality materials and processes for high reliability and long lifetime
- Superior partial load performance due to seat orifice design (LJRE, LERE & LIRE)
- Max. working pressure PS
  - 46 bar with XB power assembly
  - 31 bar with XC power assembly.
- Medium Temperature Range TS: -45...+65°C



## Type Code Valve



## Type Code Power Assembly



## Nominal Capacities for Cages

Valve Series	Capacity code *	Nominal Capacity $Q_n$ kW						Orifice Type	Power Assembly Type
		R134a (kW)	R404A/R507 (kW)	R407C (kW)	R448A/R449A (kW)	R450A	R513A		
LCLE	1 *	1.5	1.3	2.1	1.9	1.3	1.3	X 22440-B1B	XB1019...2B
	2 *	2.9	2.6	4.0	3.7	2.5	2.6	X 22440-B2B	
	3 *	6.1	5.6	8.5	7.9	5.4	5.5	X 22440-B3B	
	3.5 *	9.3	8.4	12.9	11.9	8.1	8.3	X 22440-B3.5B	
	4 *	13.5	12.2	18.7	17.3	11.8	12.1	X 22440-B4B	
	6 *	17.3	15.7	24.0	22.1	15.1	15.5	X 22440-B5B	
	7 *	23.6	21.5	32.9	30.3	20.7	21.2	X 22440-B6B	
	9 *	32.0	29.0	44.4	41.0	28.0	28.7	X 22440-B7B	
LJRE-	10 *	37.2	33.8	51.7	47.7	32.6	33.4	X 22440-B8B	XB1019...2B
	11 *	45	40	62	58	40	40	X 11873-B4B	
LERE	12 *	57	51	80	74	50	52	X 11873-B5B	XC726...2B
	13 *	71	63	99	91	62	64	X 9117-B6B	
	14 *	81	72	112	104	71	73	X 9117-B7B	
LIRE-	15 *	112	99	155	143	98	100	X 9117-B8B	XC726...2B
	16 *	135	120	188	174	119	121	X 9117-B9B	
	17 *	174	154	241	222	152	156	X 9166-B10B	

Note: \*) Please indicate designation character for desired superheat.

The nominal capacity is based on the following conditions:

Refrigerant	Evaporating temperature [°C]	Condensing temperature [°C]	Subcooling
R134a, R22, R513A, R404A, R507	+4°C Dew Point	+38°C bubble/ +38°C dew point	1K
R448A, R449A		+38°C bubble/ +42.6°C dew point	
R450A		+38°C bubble / +38.6°C dew point	
R407C		+38°C bubble/ +42.9°C dew point	

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

## Selection Table Power Assembly and Recommended Flanges

Valve Series	Orifice Type	Connection Standard Flange, Angle Style		Connection (inlet x outlet)		Power Element Type
		Type	Type	Metric	Imperial	
LCLE	X22440-B1B / B2B/ B3B / B3.5B / B4B		C501-5	-	3/8"x5/8" ODF	XB1019...1B
		C501-5mm		10x16 mm ODF		
	X22440-B5B / B6B		C501-7		1/2"x5/8" ODF	
		C501-7mm		12x16 mm ODF		
		A576		5/8"x7/8" ODF 7/8"x1-1/8" ODF		
		A576-mm		16x22 mm ODF 22x28 mm ODM	-	
LJRE	X11873-B4B / B5B	10331	10331	22x22 mm ODF	7/8"x7/8" ODF 1-1/8"x1-1/8" ODM	XC726...2B
LERE/ LIRE	X9117-B6B / B7B / B8B / B9B / B10B		9153	-	7/8"x7/8" ODF 1-1/8"x1-1/8" ODM	
		9153-mm		22x22 mm ODF 22x28 mm ODM		

## Suction Gas Superheat Selection:

* Charge Code	Refrigerant						
	R134a	R404A/R507	R407C	R410A	R448A/R449A	R450A	R513A
CL		22 K	13 K	30 K	16K	-	-
GL	15 K	35 K	25 K	33	27K	9K	-
UL	30 K		40 K	47	-	16K	24 K

Note: \*) Please Indicate Designation Character for Desired Superheat.

## Accessories and Spare Parts

Description	Type	Part No.
Service Tool for T, ZZ, L and 935 Series valves	X 99999	027 579
Gasket sets for T, ZZ, L and 935 Series valves	X 13455 -1	800 005
Gasket sets for T, ZZ, L and 935 Series valves Steel Screws for flange types: C500, C501, 9761, X6346, X6669, A576	Screw ST 32	803 573
Steel Screws for flange types: 9148, 9149, 9152, 9153, 10331, 10332	Screw ST 48	803 574
Bulb clamp for XB1019	XA 1728-4	803260
Bulb clamp for XC726	XA 1728-5	803261