Honeywell

TLE and TLEX Series

Thermostatic expansion valves

with fixed orifice

Cooling Solutions

Honeywell
TLE 0.5 - 4.5

Honeywell
TLEX 0.5 - 4.5

Honeywell
TLEX 4.75 - 7

Honeywell
TLEX 8 - 11

TLE keeps you cool

Valves of the TLE and TLEX series at a glance

TLE 0.5 - 4.5

TLEX 0.5 - 4.5

TLEX 4.75 - 7

TLEX 8 -11

You're looking for a valve for a demanding application?

TLE keeps you cool!

Owing to the wide range of variants you will also find a solution for your special case.

Do you know breakdowns during initial start-up and after servicing?

TLE keeps you cool!

The special adsorber charge of the bulb avoids a re-condensation of the control charge. This way the TLE valves also operate in most extreme situations such as during high-capacity operation when start-up or when the valve is icy.

You have applications in the low-temperature range?

TLE keeps you cool!

The required application can be maintained by choosing a gas charge for deep-freeze refrigerants up to MOP - 55 °C.

You require large cooling capacities?

TLEX keeps you cool!

No problem, you can select from a wide range of variants up to a cooling capacity of 92 kW.

Refrigerant	Evaporating temperature range	MOP
R134a, R401A, R12	+ 5 °C to - 30 °C	MOP A + 15 °C
	- 10 °C to - 30 °C	MOP A ± 0 °C
R22, R407C, R407A	+ 5 °C to - 45 °C	MOP A + 15 °C
	- 10 °C to - 45 °C	MOP A ± 0 °C
	- 27 °C to - 45 °C	MOP A - 18 °C
R404A, R507, R402A, R407B, R502	- 10 °C to - 50 °C	MOP A ± 0 °C
	- 20 °C to - 50 °C	MOP A - 10 °C
	- 27 °C to - 50 °C	MOP A - 18 °C

Adsorber charges with pressure controlled behaviour (MOP)

Refrigerant	Evaporating temperature range	MOP
ISC89	- 40 °C to - 70 °C	MOP - 40 °C
	- 55 °C to - 70 °C	MOP - 55 °C
R23	- 40 °C to - 80 °C	MOP - 40 °C
	- 55 °C to - 80 °C	MOP - 55 °C
R410A	- 40 °C to - 70 °C	MOP - 40 °C
	- 55 °C to - 70 °C	MOP - 55 °C
R508A	- 40 °C to - 90 °C	MOP - 40 °C
	- 55 °C bis - 90 °C	MOP - 55 °C
R508B	- 40 °C to - 100 °C	MOP - 40 °C
	- 55 °C to - 100 °C	MOP - 55 °C

Gas charge for deep-freeze applications

Today I could cook pizza.

Thermostatic expansion valves of the TLE and TLEX series are used in systems containing one or more cooling circuits: especially series installations such as water chillers and heat pumps with high capacities.

Transport cooling

Heat pumps

Air-conditioning system

Water chillers

Do you have problems controlling large cooling systems?

TLEX keeps you cool!

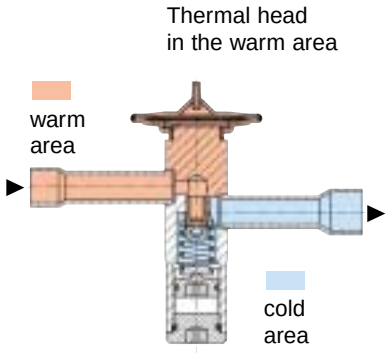
Owing to the balanced port technology an unsteady condensation pressure such as changes of the outside temperature doesn't have any influence on the superheat adjustment.

Does your customer complain about operating costs that are too high?

TLE keeps you cool!

Due to the small graduation of orifice size, the efficiency of your cooling system results in an optimum solution where energy consumption (power consumption) can be reduced.

The TLE valves have a “warm thermal head”: The thermal head is located in the “warm” area of the refrigerant flow - the inflowing refrigerant is of high temperature. The expansion of the refrigerant does not flow towards the thermal head but away from it. Since a condensation of the control charge (in the thermal head) always takes place at the coldest point, the “warm thermal head” is on the safe side at any time.



Type	Size of orifice	Nominal capacity in kW*		
		R134a	R22, R407C	R404A, R507
TLE and TLEX	0.5	0.65	0.95	0.70
	0.7	0.90	1.3	1.0
	1.0	1.3	1.9	1.5
	1.5	2.1	3.1	2.3
	2.0	2.7	3.9	2.9
	2.5	3.8	5.6	4.2
	3.0	6.2	8.9	6.7
	3.5	8.2	11.7	8.8
	4.5	11.1	16.3	12.3

The nominal capacities refer to t_o=-10 °C, t_c = +25 °C and 1 K subcooling at the valve inlet.

Type	Size of orifice	Nominal capacity in kW*		
		R134a	R22, R407C	R 404A, R507
TLEX	4.75	15.0	21.5	16.2
	5	18.8	27.9	21.0
	6	26.0	40.7	30.6
	7	33.3	52.3	39.3
TLEX	8	40.8	61.6	46.3
	10	48.0	72.1	54.2
	11	61.1	92.0	69.2

The nominal capacities refer to t_o=-10 °C, t_c = +25 °C and 1 K subcooling at the valve inlet.

Your Partner

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