

## Thermo™-Expansion Valves Series TX7

TX7 series of Thermo-Expansion Valves are designed predominantly for AC, heat pumps, close control and industrial process cooling applications. The TX7 is ideal for those applications requiring hermetic / compact size combined with stable and accurate control over wide load and evaporating temperature ranges.

### Features

- Monoblock, hermetic valve with brazing connections
- 7 sizes up to 180 kW (R410A)
- Maximum working pressure: PS 46 bar
- Factory test pressure: PT 50.6 bar
- Bi-Flow application
  - Balanced port in normal and reverse flow directions eliminates disturbance forces resulting from condensing pressure
  - Optimum static superheat in normal and reverse flow
  - Capacities performance in normal and reverse flow correlates to capacity of heat pumps in cooling and heating mode
- Power Element with 65 mm diameter enables low partial load (20-25%) performance at stable superheat
- Applicable in systems with digital scroll, step less screw compressors and variable speed compressors
- Floating superheat in reverse flow (heating mode) supports evaporator efficiency during low ambient operating conditions in air cooled reversible chillers
- Laser welded stainless steel power element with a special diaphragm profile provides life expectancy against high pressure during reversed flow via external equalizer.
- Single diaphragm with negligible hysteresis withstands against higher pressure
- Fine tuning by external superheat adjusting mechanism
- Special factory setting upon request. Minimum order quantity 60 pieces



TX7-Z13

### R410A / R32 Selection Table

Capacity, R410A [kW]		Capacity, R32 [kW]		With MOP		Connection	
Normal Flow	Reverse Flow	Normal Flow	Reverse Flow	Type	Part No.	Inlet x Outlet	Equalizer
32.1	31.7	47.7	46.9	TX7-Z13 m	806 811	12 mm x 16 mm	6 mm
32.1	31.7	47.7	46.9	TX7-Z13	806 810	1/2" x 5/8"	1/4"
39.9	39.1	59.3	57.8	TX7-Z14 m	806 813	16 mm x 22 mm	6 mm
39.9	39.1	59.3	57.8	TX7-Z14	806 812	5/8" x 7/8"	1/4"
48.9	47.4	72.7	70.1	TX7-Z15 m	806 815	16 mm x 22 mm	6 mm
48.9	47.4	72.7	70.1	TX7-Z15	806 814	5/8" x 7/8"	1/4"
80.7	67.7	120	100.2	TX7-Z16 m	806 817	22 mm x 28 mm	6 mm
80.7	67.7	120	100.2	TX7-Z16	806 816	7/8" x 1-1/8"	1/4"
99.4	81.5	147.9	120.5	TX7-Z17 m	806 819	22 mm x 28 mm	6 mm
99.4	81.5	147.9	120.5	TX7-Z17	806 818	7/8" x 1-1/8"	1/4"
130.9	113.9	194.7	168.4	TX7-Z18 m	806 821	22 mm x 28 mm	6 mm
130.9	113.9	194.7	168.4	TX7-Z18	806 820	7/8" x 1-1/8"	1/4"
183.4	165.1	272.9	244.1	TX7-Z19 m	806 823	22 mm x 28 mm	6 mm
183.4	165.1	272.9	244.1	TX7-Z19	806 822	7/8" x 1-1/8"	1/4"

## R134a Selection Table

Capacity, R134a [Kw]		With MOP		Without MOP		Connection	
Normal Flow	Reverse Flow	Type	Part No.	Type	Part No.	Inlet x Outlet	Equalizer
18.1	17.9	TX7-M13 m	806 839	TX7-M03 m	806 825	12 mm x 16 mm	6 mm
18.1	17.9	TX7-M13	806 838	TX7-M03	806 824	1/2" x 5/8"	1/4"
22.5	22	TX7-M14 m	806 841	TX7-M04 m	806 827	16 mm x 22 mm	6 mm
22.5	22	TX7-M14	806 840	TX7-M04	806 826	5/8" x 7/8"	1/4"
27.5	26.7	TX7-M15 m	806 843	TX7-M05 m	806 829	16 mm x 22 mm	6 mm
27.5	26.7	TX7-M15	806842	TX7-M05	806 828	5/8" x 7/8"	1/4"
45.4	38.2	TX7-M16 m	806 845	TX7-M06 m	806 831	22 mm x 28 mm	6 mm
45.4	38.2	TX7-M16	806844	TX7-M06	806 830	7/8" x 1-1/8"	1/4"
56.0	45.9	TX7-M17 m	806 847	TX7-M07 m	806 833	22 mm x 28 mm	6 mm
56.0	45.9	TX7-M17	806846	TX7-M07	806 832	7/8" x 1-1/8"	1/4"
73.7	64.1	TX7-M18 m	806 849	TX7-M08 m	806 835	22 mm x 28 mm	6 mm
73.7	64.1	TX7-M18	806848	TX7-M08	806 834	7/8" x 1-1/8"	1/4"
103.3	93	TX7-M19 m	806 851	TX7-M09 m	806 837	22 mm x 28 mm	6 mm
103.3	93	TX7-M19	806850	TX7-M09	806 836	7/8" x 1-1/8"	1/4"

## R407C Selection Table

Capacity, R407C [kW]		With MOP		Without MOP		Connection	
Normal Flow	Reverse Flow	Type	Part No.	Type	Part No.	Inlet x Outlet	Equalizer
28.9	28.6	TX7-N13 m	806 868	TX7-N03 m	806 853	12 mm x 16 mm	6 mm
28.9	28.6	TX7-N13	806 867	TX7-N03	806 852	1/2" x 5/8"	1/4"
36.0	35.2	TX7-N14 m	806 870	TX7-N04 m	806 855	16 mm x 22 mm	6 mm
36.0	35.2	TX7-N14	806 869	TX7-N04	806 854	5/8" x 7/8"	1/4"
44.1	42.7	TX7-N15 m	806 872	TX7-N05 m	806 857	16 mm x 22 mm	6 mm
44.1	42.7	TX7-N15	806 871	TX7-N05	806 856	5/8" x 7/8"	1/4"
72.7	61.1	TX7-N16 m	806 874	TX7-N06 m	806 859	22 mm x 28 mm	6 mm
72.7	61.1	TX7-N16	806 873	TX7-N06	806 858	7/8" x 1-1/8"	1/4"
89.7	73.5	TX7-N17 m	806 876	TX7-N07 m	806 861	22 mm x 28 mm	6 mm
89.7	73.5	TX7-N17	806 875	TX7-N07	806 860	7/8" x 1-1/8"	1/4"
118.1	102.7	TX7-N18 m	806 878	TX7-N08 m	806 863	22 mm x 28 mm	6 mm
118.1	102.7	TX7-N18	806 877	TX7-N08	806 862	7/8" x 1-1/8"	1/4"
165.4	148.9	TX7-N19 m	806 880	TX7-N09 m	806 865	22 mm x 28 mm	6 mm
165.4	148.9	TX7-N19	806 879	TX7-N09	806 864	7/8" x 1-1/8"	1/4"