

## ***Thermostatic Expansion Valves for Refrigeration***



TMV



TMVX



TMVBL



TMVXBL

- **Series TMV Thermostatic Expansion Valves with interchangeable orifice cartridge and adjustable superheat setting**

Thermostatic expansion valve for use in general refrigeration and original equipment. Plants with one or more circuits, refrigerated cabinets even with cramped mounting conditions, deep-freezing plants, ice and cream machines, milk cooling units, water chillers, vehicle air conditioning systems, cold stores, air conditioning systems. • Internal pressure equalization: for single injection in plants with single and multiple evaporators.

Extreme durability thanks to welded stainless steel head and stainless steel diaphragm.

Suitable for systems with hot gas defrosting.

For maximum pressure PS see specification sheet.

For maximum test pressure PF see specification sheet .

Series	TMV
Orifice	Interchangeable
Connections	Solder/flare
Pressure	Equalizer internal
Balanced port	No
Superheat setting	Adjustable
Capillary tube length	1,5 m
Bulb diameter	12 mm
Brass parts	Body
Stainless steel parts	Internals, thermal head
Copper parts	Connection tubes, bulb
Max. ambient temp.	100°C
Max. bulb temp.	140°C

Thermal charge

Absorber charge with damping characteristic for stable superheat control - only one valve necessary for the whole evaporating temperature range - the advantage with the combi adsorber charge is that for each of the refrigerant groups only one valve is required.

Installation  
Superheating  
Adjustment

Valves may be installed in any position.

Mean static superheat 3K

Valves should initially be installed with the factory setting unaltered. Should adjustment be necessary, remove the sealing cap and adjust the spindle.

Right turn (clock wise)- Reduces flow increasing superheat.

Left turn (anti-clock wise)- Increases flow decreasing superheat.

One turn of the adjusting spindle alters superheat by approximately 0.55 bar.

With Absorber charge it is possible for charge migration or reversal to occur, thereby offering the user a reliable, trouble free valve.

**See over page for model selection guide**

**New**

## Thermostatic Expansion Valves for Refrigeration

Refrigeration Gasses R134a R401A R12				
Model Number	RC Number	Equalisation	Evap. Temp.	Connection In/Out
TMV-00005	F1602	Internal	15 to -30°C	UNF: 5/8"/UNF: 3/4"
TMVX-00105	F1604	External	15 to -30°C	UNF: 5/8"/UNF: 3/4"
TMVBL-00105	F1652	Internal	15 to -30°C	UNF: 5/8"/ODF: 12mm
TMVXBL-00105	F1654	External	15 to -30°C	UNF: 5/8"/ODF: 12mm

Refrigeration Gasses R22 R407C R407A R422D				
Model Number	RC Number	Equalisation	Evap. Temp.	Connection In/Out
TMV-00001	F1606	Internal	15 to -45°C	UNF: 5/8"/UNF: 3/4"
TMVX-00101	F1608	External	15 to -45°C	UNF: 5/8"/UNF: 3/4"
TMVBL-00101	F1656	Internal	15 to -45°C	UNF: 5/8"/ODF: 12mm
TMVXBL-00101	F1658	External	15 to -45°C	UNF: 5/8"/ODF: 12mm

Refrigeration Gasses R404A R402A R502 R507A				
Model Number	RC Number	Equalisation	Evap. Temp.	Connection In/Out
TMV-00008	F1610	Internal	0 to -50°C	UNF: 5/8"/UNF: 3/4"
TMVX-00108	F1612	External	0 to -50°C	UNF: 5/8"/UNF: 3/4"
TMVBL-00108	F1660	Internal	0 to -50°C	UNF: 5/8"/ODF: 12mm
TMVXBL-00108	F1662	External	0 to -50°C	UNF: 5/8"/ODF: 12mm

## Orifices



Normal capacities (kW) based on 1K subcooling/1.5 bar pressure drop

Orifices							
Model Number	RC Number	Orifice Cartridges	R134a -5 to 40°C	R22 -5 to 40°C	R22 -25 to 40°C	R404a -5 to 40°C	R404a -25 to 40°C
TMVD-00001	F1624	1.0	0.34	0.52	0.36	0.35	0.23
TMVD-00002	F1626	1.5	0.65	0.98	0.69	0.66	0.43
TMVD-00003	F1628	2.0	0.90	1.35	0.94	0.94	0.61
TMVD-00004	F1630	2.5	1.29	1.97	1.38	1.36	0.88
TMVD-00005	F1632	3.0	2.09	3.16	2.21	2.15	1.40
TMVD-00006	F1634	3.5	2.69	3.99	2.79	2.72	1.77
TMVD-00007	F1636	4.5	3.78	5.75	4.02	3.93	2.56
TMVD-00008	F1620	0.5	6.17	9.17	6.41	6.27	4.09
TMVD-00009	F1622	0.7	8.16	12.12	8.48	8.24	5.37
TMVD-00010	F1618	0.3	11.04	16.89	11.81	11.52	7.50
TMVD-00011	F1638	4.75	14.92	22.27	15.58	15.17	9.88

## Pressure Equaliser Lines

Pressure Equaliser Lines				
Model Number	Size	External/Internal Dia.	Qty	Connection
ZE-00028	1.0m	3.00/1.25mm	10	7/16" UNF at both ends
ZE-00029	0.6m	3.00/1.25mm	10	7/16" UNF at both ends