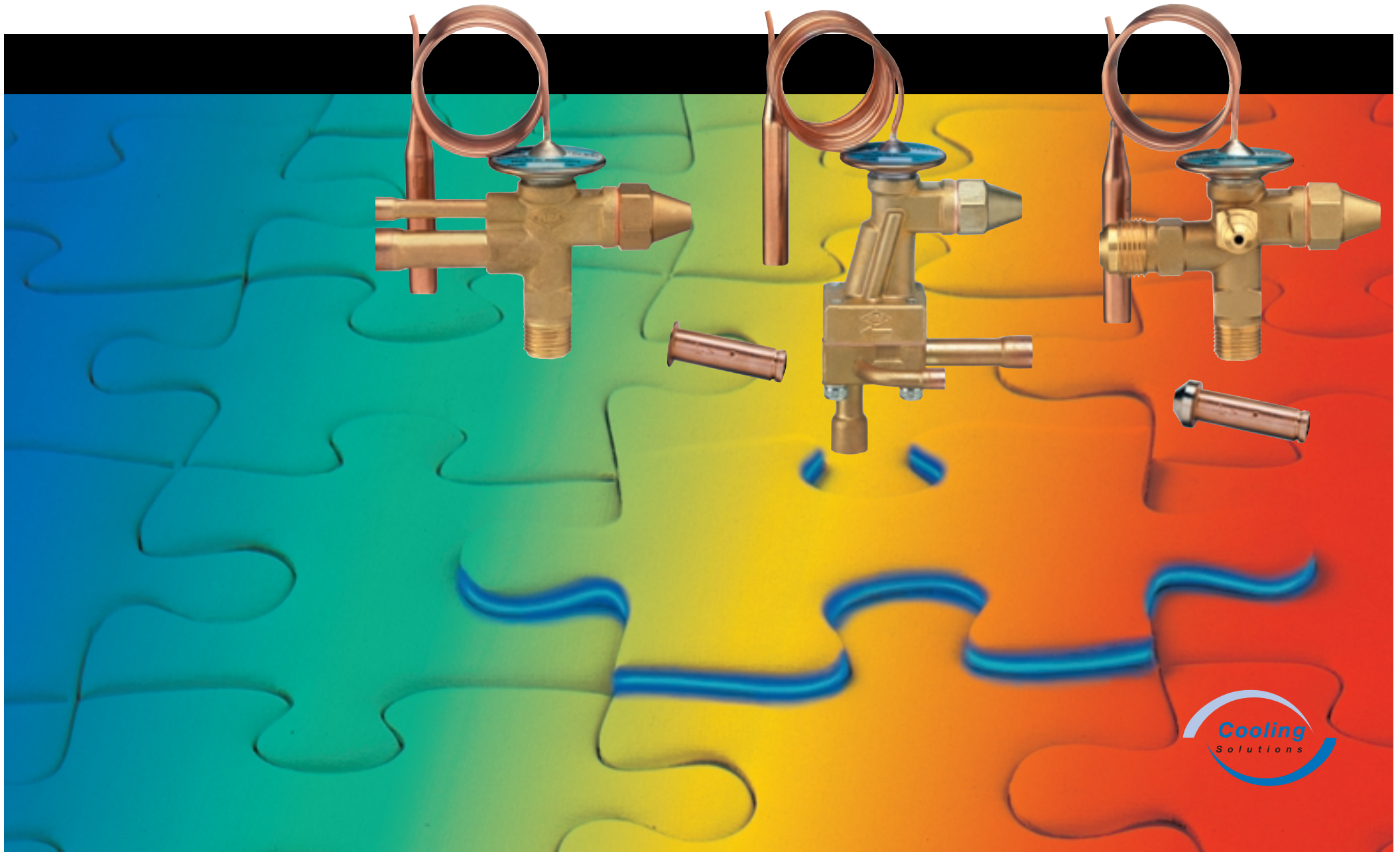


Honeywell Competition Cross Reference...



Honeywell Competition Cross Reference

note: Valve comparisons based on capacities for valves with interchangeable cartridges up to 21.5 kW

Honeywell TX Valve		Danfoss TX Valve		ALCO TX Valve		SPORLAN TX Valve	
TMV Flare/Flare	<ul style="list-style-type: none"> ● Interchangeable cartridges for capacities 0.5-21.5 kW (0.14-6.13TR) ● Adsorber charge optionally with MOP ● All refrigerants ● Adjustable superheat <p>Exceptional features:</p> <p>Adsorber charge with adapted response time for</p> <ul style="list-style-type: none"> ◆ better control features ◆ no charge migration ◆ only 3 valves for all refrigerants R134a, R401A, R12, R22, R407C, R407A, R404A, R507, R402A <p>The same cartridge can be used for all valve types.</p>	T2 Series Flare/Flare	<ul style="list-style-type: none"> ● Interchangeable cartridges for capacities 0.5-15.5kW (0.14-4.4TR) ● Gas or liquid charge ● All refrigerants ● Adjustable superheat 	TI Series Flare/Flare	<ul style="list-style-type: none"> ● Interchangeable cartridges for capacities 0.44-17.2kW (0.13-4.9TR) ● Gas or liquid charge ● All refrigerants ● Adjustable superheat 	Q Series Q-SAE Flare/Flare	<ul style="list-style-type: none"> ● Interchangeable cartridges for capacities 1.2-19kW (0.34-5.4TR) ● Gas or liquid charge ● All refrigerants ● Adjustable superheat ● Interchangeable thermoelement
TMVX Flare/Flare		TE2 Flare/Flare		TIE Flare/Flare		QE-SAE Flare/Flare	
TMVBL Flare/Solder		T2 Flare/Solder		TIS Flare/Solder			
TMVXBL Flare/Solder		TE2 Flare/Solder		TISE Flare/Solder			
TMVL(X) Flange/Solder	TUA/TUAE Solder/Solder	<ul style="list-style-type: none"> ● Stainless steel version ● Bi-flow function ● Other features see above 	TCLC Flange/Solder	<ul style="list-style-type: none"> ● Interchangeable cartridges for capacities 1.9-22.2kW (0.54-6.3TR) ● Gas or liquid charge ● All refrigerants ● Adjustable superheat 	Q-ODF QE-ODF Solder/Solder	<ul style="list-style-type: none"> ● see above 	
All capacities for R22: t ₀ = -10°C, t _c = +25°C	All capacities for R22: t ₀ = +5°C, t _c = +32°C	All capacities for R22: t ₀ = +4°C, t _c = +38°C	All capacities for R22: t ₀ = -10°C, t _c = +40°C				
Select all cartridges with the Honeywell selection disc.							

Features of different thermo charges

Type of Charge / Technical Features	Adsorber Charge	Liquid Charge	Gas Charge
Charge Migration Effects	Cannot occur = highest reliability	Cannot occur = highest reliability	Will close valve due to bulb not being colder than capillary and power head.
Max Bulb Temperature	<140°C	+ 75°C	<140°C
MOP-Function	Possible	Not Possible	Possible
Response Time	Evaporator adapted = most constant superheat control	Medium	Fast up to slow with ballast
Superheat On-site Setting	Not critical	Critical	Critical
Production Cost	High	Low	Low

Main Advantages Of Honeywell over Danfoss

- Only 3 expansion valves are required for all refrigerants = less spare parts to be carried by serviceman and by wholesaler.
- Once setting of refrigerant has been specified, superheating remains almost constant over the entire temp range of refrigerant.
- Charge migration cannot occur for Adsorber Charged MOP valves
- Response time adapts to the evaporator operation
- Applicable for hot gas defrost systems
- Superheat settings on site not critical
- Capacity goes from 0.5 kW to 21.5 kW with 11 orifices.

Disadvantages:

- Higher Production Cost

Danfoss			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 4K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TN 2	0X	440	0,13
TEN 2	00	810	0,23
	01	1460	0,42
	02	2060	0,59
	03	3690	1,05
	04	5420	1,54
	05	6880	1,96
	06	8400	2,39

Honeywell			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 4K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3 - 0,5	394 - 753	0,11 - 0,21
TMVX	0,5 - 0,7	753 - 1042	0,21 - 0,3
TMVBL	1,0	1505	0,43
TMVXBL	1,5	2432	0,69
TMVL	2 - 2,5	3127 - 4401	0,89 - 1,25
TMVLX	3,0	7180	2,04
	3,0	7180	2,04
	3,5	9496	2,7
	4,5	12854	3,65
	4,75	17371	4,94

Danfoss			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 4K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TX 2	0X	630	0,18
TEX 2	00	1300	0,37
	01	2700	0,77
	02	4000	1,14
	03	7100	2,02
	04	10500	2,99
	05	13300	3,79
	06	16200	4,61

Honeywell			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 4K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3 - 0,5	584 - 1100	0,17 - 0,32
TMVX	0,7	1520	0,43
TMVBL	1,0 - 1,5	2221 - 3565	0,63 - 1,02
TMVXBL	2,0	4500	1,28
TMVL	2,5 - 3,0	6488 - 10404	1,85 - 2,96
TMVLX	3,0	10404	2,96
	3,5	13677	3,89
	4,5	19054	5,42
	4,75	25132	7,15

Alco			
capacities based on $t_o = +4^{\circ}\text{C}$, $t_c = 38^{\circ}\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TI-MW	00	300	0,09
TIE-MW	0	800	0,23
TIS-MW			
TISE-MW	1	1900	0,54
	2	3100	0,88
	3	5000	1,42
	4	8300	2,36
	5	10100	2,87
	6	11700	3,33

Honeywell			
capacities based on $t_o = +4^{\circ}\text{C}$, $t_c = 38^{\circ}\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3	361	0,10
TMVX	0,5 - 0,7	690 - 955	0,20 - 0,27
TMVBL	1,0	1380	0,39
TMVXBL	1,5	2229	0,63
TMVL	2,0	2866	0,82
TMVLX	2,5	4034	1,15
	3,0	6581	1,87
	3,5	8704	2,48
	4,5	11782	3,35
	4,5	11782	3,35
	4,75	15922	4,53

Alco			
capacities based on $t_o = +4^{\circ}\text{C}$, $t_c = 38^{\circ}\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TI-HW	00	500	0,14
TIE-HW			
TIS-HW	0	1300	0,37
TISE-HW	1	3200	0,91
	2	5300	1,51
	3	8500	2,42
	4	13900	3,96
	5	16900	4,81
	6	19500	5,55

Honeywell			
capacities based on $t_o = +4^{\circ}\text{C}$, $t_c = 38^{\circ}\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3	521	0,15
TMVX	0,5	989	0,28
TMVBL	0,7	1354	0,39
TMVXBL	1,0	1979	0,56
TMVL	1,5	3176	0,90
TMVLX	2,0	4009	1,14
	2,5	5779	1,64
	3,0	9268	2,64
	3,5 - 4,5	12148 - 16974	3,46 - 4,83
	4,5	16974	4,83
	4,75	22389	6,37

Sporlan			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
Q-SAE			
QE-SAE	0	800	0,23
Q-ODF			
QE-ODF	1	2000	0,57
	2	2900	0,83
	3	4100	1,17
	4	6500	1,85
	5	9000	2,56
	6	12000	3,42

Honeywell			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3	379	0,10
TMVX	0,5	725	0,20
TMVBL	0,7	1004	0,29
TMVXBL	1,0 - 1,5	1451 - 2344	0,41 - 0,67
TMVL	2	3013	0,85
TMVLX	2,5	4241	1,20
	3,0	6920	1,97
	3,5	9152	2,60
	4,5	12388	3,52
	4,75	16741	4,76

Sporlan			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
Q-SAE			
QE-SAE	0	1200	0,34
Q-ODF			
QE-ODF	1	2900	0,83
	2	3900	1,11
	3	5700	1,62
	4	9800	2,79
	5	13500	3,84
	6	19000	5,40

Honeywell			
capacities based on $t_o = -10^{\circ}\text{C}$, $t_c = 40^{\circ}\text{C}$, subcooling 1K			
Types	Types	Capacities in W	Capacities in TR
TMV	0,3	567	0,16
TMVX	0,5 - 0,7	1078 - 1475	0,30 - 0,42
TMVBL	1,0	2155	0,61
TMVXBL	1,5	3459	0,98
TMVL	2,0	4367	1,24
TMVLX	2,5	6295	1,79
	3,0	10095	2,87
	3,5	13271	3,78
	4,5	18488	5,26
	4,75	24387	6,94

Danfoss			
capacities based on $t_o = -30^\circ\text{C}$, $t_c = 40^\circ\text{C}$, subcooling 4K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TS 2			
TES 2	0X	370	0,11
	00	700	0,20
	01	1200	0,34
	02	1700	0,48
	03	3070	0,87
	04	4500	1,28
	05	5700	1,62
	06	6970	1,98

Honeywell			
capacities based on $t_o = -30^\circ\text{C}$, $t_c = 40^\circ\text{C}$, subcooling 4K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3	215	0,06
TMVX	0,5	407	0,12
TMVBL	0,7	581	0,17
TMVXBL	1,0	843	0,24
TMVL	1,5	1337	0,38
TMVLX	2,0	1686	0,48
	2,5 – 3,0	2442 – 3896	0,69 – 1,11
	3,5	5117	1,46
	4,5	7152	2,04
	4,5	7152	2,04
	4,75	9420	2,68

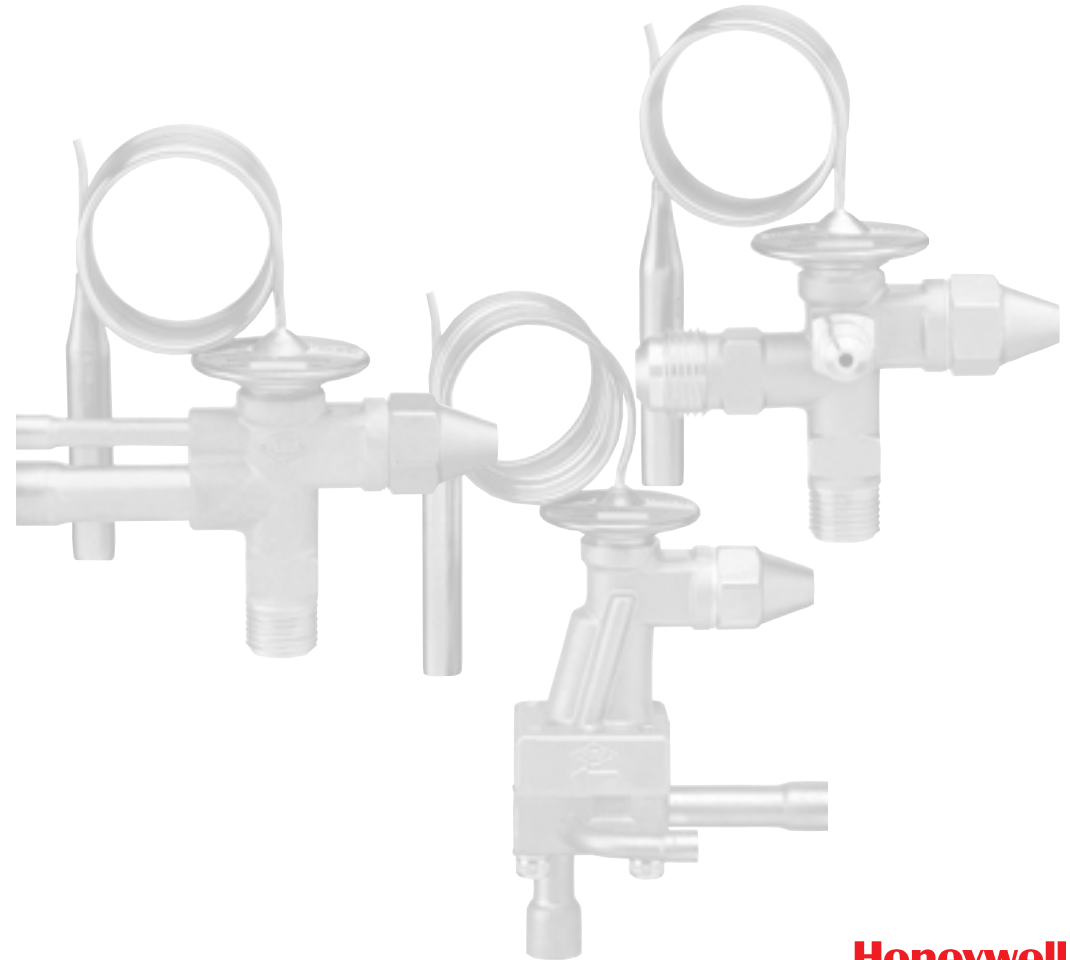
Alco			
capacities based on $t_o = +4^\circ\text{C}$, $t_c = 38^\circ\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TI-SW	00	400	0,11
TIE-SW			
TIS-SW	0	1000	0,28
TISE-SW	1	2300	0,65
	2	3900	1,11
	3	6200	1,76
	4	10100	2,87
	5	12300	3,49
	6	14200	4,03

Honeywell			
capacities based on $t_o = +4^\circ\text{C}$, $t_c = 38^\circ\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3	361	0,10
TMVX	0,5	682	0,19
TMVBL	0,7	974	0,28
TMVXBL	1,0	1413	0,40
TMVL	1,5	2241	0,64
TMVLX	2,0	2826	0,80
	2,5	4093	1,16
	3,0	6529	1,86
	3,5	8575	2,44
	4,5	11985	3,41
	4,5	11985	3,41
	4,75	15785	4,49

Sporlan			
capacities based on $t_o = -10^\circ\text{C}$, $t_c = 40^\circ\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
Q-SAE	0	800	0,23
QE-SAE			
Q-ODF	1	2000	0,57
QE-ODF	2	2900	0,83
	3	4100	1,17
	4	6500	1,85
	5	9000	2,56
	6	1200	3,42

Honeywell			
capacities based on $t_o = -10^\circ\text{C}$, $t_c = 40^\circ\text{C}$, subcooling 1K			
Types	Size of cartridge	Capacities in W	Capacities in TR
TMV	0,3	379	0,10
TMVX	0,5	725	0,20
TMVBL	0,7	1004	0,29
TMVXBL	1,0 – 1,5	1451 – 2344	0,41 – 0,67
TMVL	2,0	3013	0,85
TMVLX	2,5	4241	1,20
	3,0	6920	1,97
	3,5	9152	2,60
	4,5	12388	3,52
	4,75	16741	4,76

Please use valve selection disc for exact calculation of valve size.



Honeywell

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