

VALVES CAPACITY DATA

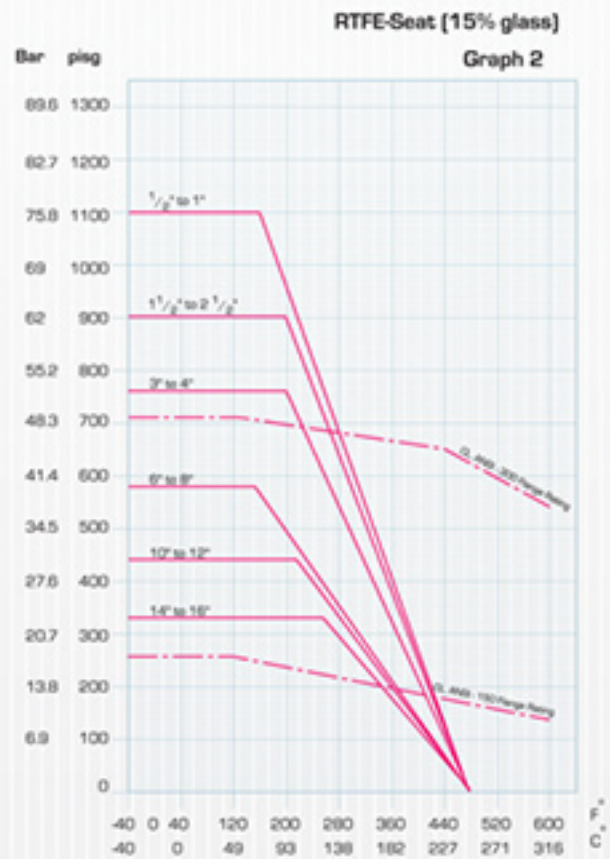
PRESSURE-TEMPERATURE RATING

1/2" to 16" FLANGED BALL VALVES

The Pressure and temperature limits of the various **QVAL** - Valves seat materials are shown below for valve sizes from 1/2" to 16". The body rating is independent of the seat rating and is shown by dotted lines.

1 - Graph 1 for PTFE Seat .

2 - Graph 2 for RTFE Seat (Reinforced glass) .

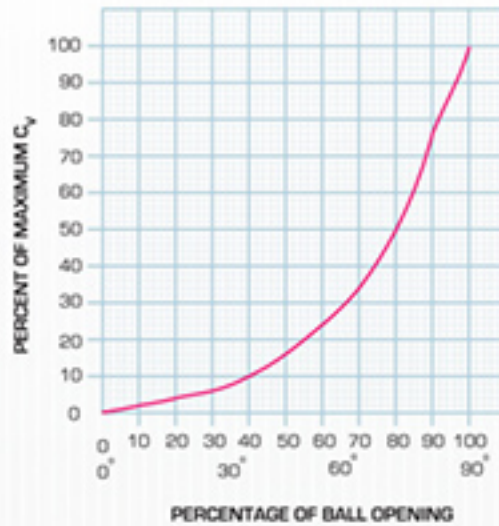


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FLOW CHARACTERISTICS AND SIZE COEFFICIENTS

The chart below and table for full bore and reduced bore are provided to assist in sizing **MV**-Valves for control applications.

Graph 3



VALVE SIZE	Full Bore				VALVE SIZE	Reduced Bore			
	Pressure Classes					Pressure Classes			
	150 lb	300 lb	600 lb	900 lb		150 lb	300 lb	600 lb	900 lb
1/2"	38	33	28	25	2"	111	122	118	128
3/4"	60	52	45	41	3"	186	195	179	188
1"	120	105	90	81	4"	557	542	532	581
1 1/2"	280	257	221	199	6"	807	773	753	769
2"	510	468	407	362	8"	2016	2026	2267	2109
3"	1400	1175	1059	1015	10"	4200	4201	4362	4700
4"	2605	2270	1915	1852	12"	7335	7439	7654	8112
6"	5530	5484	4660	4450	14"	13872	14088	14690	13061
8"	10840	11355	9054	8567	16"	15049	15300	14818	14854
10"	18032	17475	14859	14384					
12"	27176	26367	23209	21580					
14"	33280	31558	28217	27180					
16"	45203	43065	39602	37152					

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Equal percentage flow characteristics, in simple terms,

means that a given percentage change in the valve opening will produce the same percentage change in flow.

Kv indicates the quantity of m³/h of water at 20° C (70° F) which flows through the valve at a pressure drop of one bar.

Cv indicates the quantity of US Gallons per minute of water at 20° C (70° F) which flows through the valve at a pressure drop of one p.s.i. $C_v = K_v \times 1,1688$

BASIC STEM BREAK-OUT TORQUE VALUES FOR FULL BORE BALL VALVES WITH PTFE SEATS IN N.m.

bore Class RATING	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"	14"	16"
150	8	17	23	30	55	60	110	180	475	810	1750	2250	3100	4500
300	10	21	29	40	70	95	165	270	660	1115	2650	3300	3500	5100
600	15	30	41	50	95	133	230	370	910	1550	3100	4100	4500	5900
900	20	43	60	70	138	186	330	540	1320	2230	3800	5000	5400	6700

BASIC STEM BREAK-OUT TORQUE VALUES FOR REDUCED BORE BALL VALVES WITH PTFE SEATS IN N.m.

bore Class RATING	1/2"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"
150	8	17	23	30	50	80	110	180	475	810	1750	2100	3150
300	10	21	29	40	65	105	165	270	660	1115	2650	3100	4200
600	15	30	41	50	90	125	230	370	910	1550	3100	4200	5700
900	20	43	60	70	130	150	330	540	1320	2300	3700	5100	6500