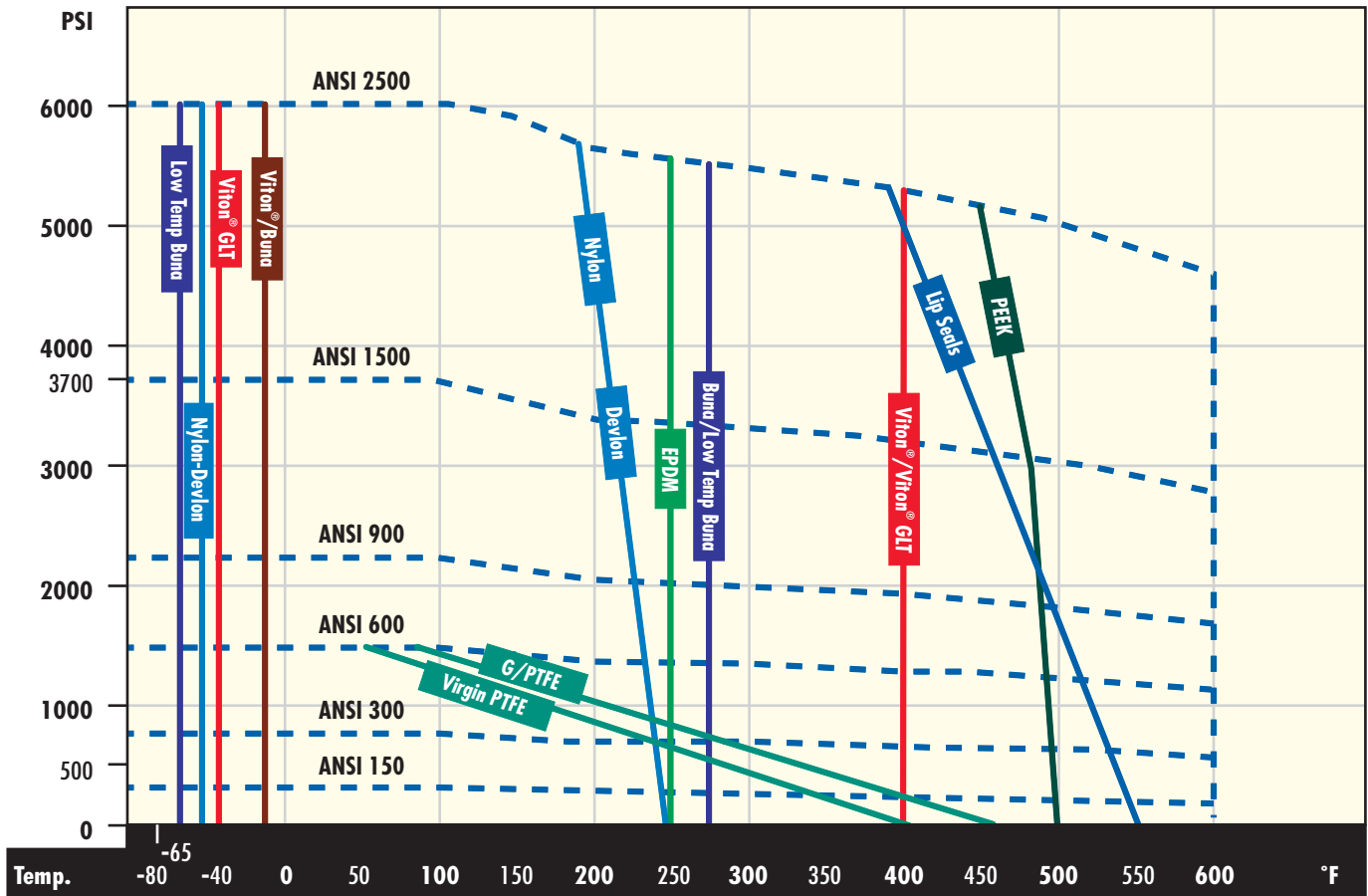


Series 5700/6700 ■ Pressure Temperature Chart

The chart below depicts pressure and temperature ratings for common plastics and elastomers used in PBV® ball valves. Other materials are available upon request.



Ball Valve Stem Torques (in.-lbs.)

To calculate torque at any pressure use the formula located under Class for each valve size.

Example: An 8" Class 600 at 1100 psi = 4471 + (9.1 x 1100) = 14,481 in.-lbs.

Seat	G/PTFE	G/PTFE	G/PTFE	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon
Valve Size	Cl. 150-300 Stem Torque Formula	Cl. 150 Stem Torque	Cl. 300 Stem Torque	Cl. 600 Stem Torque Formula	Cl. 600 Stem Torque	Cl. 900 Stem Torque Formula	Cl. 900 Stem Torque	Cl. 1500 Stem Torque Formula	Cl. 1500 Stem Torque	Cl. 2500 Stem Torque Formula	Cl. 2500 Stem Torque
	MOP (psij)	285	740	MOP (psij)	1480	2220	2220	3705	3705	6170	6170
2	500 + 0.51 * ΔP	650	880	640 + 0.62 * ΔP	1,560	700 + 0.61 * ΔP	2,050	849 + 0.61 * ΔP	3,110	792 + 0.39 * ΔP	3,200
3	1105 + 1.13 * ΔP	1,430	1,940	1333 + 1.47 * ΔP	3,510	1427 + 1.35 * ΔP	4,420	1705 + 1.14 * ΔP	5,930	1510 + 0.84 * ΔP	6,690
4	1540 + 1.99 * ΔP	2,110	3,010	1839 + 2.47 * ΔP	5,490	1985 + 2.26 * ΔP	7,000	2423 + 2.08 * ΔP	10,130	2345 + 1.35 * ΔP	10,670
6	1630 + 3.9 * ΔP	2,740	4,520	2069 + 4.4 * ΔP	8,580	2760 + 4.1 * ΔP	11,860	4612 + 5.1 * ΔP	23,510	5442 + 4.2 * ΔP	31,360
8	3600 + 8.0 * ΔP	5,880	9,520	4471 + 9.1 * ΔP	17,940	4162 + 7.8 * ΔP	21,480	6588 + 8.4 * ΔP	37,710	8463 + 8.6 * ΔP	61,530
10	4280 + 13 * ΔP	7,990	13,900	5452 + 14 * ΔP	26,170	6094 + 14 * ΔP	37,170	6193 + 16 * ΔP	65,470	10003 + 16 * ΔP	108,720
12	5275 + 20 * ΔP	10,980	20,080	7444 + 22 * ΔP	40,000	6800 + 24 * ΔP	60,080	9558 + 23 * ΔP	94,770	18889 + 24 * ΔP	166,970
14	6600 + 26 * ΔP	14,010	25,840	8624 + 33 * ΔP	57,460	12436 + 37 * ΔP	94,580	15278 + 35 * ΔP	144,950	—	—
16	8660 + 34 * ΔP	18,350	33,820	11074 + 42 * ΔP	73,230	16700 + 55 * ΔP	138,800	—	—	—	—
18	13175 + 56 * ΔP	29,140	54,620	18050 + 68 * ΔP	118,690	—	—	—	—	—	—
20	16860 + 84 * ΔP	40,800	79,020	18659 + 100 * ΔP	166,660	—	—	—	—	—	—
24	22480 + 121 * ΔP	56,970	112,020	30326 + 164 * ΔP	273,050	—	—	—	—	—	—

Torque values are for new valves with clean water.
 No additional safety factors have been added.
 For powered actuators, it is recommended to add an additional 25% minimum.
 For dirty service, add an additional 25% minimum.
 For dry gas service, add 50% minimum.

To prevent stem side loading and eliminate potential stem galling, the following tolerances for mounting actuators are recommended.
 Actuator mounting bracket flanges must be parallel within .010".
 The max allowed runout on the stem coupling bores are .008".