

FLANGE BOLT TORQUE GUIDELINES



Pressure: 150 psi

WEB DATA 10.03-2
July, 2012
Supersedes January, 2011

Nominal Valve Size	Flange Bolting		80 Durometer Rubber Gasket			Compressed Non-asbestos Hard Gasket		
	Number of Bolts	Flange Bolt Size	Recommended Bolt Load	Bolt Torque Non-lubricated	Bolt Torque Lubricated	Recommended Bolt Load	Bolt Torque Non-lubricated	Bolt Torque Lubricated
3	4	5/8 x 11	1,250	31	10	4,500	112	36
4	8	5/8 x 11	1,020	24	8	3,980	94	29
6	8	3/4 x 10	1,580	45	14	4,810	136	42
8	8	3/4 x 10	2,450	69	22	6,860	193	60
10	12	7/8 x 9	2,390	80	26	6,210	209	68
12	12	7/8 x 9	3,500	118	39	9,570	321	105
14	12	1 - 8	3,650	146	46	11,700	468	147
16	16	1 - 8	3,550	142	44	11,300	453	142
18	16	1-1/8 x 7	3,950	181	60	10,600	486	159
20	20	1-1/8 x 7	3,840	177	58	10,000	461	151
24	20	1-1/4 x 7	5,320	272	89	13,000	666	218
30	28	1-1/4 x 7	5,710	292	96	13,000	662	217
36	32	1-1/2 x 6	6,980	445	140	14,900	950	298
42	36	1-1/2 x 6	8,390	535	168	17,700	1,130	354
48	44	1-1/2 x 6	8,820	563	177	17,900	1,140	358
54	44	1-3/4 x 5	12,600	933	293	21,600	1,600	503
60	52	1-3/4 x 5	11,300	847	266	21,700	1,620	507
66	52	1-3/4 x 5	13,800	1,020	321	26,200	1,950	611
72	60	1-3/4 x 5	14,100	1,050	329	26,300	1,950	613
78	64	2 X 4.5	15,300	1,320	433	27,300	2,370	775
84	64	2 X 4.5	17,600	1,530	500	31,100	2,700	882
90	68	2-1/4 X 4.5	18,800	1,800	565	32,100	3,100	963
96	68	2-1/4 X 4.5	21,300	2,000	640	35,900	3,400	1,080
102	72	2-1/2 X 4	22,200	2,400	788	35,000	3,800	1,240
108	72	2-1/2 X 4	24,700	2,700	876	37,900	4,100	1,340
114	76	2-3/4 X 4	25,600	3,100	1,000	36,900	4,400	1,440
120	76	2-3/4 X 4	28,100	3,400	1,100	38,800	4,600	1,510

Note: The Bolt Loads are given in lbs, and the Bolt Torques are given in ft-lbs.
 Minimum torque to achieve gasket seal.