

NPS (in.)	Class 150		Class 300		Class 400		Class 600	
	MinTorque	Max Torque	MinTorque	Max Torque	MinTorque	Max Torque	MinTorque	Max Torque
0.5	15	50	30	45	30	40	30	45
0.75	15	50	30	80	60	80	60	80
1	15	60	30	90	60	80	60	85
1.25	30	60	50	120	60	100	60	120
1.5	30	60	65	200	100	135	100	200
2	60	120	45	120	60	80	60	120
2.5	60	120	65	200	100	135	100	180
3	90	120	90	200	100	175	100	200
3.5	60	120	100	200	160	225	160	320
4	75	120	100	200	160	290	160	320
5	100	200	100	200	160	320	245	490
6	120	200	100	200	160	320	245	490
8	160	200	160	300	245	490	355	710
10	160	320	240	490	355	586	500	940
12	160	320	300	710	500	770	500	900
14	280	490	300	710	500	670	680	1070
16	245	490	420	1000	680	1005	800	1370
18	360	710	420	1000	680	1110	1100	2050
20	360	710	500	1000	800	1185	1100	1880
24	500	1000	650	1600	1500	2140	2000	2940

NPS	Class 900		Class 1500		Class 2500	
	Min Torque	Max Torque	Min Torque	Max Torque	Min Torque	Max Torque
0.5	70	120	70	100	50	100
0.75	70	120	70	100	70	100
1	110	190	110	160	105	160
1.25	110	190	110	160	210	245
1.5	165	290	170	245	290	355
2	110	190	110	160	185	245
2.5	165	290	170	245	255	355
3	125	200	245	355	445	500
4	240	415	400	500	700	800
5	350	585	560	800	1240	1500
6	285	455	520	680	1835	2200
8	480	795	805	1100	1700	2200
10	500	795	1480	2000	2915	4400
12	535	795	1470	2200	4295	5920
14	600	935	2120	3180		
16	895	1285	2935	4400		
18	1520	2335	3950	5920		
20	1720	2570	5150	7720		
24	2950	5135	8335	12500		



Notes:

Torque Values are in ft.-lbs., and assume Alloy Steel Bolts (A193 B7 w/ 2H Nuts) with oil/graphite lubrication.

(Nut factors used on these charts are within .15 to .19)

Flexitallic does not generally recommend a bolt stress above 60,000 PSI

Torque values limit minimum and maximum gasket seating stresses based upon pressure class and certain operating conditions. (i.e: maximum pressure ratings for given pressure class, not hydrotest pressure). Extreme operating conditions such as high temperature may reduce bolt yield strength. Caution should be used in these applications. The above torque values are for general use only. For critical or extreme applications (high temperature/pressure) consult with Flexitallic engineering.

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