



REV 1

11/8/2017



Torque Table for VCS, VCFS (use max value), VCSID, PGE, LineBacker, and Evolution - API 6A 1.13/16" - 21.1/4" NPS													
NPS	2,000			3,000			5,000			10,000			NPS
	Minimum [ft-lb]	Recommended [ft-lb]	Max [ft-lb]	Minimum [ft-lb]	Recommended [ft-lb]	Max [ft-lb]	Minimum [ft-lb]	Recommended [ft-lb]	Max [ft-lb]	Minimum [ft-lb]	Recommended [ft-lb]	Max [ft-lb]	
1 13/16	65	95	101	N/A	N/A	N/A	N/A	N/A	N/A	60	95	160	1 13/16
2 1/16	40	55	90	95	150	245	95	150	245	70	95	160	2 1/16
2 9/16	70	95	160	135	230	380	135	230	380	115	155	255	2 9/16
3 1/16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	175	230	380	3 1/16
3 1/8	75	95	160	100	150	245	205	335	560	N/A	N/A	N/A	3 1/8
4 1/16	125	155	255	200	335	560	305	470	785	285	335	560	4 1/16
5 1/8	185	230	380	290	470	785	525	840	1400	295	335	560	5 1/8
7 1/16	170	230	380	235	335	560	450	640	1038	730	840	1400	7 1/16
9	260	335	560	445	640	1065	795	1085	1805	795	840	1400	9
11	325	470	785	465	640	1065	1285	1700	2830	1335	1370	2280	11
13 5/8	325	470	785	495	640	1065	N/A	N/A	N/A	1700	1705	2830	13 5/8
16 3/4	570	840	1400	850	1085	1805	N/A	N/A	N/A	1905	1910	2830	16 3/4
17 3/4	700	1085	1805	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17 3/4
18 3/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3055	3060	5005	18 3/4
20 3/4	N/A	N/A	N/A	1610	2080	3465	N/A	N/A	N/A	N/A	N/A	N/A	20 3/4
21 1/4	715	1085	1805	N/A	N/A	N/A	N/A	N/A	N/A	4290	4295	6945	21 1/4

Torque Table for VCS, VCFS (use max value), VCSID, PGE, LineBacker, and Evolution -
API 6A 1.13/16" - 21.1/4" NPS

Notes:

- 1) The max recommended values is not an absolute max values for the products relevant to this table. The absolute max value for these products could exceed the maximum allowable limits of the other components in bolted flange assemblies therefore GPT has chosen not to display this information. (Please contact the factory for additional information)
- 2) All values have been calculated assuming a 0.11 Coefficient of Friction and new nuts and bolt. If using non-lubricated, dry, bolts increase torque by 15%. If using PTFE or Xylon coated studs use Recommended values.
- 3) "M" - Maintenance Factor = 0, "Y" - Minimum Design Seating Stress = 7500 [psi]
values are specific to GPT isolating gasket including: VCS, VCFS, VCSID, PGE, and LineBacker. Y=0 psi for Evolution. M&Y
- 4) The above "Max" torque value is based on the use of bolts with a yield strength of 100,000 [psi]
- 5) The minimum values are based on flange design codes calling for minimum seating stress(Y value). Sometimes minimum seating stress is inadequate to seat the gasket because the bolting and flange rigidity are insufficient to effect a proper seal. Care should be taken to ensure that flange conditions provide a suitable seating surface.