

## Bolt Torque Values - FLUOROLON™ (Sheet Ring Gaskets / Raised Face Flanges)

Sheet Ring Gaskets on ASME B16.5 Raised Face Flanges with ASTM A193 Gr. B7 Bolts / A194 Gr. 2H Nuts  
 Applicable Products: Fluorolon 7545

Sheet Ring Gaskets on ASME B16.5 Raised Face Flange - Class 150						
Flange Size (in.)	1/16" THK		1/8" THK		No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)		
	Fluorolon 7545		Fluorolon 7545			
1/2	7	29	9	29	4	1/2
3/4	10	43	14	43	4	1/2
1	13	56	18	56	4	1/2
1-1/4	21	66	27	66	4	1/2
1-1/2	27	66	36	66	4	1/2
2	55	132	73	132	4	5/8
2-1/2	64	132	85	132	4	5/8
3	94	132	125	132	4	5/8
3-1/2	52	132	70	132	8	5/8
4	67	132	89	132	8	5/8
5	100	238	133	238	8	3/4
6	126	238	167	238	8	3/4
8	170	238	227	238	8	3/4
10	161	385	215	385	12	7/8
12	215	385	286	385	12	7/8
14	267	578	356	578	12	1
16	254	578	339	578	16	1
18	388	859	517	859	16	1-1/8
20	342	859	456	859	20	1-1/8
24	491	1219	654	1219	20	1-1/4

Sheet Ring Gaskets on ASME B16.5 Raised Face Flange - Class 300						
Flange Size (in.)	1/16" THK		1/8" THK		No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)		
	Fluorolon 7545		Fluorolon 7545			
1/2	11	29	13	29	4	1/2
3/4	19	53	23	53	4	5/8
1	25	70	30	70	4	5/8
1-1/4	39	107	46	107	4	5/8
1-1/2	62	171	73	171	4	3/4
2	41	114	49	114	8	5/8
2-1/2	58	160	68	160	8	3/4
3	84	235	100	235	8	3/4
3-1/2	94	238	112	238	8	3/4
4	120	238	142	238	8	3/4
5	149	238	177	238	8	3/4
6	126	238	149	238	12	3/4
8	198	385	235	385	12	7/8
10	208	577	246	577	16	1
12	310	859	368	859	16	1-1/8
14	271	752	321	752	20	1-1/8
16	381	1058	452	1058	20	1-1/4
18	431	1197	511	1197	24	1-1/4
20	475	1219	563	1219	24	1-1/4
24	736	2044	872	2044	24	1-1/2

**NOTES:** 1) The design bolt stress used for calculation is based on 60% of bolt yield at room temperature. 2) Assuming new, non-coated and well lubricated bolts and nuts are used with through-hardened washers. K factor of 0.20 was used in the calculation per ASME PCC-1. Multiply torque values by a factor of "K / 0.20" if using a lubricant with a different K factor. 3) Assuming maximum internal pressure follows ASME B16.5 Pressure-Temperature rating tables. 4) Assuming ASME PCC-1 bolting pattern is followed. 5) Flange imperfections, rotation and deflection are ignored. 6) Bolt torque values in above Tables are for reference only. User is responsible for applying appropriate bolt loads to properly seat the gasket.

## Bolt Torque Values - FLUOROLON™ (Full Face Gaskets / Flat Face Flanges)

Full Face Gaskets on ASME B16.5 Flat Face Flanges with ASTM A193 Gr. B7 Bolts / A194 Gr. 2H Nuts  
 Applicable Products: Fluorolon 7545

Full Face Gaskets on ASME B16.5 Flat Face Flange - Class 150						
Flange Size (in.)	1/16" THK		1/8" THK		No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)		
	Fluorolon 7545		Fluorolon 7545			
1/2	11	66	12	66	4	1/2
3/4	13	66	14	66	4	1/2
1	15	66	16	66	4	1/2
1-1/4	17	66	19	66	4	1/2
1-1/2	19	66	21	66	4	1/2
2	31	132	37	132	4	5/8
2-1/2	41	132	49	132	4	5/8
3	46	132	55	132	4	5/8
3-1/2	29	132	35	132	8	5/8
4	32	132	38	132	8	5/8
5	46	238	54	238	8	3/4
6	55	238	64	238	8	3/4
8	81	238	92	238	8	3/4
10	86	385	97	385	12	7/8
12	119	385	134	385	12	7/8
14	166	578	185	578	12	1
16	154	578	171	578	16	1
18	193	859	213	859	16	1-1/8
20	185	859	203	859	20	1-1/8
24	274	1219	299	1219	20	1-1/4

Full Face Gaskets on ASME B16.5 Flat Face Flange - Class 300						
Flange Size (in.)	1/16" THK		1/8" THK		No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)		
	Fluorolon 7545		Fluorolon 7545			
1/2	27	66	34	66	4	1/2
3/4	50	132	62	132	4	5/8
1	55	132	68	132	4	5/8
1-1/4	63	132	77	132	4	5/8
1-1/2	100	238	123	238	4	3/4
2	46	132	56	132	8	5/8
2-1/2	73	238	88	238	8	3/4
3	86	238	103	238	8	3/4
3-1/2	101	238	120	238	8	3/4
4	123	238	146	238	8	3/4
5	146	238	171	238	8	3/4
6	123	238	143	238	12	3/4
8	202	385	231	385	12	7/8
10	230	578	261	578	16	1
12	350	859	393	859	16	1-1/8
14	350	859	392	859	20	1-1/8
16	472	1219	526	1219	20	1-1/4
18	470	1219	520	1219	24	1-1/4
20	553	1219	609	1219	24	1-1/4
24	912	2213	998	2213	24	1-1/2

**NOTES:** 1) The design bolt stress used for calculation is based on 60% of bolt yield at room temperature. 2) Assuming new, non-coated and well lubricated bolts and nuts are used with through-hardened washers. K factor of 0.20 was used in the calculation per ASME PCC-1. Multiply torque values by a factor of "K / 0.20" if using a lubricant with a different K factor. 3) Assuming maximum internal pressure follows ASME B16.5 Pressure-Temperature rating tables. 4) Assuming ASME PCC-1 bolting pattern is followed. 5) Flange imperfections, rotation and deflection are ignored. 6) Bolt torque values in above Tables are for reference only. User is responsible for applying appropriate bolt loads to properly seat the gasket.

## Bolt Torque Values - FLUOROLON™ (Sheet Ring Gaskets / FRP Flat Face Flanges)

Sheet Ring Gaskets on FRP Flat Face Flanges with ASTM A193 Gr. B7 Bolts / A194 Gr. 2H Nuts  
 Applicable Products: Fluorolon 7545

Sheet Ring Gaskets on FRP Flat Face Flange - Class 150 Bolting Pattern						
Flange Size (in.)	1/16" THK		1/8" THK		No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)		
	Fluorolon 7545		Fluorolon 7545			
1/2	4	19	4	19	4	1/2
3/4	5	19	5	19	4	1/2
1	6	19	6	19	4	1/2
1-1/4	7	19	8	19	4	1/2
1-1/2	9	19	10	19	4	1/2
2	15	38	18	38	4	5/8
2-1/2	20	38	24	38	4	5/8
3	23	38	28	38	4	5/8
3-1/2	16	38	19	38	8	5/8
4	19	38	22	38	8	5/8
5	27	68	32	68	8	3/4
6	34	68	39	68	8	3/4
8	52	68	59	68	8	3/4
10	58	110	65	110	12	7/8
12	84	110	93	110	12	7/8
14	116	165	128	165	12	1
16	112	165	123	165	16	1
18	141	246	153	246	16	1-1/8
20	136	246	148	246	20	1-1/8
24	209	348	225	348	20	1-1/4

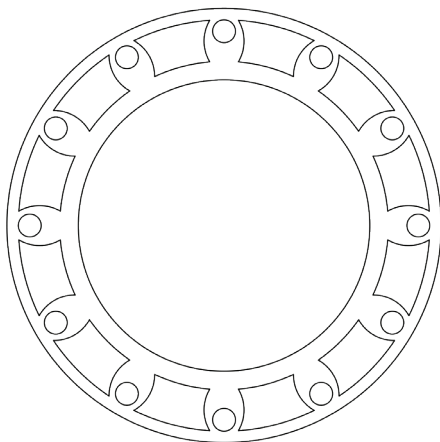
**NOTES:** 1) The design bolt stress used for calculation is based on 60% of bolt yield at room temperature. 2) Assuming new, non-coated and well lubricated bolts and nuts are used with through-hardened washers. K factor of 0.20 was used in the calculation per ASME PCC-1. Multiply torque values by a factor of "K / 0.20" if using a lubricant with a different K factor. 3) Assuming maximum internal pressure of 100 psi. 4) Assuming ASME PCC-1 bolting pattern is followed. 5) Flange imperfections, rotation, deflection, and flange strength are not considered in the calculation. 6) Bolt torque values in above Tables are for reference only. User is responsible for applying appropriate bolt loads to properly seat the gasket.

## Bolt Torque Values - FLUOROLON™ (KC Multi Gaskets / FRP Flat Face Flanges)

KC Multi Gaskets on FRP Flat Face Flanges with ASTM A193 Gr. B8 Class 1 (or Similar Low Strength) Bolts / A194 Gr. 8 Nuts  
 Applicable Products: Fluorolon 7545

KC Multi Gaskets on FRP Flat Face Flange - Class 150 Bolting Pattern						
Flange Size (in.)	1/16" THK		1/8" THK		No. of Bolts	Bolt Size (in.)
	MIN Torque (ft.-lbs.)	MAX Torque (ft.-lbs.)	MIN Torque (ft.-lbs.)	MAX Torque (ft.-lbs.)		
	Fluorolon 7545		Fluorolon 7545			
1/2	11	19	12	19	4	1/2
3/4	13	19	14	19	4	5/8
1	15	19	16	19	4	5/8
1-1/4	17	19	19	19	4	5/8
1-1/2	19	19	19	19	4	3/4
2	31	38	37	38	8	5/8
2-1/2	38	38	38	38	8	3/4
3	38	38	38	38	8	3/4
3-1/2	29	38	35	38	8	3/4
4	32	38	38	38	8	3/4
5	46	68	54	68	8	3/4
6	55	68	64	68	12	3/4
8	68	68	68	68	12	7/8
10	86	110	97	110	16	1
12	110	110	110	110	16	1-1/8
14	165	165	165	165	20	1-1/8
16	154	165	165	165	20	1-1/4
18	193	246	213	246	24	1-1/4
20	185	246	203	246	24	1-1/4
24	274	348	299	348	24	1-1/2

**NOTES:** 1) The design bolt stress used for calculation is based on 60% of bolt yield at room temperature. 2) Assuming new, non-coated and well lubricated bolts (ASTM A193 Gr. B8 Class 1 or similar low strength) and nuts are used with through-hardened washers. K factor of 0.20 was used in the calculation per ASME PCC-1. Multiply torque values by a factor of "K / 0.20" if using a lubricant with a different K factor. 3) Assuming maximum internal pressure of 100 psi. 4) Assuming ASME PCC-1 bolting pattern is followed. 5) Flange imperfections, rotation, deflection, and flange strength are not considered in the calculation. 6) Bolt torque values in above Tables are for reference only. User is responsible for applying appropriate bolt loads to properly seat the gasket.



## Bolt Torque Values - FLUOROLON™ (Full Face Gaskets / FRP Flat Face Flanges)

Full Face Gaskets on FRP Flat Face Flanges with ASTM A193 Gr. B8 Class 1 (or Similar Low Strength) Bolts / A194 Gr. 8 Nuts  
 Applicable Products: Fluorolon 7545

Full Face Gaskets on FRP Flat Face Flange - Class 150 Bolting Pattern						
Flange Size (in.)	1/16" THK		1/8" THK		No. of Bolts	Bolt Size (in.)
	MIN Torque. (ft-lbs.)	MAX Torque (ft-lbs.)	MIN Torque (ft-lbs.)	MAX Torque (ft-lbs.)		
	Fluorolon 7545		Fluorolon 7545			
1/2	11	66	12	66	4	1/2
3/4	13	66	14	66	4	5/8
1	15	66	16	66	4	5/8
1-1/4	17	66	19	66	4	5/8
1-1/2	19	66	21	66	4	3/4
2	31	132	37	132	8	5/8
2-1/2	41	132	49	132	8	3/4
3	46	132	55	132	8	3/4
3-1/2	29	132	35	132	8	3/4
4	32	132	38	132	8	3/4
5	46	238	54	238	8	3/4
6	55	238	64	238	12	3/4
8	81	238	92	238	12	7/8
10	86	385	97	385	16	1
12	119	385	134	385	16	1-1/8
14	166	578	185	578	20	1-1/8
16	154	578	171	578	20	1-1/4
18	193	859	213	859	24	1-1/4
20	185	859	203	859	24	1-1/4
24	274	1219	299	1219	24	1-1/2

**NOTES:** 1) The design bolt stress used for calculation is based on 60% of bolt yield at room temperature. 2) Assuming new, non-coated and well lubricated bolts (ASTM A193 Gr. B8 Class 1 or similar low strength) and nuts are used with through-hardened washers. K factor of 0.20 was used in the calculation per ASME PCC-1. Multiply torque values by a factor of "K / 0.20" if using a lubricant with a different K factor. 3) Assuming maximum internal pressure of 100 psi. 4) Assuming ASME PCC-1 bolting pattern is followed. 5) Flange imperfections, rotation, deflection, and flange strength are not considered in the calculation. 6) Bolt torque values in above Tables are for reference only. User is responsible for applying appropriate bolt loads to properly seat the gasket.