

Bolt Torque Values - ELASTOMERS (Ring Gaskets / Raised Face Flanges)

Elastomeric Ring Gaskets on ASME B16.5 Raised Face Flanges. Applicable Products: EPDM, Aflas®, Viton®, NBR, Natural Rubber.

Elastomeric Ring Gaskets on ASME B16.5 Raised Face Flanges - Class 150						
Flange Size (in.)	1/16" and 1/8" THK			No. of Bolts	Bolt Size (in.)	
	MIN Torque (ft-lbs.)		MAX Torque (ft-lbs.)			
	Elastomeric <75A Duro	Elastomeric ≥75A Duro	Elastomeric <75A Duro			Elastomeric ≥75A Duro
1/2	1		2	2	4	1/2
3/4	2		3	3	4	1/2
1	2		3	4	4	1/2
1-1/4	3		5	7	4	1/2
1-1/2	5		7	9	4	1/2
2	9		14	18	4	5/8
2-1/2	11		16	21	4	5/8
3	16		23	31	4	5/8
3-1/2	9		13	17	8	5/8
4	11		17	22	8	5/8
5	17		25	33	8	3/4
6	21		31	42	8	3/4
8	28		42	57	8	3/4
10	27		40	54	12	7/8
12	36		54	72	12	7/8
14	45		67	89	12	1
16	42		64	85	16	1
18	65		97	129	16	1-1/8
20	57		85	114	20	1-1/8
24	82		123	164	20	1-1/4

NOTES: 1) 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. 2) The pressure and temperature rating of elastomeric material varies by type. 3) Assuming ASME PCC-1 bolting pattern is followed. 4) 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 - ELASTOMERS (Ring Gaskets / Raised Face Flanges)

Elastomeric Ring Gaskets on ASME B16.5 Raised Face Flanges. Applicable Products: EPDM, Aflas®, Viton®, NBR, Natural Rubber.

Elastomeric Ring Gaskets on ASME B16.5 Raised Face Flanges - Class 300					
Flange Size (in.)	1/16" and 1/8" THK			No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)		MAX Torque (ft-lbs.)		
	Elastomeric <75A Duro	Elastomeric ≥75A Duro	Elastomeric <75A Duro		
1/2	1		2	4	1/2
3/4	2		3	4	5/8
1	3		4	4	5/8
1-1/4	4		6	4	5/8
1-1/2	7		10	4	3/4
2	5		7	8	5/8
2-1/2	6		10	8	3/4
3	9		14	8	3/4
3-1/2	10		16	8	3/4
4	13		20	8	3/4
5	17		25	8	3/4
6	14		21	12	3/4
8	22		33	12	7/8
10	23		35	16	1
12	34		52	16	1-1/8
14	30		45	20	1-1/8
16	42		64	20	1-1/4
18	48		72	24	1-1/4
20	53		79	24	1-1/4
24	82		123	24	1-1/2

NOTES: 1) 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. 2) The pressure and temperature rating of elastomeric material varies by type. 3) Assuming ASME PCC-1 bolting pattern is followed. 4) 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 - ELASTOMERS (Full Face Gaskets / Flat Face Flanges)

Elastomeric Full Face Gaskets on ASME B16.5 Flat Face Flanges. Applicable Products: EPDM, Aflas®, Viton®, NBR, Natural Rubber.

Elastomeric Full Face Gaskets on ASME B16.5 Flat Face Flanges - Class 150					
Flange Size (in.)	1/16" and 1/8" THK			No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)		MAX Torque (ft-lbs.)		
	Elastomeric <75A Duro	Elastomeric ≥75A Duro	Elastomeric <75A Duro		
1/2	11	17	23	4	1/2
3/4	14	21	27	4	1/2
1	16	24	32	4	1/2
1-1/4	18	27	36	4	1/2
1-1/2	21	31	42	4	1/2
2	37	56	74	4	5/8
2-1/2	50	75	100	4	5/8
3	54	81	108	4	5/8
3-1/2	35	52	69	8	5/8
4	37	56	75	8	5/8
5	51	76	102	8	3/4
6	57	85	114	8	3/4
8	79	119	159	8	3/4
10	80	121	161	12	7/8
12	114	170	227	12	7/8
14	160	241	321	12	1
16	145	218	291	16	1
18	166	249	332	16	1-1/8
20	157	236	315	20	1-1/8
24	220	330	440	20	1-1/4

NOTES: 1) 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. 2) The pressure and temperature rating of elastomeric material varies by type. 3) Assuming ASME PCC-1 bolting pattern is followed. 4) 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 - ELASTOMERS (Full Face Gaskets / Flat Face Flanges)

Elastomeric Full Face Gaskets on ASME B16.5 Flat Face Flanges. Applicable Products: EPDM, Aflas®, Viton®, NBR, Natural Rubber.

Elastomeric Full Face Gaskets on ASME B16.5 Flat Face Flanges - Class 300					
Flange Size (in.)	1/16" and 1/8" THK			No. of Bolts	Bolt Size (in.)
	MIN Torque (ft-lbs.)		MAX Torque (ft-lbs.)		
	Elastomeric <75A Duro	Elastomeric ≥75A Duro	Elastomeric <75A Duro		
1/2	13	20	26	4	1/2
3/4	25	37	50	4	5/8
1	27	41	54	4	5/8
1-1/4	30	46	61	4	5/8
1-1/2	50	75	100	4	3/4
2	22	34	45	8	5/8
2-1/2	35	53	71	8	3/4
3	41	62	82	8	3/4
3-1/2	48	72	96	8	3/4
4	59	88	117	8	3/4
5	66	99	133	8	3/4
6	55	83	110	12	3/4
8	86	129	173	12	7/8
10	94	140	187	16	1
12	142	213	285	16	1-1/8
14	147	221	294	20	1-1/8
16	194	290	387	20	1-1/4
18	188	282	376	24	1-1/4
20	217	325	434	24	1-1/4
24	353	530	707	24	1-1/2

NOTES: 1) 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. 2) The pressure and temperature rating of elastomeric material varies by type. 3) Assuming ASME PCC-1 bolting pattern is followed. 4) 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.