

**ANSI Flanges B16.5**  
**Number and size of Studs and Ring Gaskets**

Primary Service Pressure Rating	Bolting	Flange Facing	NOMINAL PIPE SIZE																				
			1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20	24	
150 Pound	Number		4	4	4	4	4	4	4	4	4	8	8	8	8	8	12	12	12	16	18	20	20
	Diameter		1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	3/4	3/4	3/4	7/8	7/8	1	1	1 1/8	1 1/8	1 1/4	1 1/4
	Length of Stud Bolts	1/16 RF	2 1/2	2 1/2	2 3/4	2 3/4	3	3 1/4	3 1/2	3 3/4	3 3/4	3 3/4	3 3/4	4	4	4 1/4	4 3/4	4 3/4	5 1/4	5 1/2	6	6 1/4	7
		RTJ	—	—	3 1/4	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/2	4 1/2	4 1/2	5 1/4	5 1/4	5 3/4	6	6 1/2	6 3/4	7 1/2
Ring Size	R	—	—	15	17	19	22	25	29	33	36	40	43	48	52	56	59	64	68	72	76	76	
300 Pound	Number		4	4	4	4	4	8	8	8	8	8	8	12	12	16	16	20	20	24	24	24	
	Diameter		1/2	5/8	5/8	5/8	3/4	5/8	3/4	3/4	3/4	3/4	3/4	3/4	7/8	1	1 1/8	1 1/8	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2
	Length of Stud Bolts	1/16 RF	2 3/4	3	3 1/4	3 1/4	3 3/4	3 1/2	4	4 1/4	4 1/2	4 1/2	4 3/4	5	5 1/2	6 1/4	6 3/4	7	7 1/2	7 3/4	8 1/4	9 1/4	9 1/4
		RTJ	3 1/4	3 1/2	3 3/4	3 3/4	4 1/4	4 1/4	4 3/4	5	5 1/4	5 1/4	5 1/2	5 3/4	6 1/4	7	7 1/2	7 3/4	8 1/4	8 1/2	9	10 1/4	10 1/4
Ring Size	R	11	13	16	18	20	23	26	31	34	37	41	45	49	53	57	61	65	69	73	77	77	
	RX	—	—	—	—	20	23	26	31	34	37	41	45	49	53	57	61	65	69	73	77	77	
400 Pound	Number		4	4	4	4	4	8	8	8	8	8	8	12	12	16	16	20	20	24	24	24	
	Diameter		1/2	5/8	5/8	5/8	3/4	5/8	3/4	3/4	7/8	7/8	7/8	7/8	1	1 1/8	1 1/4	1 1/4	1 3/8	1 3/8	1 1/2	1 3/4	1 3/4
	Length of Stud Bolts	1/4 RF	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/4	4 3/4	5	5 1/2	5 1/2	5 3/4	6	6 3/4	7 1/2	8	8 1/4	8 3/4	9	9 3/4	10 3/4	10 3/4
		RTJ	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/2	5	5 1/4	5 3/4	5 3/4	6	6 1/4	7	7 3/4	8 1/4	8 1/2	9	9 1/4	10	11 1/4	11 1/4
Ring Size	R	11	13	16	18	20	23	26	31	34	37	41	45	49	53	57	61	65	69	73	77	77	
	RX	—	—	—	—	20	23	26	31	34	37	41	45	49	53	57	61	65	69	73	77	77	
600 Pound	Number		4	4	4	4	4	8	8	8	8	8	8	12	12	16	20	20	20	20	24	24	
	Diameter		1/2	5/8	5/8	5/8	3/4	5/8	3/4	3/4	7/8	7/8	1	1	1 1/8	1 1/4	1 1/4	1 3/8	1 1/2	1 5/8	1 5/8	1 7/8	
	Length of Stud Bolts	1/4 RF	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/4	4 3/4	5	5 1/2	5 3/4	6 1/2	6 3/4	7 3/4	8 1/2	8 3/4	9 1/4	10	10 3/4	11 1/2	13	13
		RTJ	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/2	5	5 1/4	5 3/4	6	6 3/4	7	8	8 3/4	9	9 1/2	10 1/4	11	11 3/4	13 1/2	13 1/2
Ring Size	R	11	13	16	18	20	23	26	31	34	37	41	45	49	53	57	61	65	69	73	77	77	
	RX	—	—	—	—	20	23	26	31	34	37	41	45	49	53	57	61	65	69	73	77	77	
900 Pound	Number		4	4	4	4	4	8	8	8	—	8	8	12	12	16	20	20	20	20	20	20	
	Diameter		3/4	3/4	7/8	7/8	1	7/8	1	7/8	—	1 1/8	1 1/4	1 1/8	1 3/8	1 3/8	1 3/8	1 1/2	1 5/8	1 7/8	2	2 1/2	
	Length of Stud Bolts	1/4 RF	4 1/4	4 1/2	5	5	5 1/2	5 3/4	6 1/4	5 3/4	—	6 3/4	7 1/2	7 3/4	8 3/4	9 1/4	10	10 3/4	11 1/4	13	13 3/4	17 1/4	17 1/4
		RTJ	4 1/4	4 1/2	5	5	5 1/2	6	6 1/2	6	—	7	7 3/4	7 3/4	9	9 1/2	10 1/4	11 1/4	11 3/4	13 1/2	14 1/4	18	18
Ring Size	R	12	14	16	18	20	24	27	31	—	37	41	45	49	53	57	62	66	70	74	78	78	
	RX	—	—	—	—	20	24	27	31	—	37	41	45	49	53	57	62	66	70	74	78	78	
1500 Pound	Number		4	4	4	4	4	8	8	8	—	8	8	8	12	12	12	16	16	16	16	16	
	Diameter		3/4	3/4	7/8	—	1	7/8	1	1 1/8	—	1 1/4	1 1/2	1 3/8	1 5/8	1 7/8	2	2 1/4	2 1/2	2 3/4	3	3 1/2	
	Length of Stud Bolts	1/4 RF	4 1/4	4 1/2	5	5	5 1/2	5 3/4	6 1/4	7	—	7 3/4	9 3/4	10 1/4	11 1/2	13 1/2	15	16 1/4	17 3/4	19 1/2	21 1/4	24 1/4	24 1/4
		RTJ	4 1/4	4 1/2	5	5	5 1/2	6	6 1/2	7 1/4	—	8	10	10 1/2	12	13 3/4	15 1/2	17	18 3/4	20 1/2	22 1/2	25 1/2	25 1/2
Ring Size	R	12	14	16	18	20	24	27	35	—	39	44	46	50	54	58	63	67	71	75	79	79	
	RX	—	—	—	—	20	24	27	35	—	39	44	46	50	54	58	63	67	71	75	79	79	
2500 Pound	Number		4	4	4	4	4	8	8	8	—	8	8	8	12	12	12	—	—	—	—	—	
	Diameter		3/4	3/4	7/8	1	1 1/8	1	1 1/8	1 1/4	—	1 1/2	1 3/4	2	2	2 1/2	2 3/4	—	—	—	—	—	
	Length of Stud Bolts	1/4 RF	5	5	5 1/2	6	6 3/4	7	7 3/4	8 3/4	—	10	11 3/4	13 3/4	15 1/4	19 1/2	21 1/4	—	—	—	—	—	
		RTJ	5	5	5 1/2	6 1/4	7	7 1/4	8	9	—	10 1/2	12 1/2	14 1/4	15 3/4	20 1/4	22 1/4	—	—	—	—	—	
Ring Size	R	13	16	18	21	23	26	28	32	—	38	42	47	51	55	60	—	—	—	—	—		
	RX	—	—	—	21	23	26	28	32	—	38	42	47	51	55	60	—	—	—	—	—		