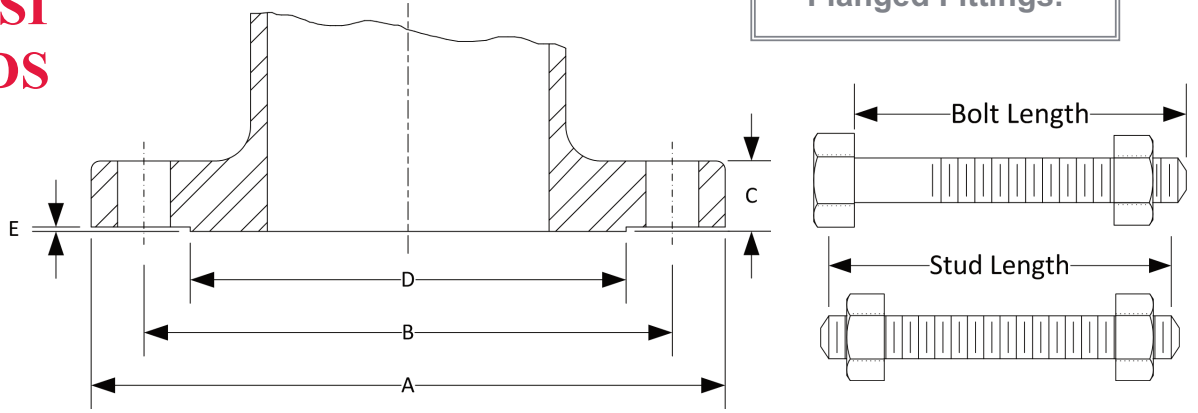




Flange, Bolt Holes, and Bolting Dimensions for Flanged Fittings.

ASME / ANSI STANDARDS



Cast Iron Flanges

125 lb.	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Flange Dia. A	--	--	4-1/4	4-5/8	5	6	7	7-1/2	9	10	11	13-1/2	16	19	21	23-1/2	25	27-1/2
Bolt Circle Dia. B	--	--	3-1/8	3-1/2	3-7/8	4-3/4	5-1/2	6	7-1/2	8-1/2	9-1/2	11-3/4	14-1/4	17	18-3/4	21-1/4	22-3/4	25
Flange Thk. C	--	--	7/16	1/2	6/16	5/8	11/16	3/4	15/16	15/16	1	1-1/8	1-3/16	1-1/4	1-3/8	1-7/16	1-9/16	1-11/16
No. Bolts	--	--	4	4	4	4	4	4	8	8	8	8	12	12	12	16	16	20
Bolt Dia.	--	--	1/2	1/2	1/2	5/8	5/8	5/8	5/8	3/4	3/4	3/4	3/4	7/8	7/8	1	1	1-1/8
Bolt Length	--	--	1-3/4	2	2	2-1/4	2-1/2	2-1/2	3	3	3-1/4	3-1/2	3-3/4	3-3/4	4-1/4	4-1/2	4-3/4	5

250 lb.	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Flange Dia. A	--	--	4-7/8	5-1/4	6-1/8	6-1/2	7-1/2	8-1/4	10	11	12-1/2	15	17-1/2	20-1/2	23	25-1/2	28	30-1/2
Bolt Circle Dia. B	--	--	3-1/2	3-7/8	4-1/2	5	5-7/8	6-5/8	7-7/8	9-1/4	10-5/8	13	15-1/4	17-3/4	20-1/4	22-1/2	24-3/4	27
Flange Thk.* C	--	--	11/16	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-7/16	1-5/8	1-7/8	2	2-1/8	2-1/4	2-3/8	2-1/2
Raised Face Dia. D	--	--	2-11/16	3-1/16	3-9/16	4-3/16	4-15/16	5-11/16	6-15/16	8-5/16	9-11/16	11-15/16	14-1/16	16-7/16	18-15/16	21-1/16	23-5/16	25-9/16
No. Bolts	--	--	4	4	4	8	8	8	8	8	12	12	16	16	20	20	24	24
Bolt Dia.	--	--	5/8	5/8	3/4	5/8	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
Bolt Length	--	--	2-1/2	2-1/2	2-3/4	2-3/4	3-1/4	3-1/2	3-3/4	4	4	4-1/2	5-1/4	5-1/2	6	6-1/4	6-1/2	6-3/4

Bronze Flanges

150 lb.	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Flange Dia. A	3-1/2	3-7/8	4-1/4	4-5/8	5	6	7	7-1/2	9	10	11	13-1/2	16	19	--	--	--	--
Bolt Circle Dia. B	2-3/8	2-3/4	3-1/8	3-1/2	3-7/8	4-3/4	5-1/2	6	7-1/2	8-1/2	9-1/2	11-3/4	14-1/4	17	--	--	--	--
Flange Thk. C	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8	11/16	3/4	13/16	15/16	1	1-1/16	--	--	--	--
No. Bolts	4	4	4	4	4	4	4	4	8	8	8	8	8	12	12	--	--	--
Bolt Dia.	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	3/4	3/4	3/4	7/8	7/8	--	--	--	--
Bolt Length	1-3/4	1-3/4	1-3/4	2	2	2-1/4	2-1/2	2-1/2	3	3	3-1/4	3-1/2	3-3/4	3-3/4	--	--	--	--

300 lb.	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Flange Dia. A	3-3/4	4-5/8	4-7/8	5-1/4	6-1/8	6-1/2	7-1/2	8-1/4	10	11	12-1/2	15	--	--	--	--	--	--
Bolt Circle Dia. B	2-5/8	3-1/4	3-1/2	3-7/8	4-1/2	5	5-7/8	6-5/8	7-7/8	9-1/4	10-5/8	13	--	--	--	--	--	--
Flange Thk.* C	1/2	17/32	19/32	5/8	11/16	3/4	13/16	29/32	1-1/16	1-1/8	1-3/16	1-3/8	--	--	--	--	--	--
No. Bolts	4	4	4	4	4	8	8	8	8	8	12	12	--	--	--	--	--	--
Bolt Dia.	1/2	5/8	5/8	5/8	3/4	5/8	3/4	3/4	3/4	3/4	3/4	7/8	--	--	--	--	--	--
Bolt Length	2	2	2-1/2	2-1/2	2-3/4	2-3/4	3-1/4	3-1/2	3-1/2	4	4	4-1/2	--	--	--	--	--	--

Steel Flanges

150 lb.	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Flange Dia. A	3-1/2	3-7/8	4-1/4	4-5/8	5	6	7	7-1/2	9	10	11	13-1/2	16	19	21	23-1/2	25	27-1/2
Bolt Circle Dia. B	2-3/8	2-3/4	3-1/8	3-1/2	3-7/8	4-3/4	5-1/2	6	7-1/2	8-1/2	9-1/2	11-3/4	14-1/4	17	18-3/4	21-1/4	22-3/4	25
Flange Thk.* C	7/16	7/16	7/16	1/2	9/16	5/8	11/16	3/4	15/16	15/16	1	1-1/8	1-3/16	1-1/4	1-3/8	1-7/16	1-9/16	1-11/16
Raised Face Dia. D	1-3/8	1-11/16	2	2-1/2	2-7/8	3-5/8	4-1/8	5	6-3/16	7-5/16	8-1/2	10-5/8	12-3/4	15	16-1/4	18-1/2	21	23
No. Bolts	4	4	4	4	4	4	4	4	8	8	8	8	12	12	16	16	20	20
Bolt Dia.	1/2	1/2	1/2	1/2	1/2	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
Bolt Length	2	2	2-1/4	2-1/4	2-1/2	2-3/4	3	3	3	3-1/4	3-1/4	3-1/2	4	4	4-1/2	4-1/2	5	5-1/2
Stud Length	2-1/4	2-1/2	2-1/2	2-3/4	2-3/4	3-1/4	3-1/2	3-1/2	3-1/2	3-3/4	4	4-1/4	4-1/2	4-3/4	5-1/4	5-1/4	5-3/4	6-1/4

300 lb.	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Flange Dia. A	3-3/4	4-5/8	4-7/8	5-1/4	6-1/8	6-1/2	7-1/2	8-1/4	10	11	12-1/2	15	17-1/2	20-1/2	23	25-1/2	28	30-1/2
Bolt Circle Dia. B	2-5/8	3-1/4	3-1/2	3-7/8	4-1/2	5	5-7/8	6-5/8	7-7/8	9-1/4	10-5/8	13	15-1/4	17-3/4	20-1/4	22-1/2	24-3/4	27
Flange Thk.* C	9/16	5/8	11/16	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-7/16	1-5/8	1-7/8	2	2-1/8	2-1/4	2-3/8	2-1/2
Raised Face Dia. D	1-3/8	1-11/16	2	2-1/2	2-7/8	3-5/8	4-1/8	5	6-3/16	7-5/16	8-1/2	10-5/8	12-3/4	15	16-1/4	18-1/2	21	23
No. Bolts	4	4	4	4	4	8	8	8	8	8	12	12	16	16	20	20	24	24
Bolt Dia.	1/2	5/8	5/8	5/8	3/4	5/8	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
Bolt Length	2-1/4	2-1/2	2-1/2	2-3/4	3	3	3-1/4	3-1/2	3-3/4	4-1/4	4-1/4	4-3/4	5-1/2	5-3/4	6-1/4	6-1/2	6-3/4	7-1/4
Stud Length	2-1/2	3	3	3-1/4	3-1/2	3-1/2	4	4-1/4	4-1/2	4-3/4	4-3/4	5-1/2	6-1/4	6-3/4	7	7-1/2	7-3/4	8

600 lb.	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Flange Dia. A	3-3/4	4-5/8	4-7/8	5-1/4	6-1/8	6-1/2	7-1/2	8-1/4	10-3/4	13	14	16-1/2	20	22	23-3/4	27	29-1/4	32
Bolt Circle Dia. B	2-5/8	3-1/4	3-1/2	3-7/8	4-1/2	5	5-7/8	6-5/8	8-1/2	10-1/2	11-1/2	13-3/4	17	19-1/4	20-3/4	23-3/4	25-3/4	28-1/2
Flange Thk.* C	9/16	5/8	11/16	13/16	7/8	1	1-1/8	1-1/4	1-1/2	1-3/4	1-7/8	2-3/16	2-1/2	2-5/8	2-3/4	3	3-1/4	3-1/2
Raised Face Dia. D	1-3/8	1-11/16	2	2-1/2	2-7/8	3-5/8	4-1/8	5	6-3/16	7-5/16	8-1/2	10-5/8	12-3/4	15	16-1/4	18-1/2	21	23
No. Bolts	4	4	4	4	4	8	8	8	8	8	12	12	16	20	20	24	24	24
Bolt Dia.	1/2	5/8	5/8	5/8	3/4	5/8	3/4	3/4	3/4	7/8	1	1	1-1/8	1-1/4	1-1/4	1-3/8	1-1/2	1-5/8
Bolt Length	2-1/4	2-1/2	2-1/2	2-3/4	3	3	3-1/4	3-1/2	3-3/4	4-1/4	4-1/4	4-3/4	5-1/2	5-3/4	6-1/4	6-1/2	6-3/4	7-1/4
Stud Length	2-1/2	3	3	3-1/4	3-1/2	3-1/2	4	4-1/4	4-1/2	4-3/4	4-3/4	5-1/2	6-1/4	6-3/4	7	7-1/2	7-3/4	8

*Flange thickness (dimension C) includes a 1/16 inch high face (dimension E).
 †Flange thickness (dimension C) does not include a 1/4 inch high face (dimension E).