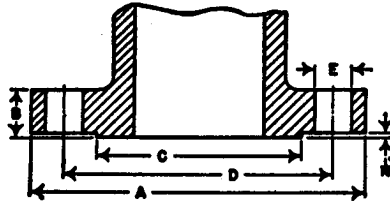
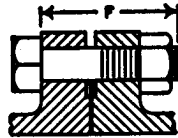


## Cast Iron Flange Dimensions and Drilling Templates

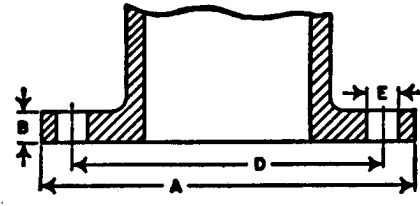
### ANSI B16.1



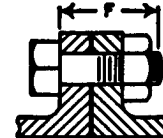
250 Lb Cast Iron



Length of Machine Bolt



125 Lb Cast Iron



Length of Machine Bolt

### 125 Lb Cast Iron Flanges

#### Dimensions in Inches

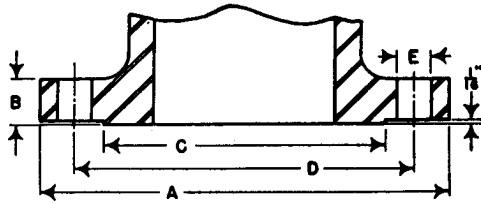
Nominal Pipe Size	Flanges		Drilling		Bolting		Length of Machine Bolts F
	Flange Diameter A	Flange Thickness B	Diameter of Bolt Circle D	Diameter of Bolt Holes E	Number of Bolts	Diameter of Bolts	
1	4 1/4	7/16	3 3/8	5/8	4	1/2	1 3/4
1 1/4	4 3/8	1/2	3 1/2	5/8	4	1/2	2
1 1/2	5	9/16	3 7/8	5/8	4	1/2	2
2	6	5/8	4 3/4	3/4	4	5/8	2 1/4
2 1/2	7	1 1/16	5 1/2	3/4	4	5/8	2 1/2
3	7 1/2	3/4	6	3/4	4	5/8	2 1/2
4	9	15/16	7 1/2	3/4	8	5/8	3
5	10	1 1/16	8 1/2	7/8	8	3/4	3
6	11	1	9 1/2	7/8	8	3/4	3 1/4
8	13 1/2	1 1/8	11 3/4	7/8	8	3/4	3 1/2
10	16	1 1/16	14 1/4	1	12	7/8	3 3/4
12	19	1 1/4	17	1	12	7/8	3 3/4
14	21	1 3/8	18 3/4	1 1/8	12	1	4 1/4
16	23 1/2	1 7/16	21 1/4	1 1/8	16	1	4 1/2
18	25	1 1/16	22 3/4	1 1/4	16	1 1/8	4 3/4
20	27 1/2	1 11/16	25	1 1/4	20	1 1/8	5
24	32	1 7/8	29 1/2	1 3/8	20	1 1/4	5 1/2
30	38 3/4	2 1/8	36	1 3/8	28	1 1/4	6 1/4
36	46	2 3/8	42 3/4	1 5/8	32	1 1/2	7

### 250 Lb Cast Iron Flanges

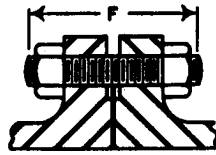
#### Dimensions in Inches

Nominal Pipe Size	Flanges			Drilling		Bolting		Length of Machine Bolts F
	Flange Diameter A	Flange Thickness B	Diameter of Raised Face C	Diameter of Bolt Circle D	Diameter of Bolt Holes E	Number of Bolts	Diameter of Bolts	
1	4 7/8	1 1/16	2 11/16	3 1/2	3/4	4	5/8	2 1/2
1 1/4	5 1/4	3/4	3 1/16	3 7/8	3/4	4	5/8	2 1/2
1 1/2	6 1/8	13/16	3 3/16	4 1/2	7/8	4	3/4	2 3/4
2	6 1/2	7/8	4 3/16	5	3/4	8	5/8	2 3/4
2 1/2	7 1/2	1	4 15/16	5 5/8	7/8	8	3/4	3 1/4
3	8 1/4	1 1/8	5 11/16	6 5/8	7/8	8	3/4	3 1/2
4	10	1 1/4	6 15/16	7 7/8	7/8	8	3/4	3 3/4
5	11	1 3/8	8 5/16	9 1/4	7/8	8	3/4	4
6	12 1/2	1 7/16	9 11/16	10 5/8	7/8	12	3/4	4
8	15	1 5/8	11 15/16	13	1	12	7/8	4 1/2
10	17 1/2	1 7/8	14 1/16	15 1/4	1 1/8	16	1	5 1/4
12	20 1/2	2	16 7/16	17 3/4	1 1/4	16	1 1/8	5 1/2
14	23	2 1/8	18 3/16	20 1/4	1 1/4	20	1 1/8	6
16	25 1/2	2 1/4	21 1/16	22 1/2	1 3/8	20	1 1/4	6 1/4
18	28	2 3/8	23 3/16	24 3/4	1 3/8	24	1 1/4	6 1/2
20	30 1/2	2 1/2	25 1/16	27	1 3/8	24	1 1/4	6 3/4
24	36	2 3/4	30 1/16	32	1 5/8	24	1 1/2	7 1/2

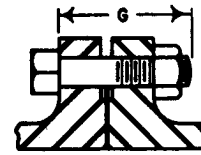
## Steel Flange Dimensions and Drilling Templates 150 and 300 Lb—ANSI B16.5



150 and 300 Lb Steel



Length of Stud Bolt



Length of Machine Bolt

$\frac{1}{16}$ -Inch Raised Face Joint

### 150 PSI (Gage) Primary Service Pressure Rating

### Dimensions in Inches

Nominal Pipe Size	Flange Diameter A	Flange Thickness—Companion Flange B	Valve Flange B	Diameter of Raised Face C	Diameter of Bolt Circle D	Diameter of Bolt Holes E	Number of Bolts	Diameter of Bolts	Length of Stud Bolts with 2 Nuts F	Length of Machine Bolts G
1/2	3 1/2	7/16	...	1 3/8	2 3/8	5/8	4	1/2	2 1/4	1 3/4
3/4	3 7/8	1/2	...	1 11/16	2 3/4	5/8	4	1/2	2 1/4	2
1	4 1/4	9/16	7/16	2	3 1/8	5/8	4	1/2	2 1/2	2
1 1/4	4 7/8	5/8	1/2	2 1/2	3 1/2	5/8	4	1/2	2 1/2	2 1/4
1 1/2	5	11/16	9/16	2 7/8	3 3/8	5/8	4	1/2	2 3/4	2 1/4
2	6	3/4	5/8	3 5/8	4 1/4	3/4	4	5/8	3	2 3/4
2 1/2	7	7/8	1 1/16	4 1/8	5 1/2	3/4	4	5/8	3 1/4	3
3	7 1/2	15/16	3/4	5	6	3/4	4	5/8	3 1/2	3
3 1/2	8 1/2	1 1/16	13/16	5 1/2	7	3/4	8	5/8	3 1/2	3
4	9	1 1/8	1 1/8	6 1/16	7 1/2	3/4	8	5/8	3 1/2	3
5	10	1 1/8	1 1/8	7 5/16	8 1/2	7/8	8	3/4	3 3/4	3 1/4
6	11	1 1/8	1 1/8	8 1/2	9 1/2	7/8	8	3/4	3 3/4	3 1/4
8	13 1/2	1 1/8	1 1/8	10 3/8	11 3/4	7/8	8	3/4	4	3 1/2
10	16	1 3/16	1 3/16	12 3/4	14 1/4	1	12	7/8	4 1/2	3 3/4
12	19	1 1/2	1 1/2	15	17	1	12	7/8	4 1/2	4
14	21	1 3/8	1 3/8	16 1/4	18 3/4	1 1/8	12	1	5	4 1/4
16	23 1/2	1 1/2	1 1/2	18 1/2	21 1/4	1 1/8	16	1	5 1/4	4 1/2
18	25	1 5/8	1 5/8	21	22 3/4	1 1/4	16	1 1/8	5 3/4	4 3/4
20	27 1/2	1 7/8	1 7/8	23	25	1 1/4	20	1 1/8	6	5 1/4
24	32	2	2	27 1/4	29 1/2	1 3/8	20	1 1/4	6 3/4	5 3/4

### 300 PSI (Gage) Primary Service Pressure Rating

### Dimensions in Inches

Nominal Pipe Size	Flange Diameter A	Flange Thickness B	Diameter of Raised Face C	Diameter of Bolt Circle D	Diameter of Bolt Holes E	Number of Bolts	Diameter of Bolts	Length of Stud Bolts with 2 Nuts F	Length of Machine Bolts G
1/2	3 3/4	9/16	1 3/8	2 5/8	5/8	4	1/2	2 1/2	2
3/4	4 5/8	5/8	1 11/16	3 1/4	3/4	4	5/8	2 3/4	2 1/2
1	4 7/8	1 1/16	2	3 1/2	3/4	4	5/8	3	2 1/2
1 1/4	5 1/4	3/4	2 1/2	3 3/8	3/4	4	5/8	3	2 3/4
1 1/2	6 1/8	13/16	2 7/8	4 1/2	7/8	4	3/4	3 1/2	3
2	6 1/2	7/8	3 5/8	5	3/4	8	5/8	3 1/4	3
2 1/2	7 1/2	1	4 1/8	5 5/8	7/8	8	3/4	3 3/4	3 1/4
3	8 1/4	1 1/8	5	6 5/8	7/8	8	3/4	4	3 1/2
3 1/2	9	1 3/16	5 1/2	7 1/4	7/8	8	3/4	4 1/4	3 3/4
4	10	1 1/4	6 3/16	7 7/8	7/8	8	3/4	4 1/4	3 3/4
5	11	1 3/8	7 5/16	9 1/4	7/8	8	3/4	4 1/2	4
6	12 1/2	1 1/2	8 1/2	10 3/8	7/8	12	3/4	4 3/4	4 1/4
8	15	1 5/8	10 3/8	13	1	12	7/8	5 1/4	4 3/4
10	17 1/2	1 7/8	12 3/4	15 1/4	1 1/8	16	1	6	5 1/4
12	20 1/2	2	15	17 3/4	1 1/4	16	1 1/8	6 1/2	5 3/4
14	23	2 1/8	16 1/4	20 1/4	1 1/4	20	1 1/8	6 3/4	6
16	25 1/2	2 1/4	18 1/2	22 1/2	1 3/8	20	1 1/4	7 1/4	6 1/2
18	28	2 3/8	21	24 3/4	1 3/8	24	1 1/4	7 1/2	6 3/4
20	30 1/2	2 1/2	23	27	1 3/8	24	1 1/4	8	7
24	36	2 3/4	27 1/4	32	1 5/8	24	1 1/2	9	7 3/4

