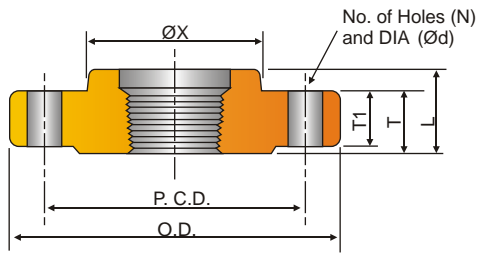
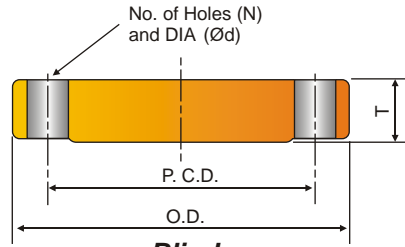




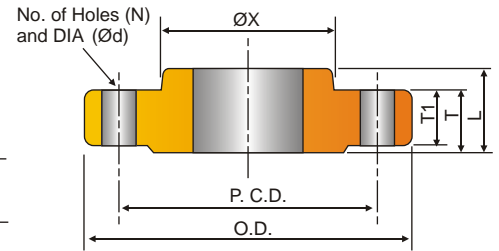
FLANGES



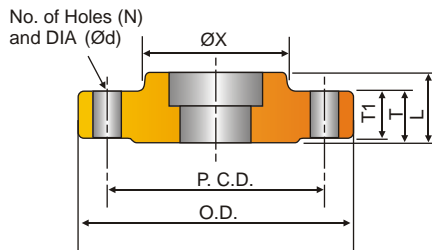
Threaded.
(Fig. 1)



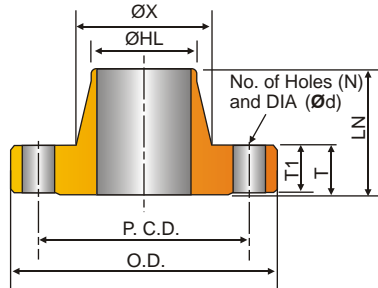
Blind
(Fig. 3)



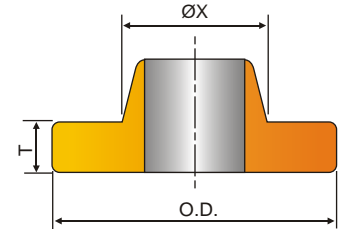
Slip-on-Welding
(Fig. 2)



Socket-Welding (1/2 to 3 only)
(Fig. 4)



Weld Neck Flange
(Fig. 5)



Lapped
(Fig. 6)

*All dimensions are in inches.

6 FLANGES. (THREADED, SLIP-ON WELDING, BLIND, SOCKET WELDING, LAPPED & WELDING NECK)

(6-1.) CLASS 150 FLANGES (AS PER ANSI B16.5)									
SIZE	O.D	T	ØX	P. C. D	N	Ød	L	LN	ØHL
1/2	3.50	0.44	1.19	2.38	4	0.62	0.62	1.88	0.84
3/4	3.88	0.50	1.50	2.75	4	0.62	0.62	2.06	1.05
1	4.25	0.56	1.94	3.12	4	0.62	0.69	2.19	1.32
1 1/4	4.62	0.62	2.31	3.50	4	0.62	0.81	2.25	1.66
1 1/2	5.00	0.69	2.56	3.88	4	0.62	0.88	2.44	1.90
2	6.00	0.75	3.06	4.75	4	0.75	1.00	2.50	2.38
2 1/2	7.00	0.88	3.56	5.50	4	0.75	1.12	2.75	2.88
3	7.50	0.94	4.25	6.00	4	0.75	1.19	2.75	3.50
3 1/2	8.50	0.94	4.81	7.00	8	0.75	1.25	2.81	4.00
4	9.00	0.94	5.31	7.50	8	0.75	1.31	3.00	4.50
5	10.00	0.94	6.44	8.50	8	0.88	1.44	3.50	5.56
6	11.00	1.00	7.56	9.50	8	0.88	1.56	3.50	6.63
8	13.50	1.12	9.69	11.75	8	0.88	1.75	4.00	8.63
10	16.00	1.19	12.00	14.25	12	1.00	1.94	4.00	10.75
12	19.00	1.25	14.38	17.00	12	1.00	2.19	4.50	12.75
14	21.00	1.38	15.75	18.75	12	1.12	2.25	5.00	14.00
16	23.50	1.44	18.00	21.25	16	1.12	2.50	5.00	16.00
18	25.00	1.56	19.88	22.75	16	1.25	2.69	5.50	18.00
20	27.50	1.69	22.00	25.00	20	1.25	2.88	5.69	20.00
24	32.00	1.88	26.12	29.50	20	1.38	3.25	6.00	24.00



FLANGES

6 FLANGES. (THREADED, SLIP-ON WELDING, BLIND, SOCKET WELDING, LAPPED & WELDING NECK)

*All dimensions are in inches.

(6-2.) CLASS 300 FLANGES (AS PER ANSI B16.5)									
SIZE	O.D	T	ØX	P. C.D	N	Ød	L	LN	ØHL
1/2	3.75	0.56	1.50	2.62	4	0.62	0.88	2.06	0.84
3/4	4.62	0.62	1.88	3.25	4	0.75	1.00	2.25	1.05
1	4.88	0.69	2.12	3.50	4	0.75	1.06	2.44	1.32
1 1/4	5.25	0.75	2.50	3.88	4	0.75	1.06	2.56	1.66
1 1/2	6.12	0.81	2.75	4.50	4	0.88	1.19	2.69	1.90
2	6.50	0.88	3.31	5.00	8	0.75	1.31	2.75	2.38
2 1/2	7.50	1.00	3.94	5.88	8	0.88	1.50	3.00	2.88
3	8.25	1.12	4.62	6.62	8	0.88	1.69	3.12	3.50
3 1/2	9.00	1.19	5.25	7.25	8	0.88	1.75	3.19	4.00
4	10.00	1.25	5.75	7.88	8	0.88	1.88	3.38	4.50
5	11.00	1.38	7.00	9.25	8	0.88	2.00	3.88	5.56
6	12.50	1.44	8.12	10.62	12	0.88	2.06	3.88	6.63
8	15.00	1.62	10.25	13.00	12	1.00	2.44	4.38	8.63
10	17.50	1.88	12.62	15.25	16	1.12	2.62	4.62	10.75
12	20.50	2.00	14.75	17.75	16	1.25	2.88	5.12	12.75
14	23.00	2.12	16.75	20.25	20	1.25	3.00	5.62	14.00
16	25.50	2.25	19.00	22.50	20	1.38	3.25	5.75	16.00
18	28.00	2.38	21.00	24.75	24	1.38	3.50	6.25	18.00
20	30.50	2.50	23.12	27.00	24	1.38	3.75	6.38	20.00
24	36.00	2.75	27.62	32.00	24	1.62	4.19	6.62	24.00

6 FLANGES. (THREADED, SLIP-ON WELDING, BLIND, LAPPED & WELDING NECK)

*All dimensions are in inches.

(6-3.) CLASS 400 FLANGES (AS PER ANSI B16.5)									
SIZE	O.D	T	ØX	P. C.D	N	Ød	L	LN	ØHL
1/2	3.75	0.56	1.50	2.62	4	0.62	0.88	2.06	0.84
3/4	4.62	0.62	1.88	3.25	4	0.75	1.00	2.25	1.05
1	4.88	0.69	2.12	3.50	4	0.75	1.06	2.44	1.32
1 1/4	5.25	0.81	2.50	3.88	4	0.75	1.12	2.62	1.66
1 1/2	6.12	0.88	2.75	4.50	4	0.88	1.25	2.75	1.90
2	6.50	1.00	3.31	5.00	8	0.75	1.44	2.88	2.38
2 1/2	7.50	1.12	3.94	5.88	8	0.88	1.62	3.12	2.88
3	8.25	1.25	4.62	6.62	8	0.88	1.81	3.25	3.50
3 1/2	9.00	1.38	5.25	7.25	8	1.00	1.94	3.38	4.00
4	10.00	1.38	5.75	7.88	8	1.00	2.00	3.50	4.50
5	11.00	1.50	7.00	9.25	8	1.00	2.12	4.00	5.56
6	12.50	1.62	8.12	10.62	12	1.00	2.25	4.06	6.63
8	15.00	1.88	10.25	13.00	12	1.12	2.69	4.62	8.63
10	17.50	2.12	12.62	15.25	16	1.25	2.88	4.88	10.75
12	20.50	2.25	14.75	17.75	16	1.38	3.12	5.38	12.75
14	23.00	2.38	16.75	20.25	20	1.38	3.31	5.88	14.00
16	25.50	2.50	19.00	22.50	20	1.50	3.69	6.00	16.00
18	28.00	2.62	21.00	24.75	24	1.50	3.88	6.50	18.00
20	30.50	2.75	23.12	27.00	24	1.62	4.00	6.62	20.00
24	36.00	3.00	27.62	32.00	24	1.88	4.50	6.88	24.00



FLANGES

6 FLANGES. (THREADED, SLIP-ON WELDING, BLIND, SOCKET WELDING, LAPPED & WELDING NECK)

*All dimensions are in inches.

(6-4.) CLASS 600 FLANGES (AS PER ANSI B16.5)									
SIZE	O.D	T	ØX	P. C.D	N	Ød	L	LN	ØHL
1/2	3.75	0.56	1.50	2.62	4	0.62	0.88	2.06	0.84
3/4	4.62	0.62	1.88	3.25	4	0.75	1.00	2.25	1.05
1	4.88	0.69	2.12	3.50	4	0.75	1.06	2.44	1.32
1 1/4	5.25	0.81	2.50	3.88	4	0.75	1.12	2.62	1.66
1 1/2	6.12	0.88	2.75	4.50	4	0.88	1.25	2.75	1.90
2	6.50	1.00	3.31	5.00	8	0.75	1.44	2.88	2.38
2 1/2	7.50	1.12	3.94	5.88	8	0.88	1.62	3.12	2.88
3	8.25	1.25	4.62	6.62	8	0.88	1.81	3.25	3.50
3 1/2	9.00	1.38	5.25	7.25	8	1.00	1.94	3.38	4.00
4	10.75	1.50	6.00	8.50	8	1.00	2.12	4.00	4.50
5	13.00	1.75	7.44	10.50	8	1.12	2.38	4.50	5.56
6	14.00	1.88	8.75	11.50	12	1.12	2.62	4.62	6.63
8	16.50	2.19	10.75	13.75	12	1.25	3.00	5.25	8.63
10	20.00	2.50	13.50	17.00	16	1.38	3.38	6.00	10.75
12	22.00	2.62	15.75	19.25	20	1.38	3.62	6.12	12.75
14	23.75	2.75	17.00	20.75	20	1.50	3.69	6.50	14.00
16	27.00	3.00	19.50	23.75	20	1.62	4.19	7.00	16.00
18	29.25	3.25	21.50	25.75	20	1.75	4.62	7.25	18.00
20	32.00	3.50	24.00	28.50	24	1.75	5.00	7.50	20.00
24	37.00	4.00	28.25	33.00	24	2.00	5.50	8.00	24.00

6 FLANGES. (THREADED, SLIP-ON WELDING, BLIND, LAPPED & WELDING NECK)

*All dimensions are in inches.

(6-5.) CLASS 900 FLANGES (AS PER ANSI B16.5)									
SIZE	O.D	T	ØX	P. C.D	N	Ød	L	LN	ØHL
1/2	4.75	0.88	1.50	3.25	4	0.88	1.25	2.38	0.84
3/4	5.12	1.00	1.75	3.50	4	0.88	1.38	2.75	1.05
1	5.88	1.12	2.06	4.00	4	1.00	1.62	2.88	1.32
1 1/4	6.25	1.12	2.50	4.38	4	1.00	1.62	2.88	1.66
1 1/2	7.00	1.25	2.75	4.88	4	1.12	1.75	3.25	1.90
2	8.50	1.50	4.12	6.50	8	1.00	2.25	4.00	2.38
2 1/2	9.62	1.62	4.88	7.50	8	1.12	2.50	4.12	2.88
3	9.50	1.50	5.00	7.50	8	1.00	2.12	4.00	3.50
4	11.50	1.75	6.25	9.25	8	1.25	2.75	4.50	4.50
5	13.75	2.00	7.50	11.00	8	1.38	3.12	5.00	5.56
6	15.00	2.19	9.25	12.50	12	1.25	3.38	5.50	6.63
8	18.50	2.50	11.75	15.50	12	1.50	4.00	6.38	8.63
10	21.50	2.75	14.50	18.50	16	1.50	4.25	7.25	10.75
12	24.00	3.12	16.50	21.00	20	1.50	4.62	7.88	12.75
14	25.25	3.38	17.75	22.00	20	1.62	5.12	8.38	14.00
16	27.75	3.50	20.00	24.25	20	1.75	5.25	8.50	16.00
18	31.00	4.00	22.25	27.00	20	2.00	6.00	9.00	18.00
20	33.75	4.25	24.50	29.50	20	2.12	6.25	9.75	20.00
24	41.00	5.50	29.50	35.50	20	2.62	8.00	11.50	24.00



FLANGES

6 FLANGES. (THREADED, SLIP-ON WELDING, BLIND, SOCKET WELDING, LAPPED & WELDING NECK)

*All dimensions are in inches.

(6-6.) CLASS 1500 FLANGES (AS PER ANSI B16.5)									
SIZE	O.D	T	ØX	P. C.D	N	Ød	L	LN	ØHL
1/2	4.75	0.88	1.50	3.25	4	0.88	1.25	2.38	0.84
3/4	5.12	1.00	1.75	3.50	4	0.88	1.38	2.75	1.05
1	5.88	1.12	2.06	4.00	4	1.00	1.62	2.88	1.32
1 1/4	6.25	1.12	2.50	4.38	4	1.00	1.62	2.88	1.66
1 1/2	7.00	1.25	2.75	4.88	4	1.12	1.75	3.25	1.90
2	8.50	1.50	4.12	6.50	8	1.00	2.25	4.00	2.38
2 1/2	9.62	1.62	4.88	7.50	8	1.12	2.50	4.12	2.88
3	10.50	1.88	5.25	8.00	8	1.25	2.88	4.62	3.50
4	12.25	2.12	6.38	9.50	8	1.38	3.56	4.88	4.50
5	14.75	2.88	7.75	11.50	8	1.62	4.12	6.12	5.56
6	15.50	3.25	9.00	12.50	12	1.50	4.69	6.75	6.63
8	19.00	3.62	11.50	15.50	12	1.75	5.62	8.38	8.63
10	23.00	4.25	14.50	19.00	12	2.00	6.25	10.00	10.75
12	26.50	4.88	17.75	22.50	16	2.12	7.12	11.12	12.75
14	29.50	5.25	19.50	25.00	16	2.38	-	11.75	14.00
16	32.50	5.75	21.75	27.75	16	2.62	-	12.25	16.00
18	36.00	6.38	23.50	30.50	16	2.88	-	12.88	18.00
20	38.75	7.00	25.25	32.75	16	3.12	-	14.00	20.00
24	46.00	8.00	30.00	39.00	16	3.62	-	16.00	24.00

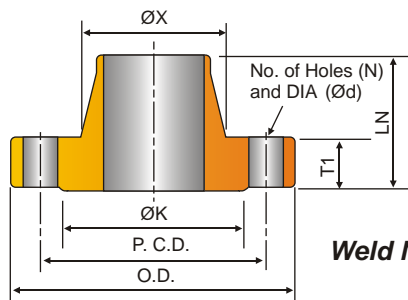
6 FLANGES. (THREADED, BLIND, LAPPED & WELDING NECK)

*All dimensions are in inches.

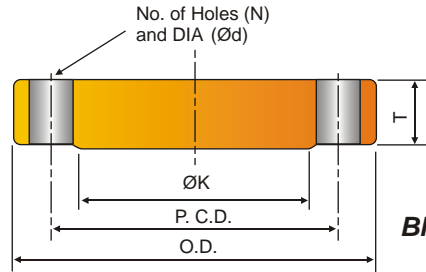
(6-7.) CLASS 2500 FLANGES (AS PER ANSI B16.5)									
SIZE	O.D	T	ØX	P. C.D	N	Ød	L	LN	ØHL
1/2	5.25	1.19	1.69	3.50	4	0.88	1.56	2.88	0.84
3/4	5.50	1.25	2.00	3.75	4	0.88	1.69	3.12	1.05
1	6.25	1.38	2.25	4.25	4	1.00	1.88	3.50	1.32
1 1/4	7.25	1.50	2.88	5.12	4	1.12	2.06	3.75	1.66
1 1/2	8.00	1.75	3.12	5.75	4	1.25	2.38	4.38	1.90
2	9.25	2.00	3.75	6.75	8	1.12	2.75	5.00	2.38
2 1/2	10.50	2.25	4.50	7.75	8	1.25	3.12	5.62	2.88
3	12.00	2.62	5.25	9.00	8	1.38	3.62	6.62	3.50
4	14.00	3.00	6.50	10.75	8	1.62	4.25	7.50	4.50
5	16.50	3.62	8.00	12.75	8	1.88	5.12	9.00	5.56
6	19.00	4.25	9.25	14.50	8	2.12	6.00	10.75	6.63
8	21.75	5.00	12.00	17.25	12	2.12	7.00	12.50	8.63
10	26.50	6.50	14.75	21.25	12	2.62	9.00	16.50	10.75
12	30.00	7.25	17.38	24.38	12	2.88	10.00	18.25	12.75



FLANGES



Weld Neck Flange
(Fig. 1)



Blind Flange
(Fig. 2)

7 FORGED STEEL FLANGES FOR PIPELINE SYSTEM (BLIND & WELDING NECK)

*All dimensions are in inches.

(7-1.) 150 LB. MSS SP-44 FLANGES									
SIZE	O.D.	T	T1	ØK	ØX	P. C.D.	N	Ød	LN
12	19	1 1/4	1 1/4	15	14 3/8	17	12	1	4 1/2
14	21	1 3/8	1 3/8	16 1/4	15 3/4	18 3/4	12	1 1/8	5
16	23 1/2	1 7/16	1 7/16	18 1/2	18	21 1/4	16	1 1/8	5
18	25	1 9/16	1 9/16	21	19 7/8	22 3/4	16	1 1/4	5 1/2
20	27 1/2	1 11/16	1 11/16	23	22	25	20	1 1/4	5 11/16
22	29 1/2	1 13/16	1 13/16	25 1/4	24	27 1/4	20	1 3/8	5 7/8
24	32	1 7/8	1 7/8	27 1/4	26 1/8	29 1/2	20	1 3/8	6
26	34 1/4	2 11/16	2 11/16	29 1/2	26 5/8	31 3/4	24	1 3/8	4 3/4
28	36 1/2	2 13/16	2 13/16	31 1/2	28 5/8	34	28	1 3/8	4 15/16
30	38 3/4	2 15/16	2 15/16	33 3/4	30 3/4	36	28	1 3/8	5 3/8
32	41 3/4	3 3/16	3 3/16	36	32 3/4	38 1/2	28	1 5/8	5 11/16
34	43 3/4	3 1/4	3 1/4	38	34 3/4	40 1/2	32	1 5/8	5 7/8
36	46	3 9/16	3 9/16	40 1/4	36 3/4	42 3/4	32	1 5/8	6 3/16
40	50 3/4	2 3/8	3 1/2	40 3/4	43 3/4	47 1/4	36	1 5/8	6 3/4
42	53	2 5/8	3 3/4	47	44 3/4	49 1/2	36	1 5/8	6 15/16
48	59 1/2	2 3/4	4 1/8	53 1/2	50 3/4	56	44	1 5/8	7 1/4
(7-2.) 300 LB. MSS SP-44 FLANGES									
12	20 1/2	2	2	15	14 3/4	17 3/4	16	1 1/4	5 1/8
14	23	2 1/8	2 1/8	16 1/4	16 3/4	20 1/4	20	1 1/4	5 5/8
16	25 1/2	2 1/4	2 1/4	18 1/2	19	22 1/2	20	1 3/8	5 3/4
18	28	2 3/8	2 3/8	21	21	24 3/4	24	1 3/8	6 1/4
20	30 1/2	2 1/2	2 1/2	23	23 1/8	27	24	1 3/8	6 3/8
22	33	2 5/8	2 5/8	25 1/4	25 1/4	29 1/4	24	1 5/8	6 1/2
24	36	2 3/4	2 3/4	27 1/4	27 5/8	32	24	1 5/8	6 5/8
26	38 1/4	3 1/8	3 5/16	29 1/2	28 3/8	34 1/2	28	1 3/4	7 1/4
28	40 3/4	3 3/8	3 9/16	31 1/2	30 1/2	37	28	1 3/4	7 3/4
30	43	3 5/8	3 3/4	33 3/4	32 9/16	39 1/4	28	1 7/8	8 1/4
32	45 1/4	3 7/8	3 15/16	36	34 11/16	41 1/2	28	2	8 3/4
34	47 1/2	4	4 1/8	38	36 7/8	43 1/2	28	2	9 1/8
36	50	4	4 3/8	40 1/4	39	46	32	2 1/8	9 1/2
40	55	4 1/2	6 5/16	45	43 7/16	50 3/4	36	2 1/8	10 1/2
42	57	4 5/8	6 7/16	47	45 7/16	52 3/4	36	2 1/8	10 7/8
48	63 1/2	5	6 15/16	55	52 1/2	59	36	2 3/8	11 3/4