

ASME B16.5

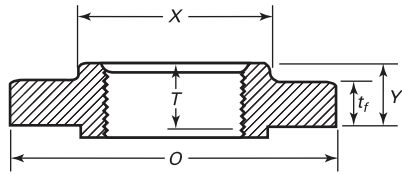


ALL TYPE

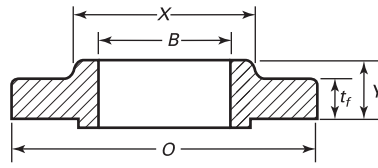
150/300/400/600/900/1500/2500

<https://eliteflange.com>

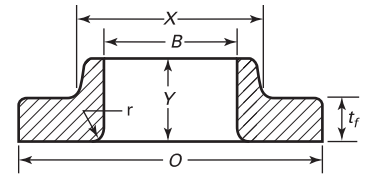
Dimensions of Class 150 Flanges



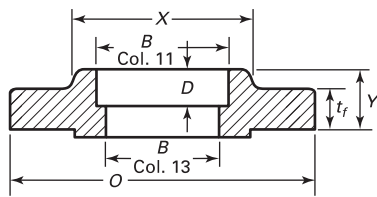
Threaded



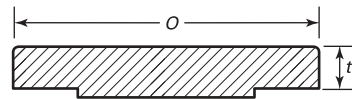
Slip-On Welding



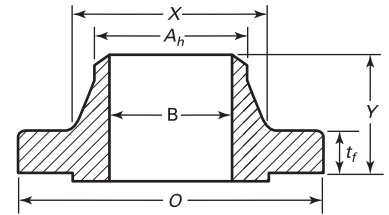
Lapped



Socket Welding (NPS 1/2 to 3 Only)



Blind



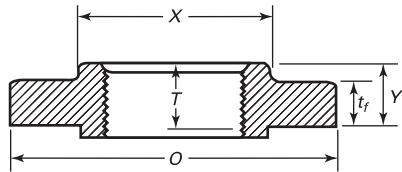
Welding Neck

Nominal Pipe Size, NPS	Outside Diameter of Flange, O	Minimum Thickness of Flange, t_f	Minimum Thickness Lap Joint, t_l	Diameter of Hub, X	Hub Diameter Beginning of Chamfer Welding Neck, A_h	Length Through Hub			Minimum Thread Length Threaded, T	Bore			Corner Bore Radius of Lapped Flange and Pipe, r	Depth of Socket, D
						Threaded/ Slip-on/ Socket Welding, Y	Lapped, Y	Welding Neck, Y		Minimum Slip-on/ Socket Welding, B	Minimum Lapped, B	Welding Neck/ Socket Welding, B		
1/2	89	9.7	11.2	30	21.3	14	16	46	16	22.4	22.9	15.7	3	10
3/4	99	11.2	12.7	38	26.7	14	16	51	16	27.7	28.2	20.8	3	11
1	108	12.7	14.2	49	33.5	16	18	54	18	34.5	35.1	26.7	3	13
1 1/4	117	14.2	15.7	59	42.2	19	21	56	21	43.2	43.7	35.1	5	14
1 1/2	127	15.9	17.5	65	48.3	21	22	60	22	49.5	50.0	40.9	6	16
2	152	17.5	19.0	78	60.5	24	25	62	25	61.9	62.5	52.6	8	18
2 1/2	178	20.6	22.4	90	73.2	27	28	68	28	74.7	75.4	62.7	8	19
3	190	22.4	23.9	108	88.9	28	30	68	30	90.7	91.4	78.0	10	21
3 1/2	216	22.4	23.9	122	101.6	30	32	70	32	103.4	104.1	90.2	10	...
4	229	22.4	23.9	135	114.3	32	33	75	33	116.1	116.8	102.4	11	...
5	254	22.4	23.9	164	141.2	35	37	87	37	143.8	144.5	128.3	11	...
6	279	23.9	25.4	192	168.4	38	40	87	40	170.7	171.4	154.2	13	...
8	343	26.9	28.4	246	219.2	43	44	100	44	221.5	222.2	202.7	13	...
10	406	28.4	30.2	305	273.0	48	49	100	49	276.4	277.4	254.5	13	...
12	483	30.2	31.8	365	323.8	54	56	113	56	327.2	328.2	304.8	13	...
14	553	33.3	35.1	400	355.6	56	79	125	57	359.2	360.2		13	...
16	597	35.1	36.6	457	406.4	62	87	125	64	410.5	411.2		13	...
18	635	38.1	39.6	505	457.2	67	97	138	68	461.8	462.3		13	...
20	698	41.1	42.9	559	508.0	71	103	143	73	513.1	514.4		13	...
22	749	44.4	46.0	610	558.8	78	108	148	...	564.4	565.2		13	...
24	813	46.0	47.8	663	609.6	81	111	151	83	616.0	616.0		13	...

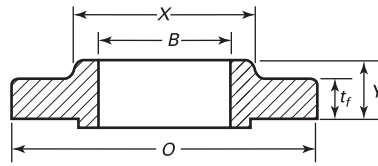
To be specified by the purchaser



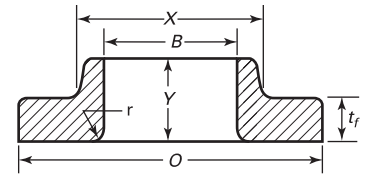
Dimensions of Class 300 Flanges



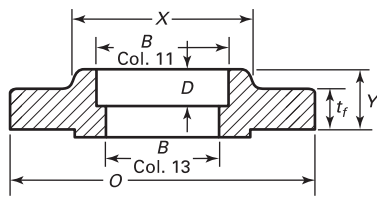
Threaded



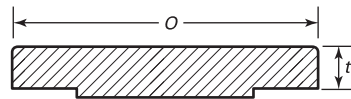
Slip-On Welding



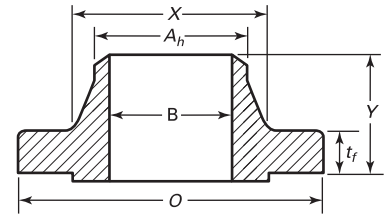
Lapped



Socket Welding (NPS 1/2 to 3 Only)



Blind



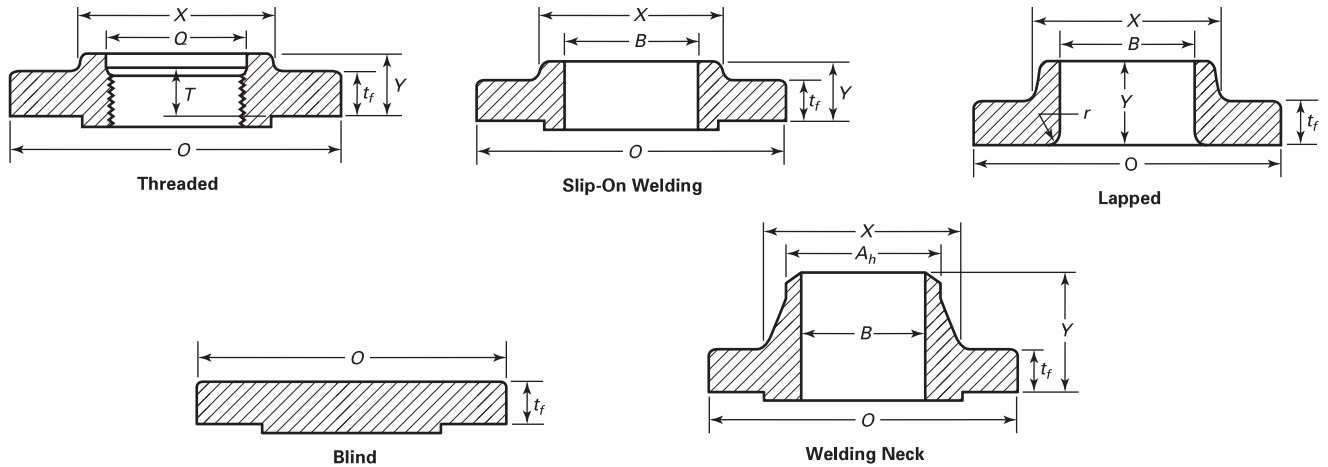
Welding Neck

Nominal Pipe Size NPS	Outside Diameter of Flange, O	Minimum Thickness of Flange, tr	Minimum Thickness Lap Joint, tr	Diameter of Hub, X	Hub Diameter Beginning of Chamfer Welding Neck, Ah	Length Through Hub			Minimum Thread Length Threaded, T	Bore			Corner Radius of Bore of Lapped Flange and Pipe, r	Minimum Counter-bore Threaded Flange, Q	Depth of Socket, D
						Threaded/ Slip-On/ Socket Welding, Y	Lapped, Y	Welding Neck, Y		Minimum Slip-On/ Socket Welding, B	Minimum Lapped, B	Welding Neck/ Socket Welding, B			
1/2	95	12.7	14.2	38	21.3	21	22	51	16	22.4	22.9	15.7	3	23.6	10
3/4	117	14.2	15.7	48	26.7	24	25	56	16	27.7	28.2	20.8	3	29.0	11
1	124	15.7	17.5	54	33.5	25	27	60	18	34.5	35.1	26.7	3	35.8	13
1 1/4	133	17.5	19.0	64	42.2	25	27	64	21	43.2	43.7	35.1	5	44.4	14
1 1/2	155	19.0	20.6	70	48.3	29	30	67	22	49.5	50.0	40.9	6	50.3	16
2	165	20.6	22.4	84	60.5	32	33	68	28	62.0	62.5	52.6	8	63.5	17
2 1/2	190	23.9	25.4	100	73.2	37	38	75	32	74.7	75.4	62.7	8	76.2	19
3	210	26.9	28.4	117	88.9	41	43	78	32	90.7	91.4	78.0	10	92.2	21
3 1/2	229	28.4	30.2	133	101.6	43	44	80	37	103.4	104.1	90.2	10	104.9	...
4	254	30.2	31.8	146	114.3	46	48	84	37	116.1	116.8	102.4	11	117.6	...
5	279	33.3	35.1	178	141.2	49	51	97	43	143.8	144.5	128.3	11	144.5	...
6	318	35.1	36.6	206	168.4	51	52	97	46	170.7	171.4	154.2	13	171.4	...
8	381	39.6	41.1	260	219.2	60	62	110	51	221.5	222.2	202.7	13	222.2	...
10	444	46.0	47.8	321	273.0	65	95	116	56	276.4	277.4	254.5	13	276.4	...
12	521	49.3	50.8	375	323.8	72	102	129	60	327.2	328.2	304.8	13	328.7	...
14	584	52.3	53.8	425	355.6	75	111	141	64	359.2	360.2	...	13	360.4	...
16	648	55.6	57.2	483	406.4	81	121	145	68	410.5	411.2	...	13	411.2	...
18	711	58.7	60.5	533	457.2	87	130	157	70	461.8	462.3	...	13	462.0	...
20	775	62.0	63.5	587	508.0	94	140	161	73	513.1	514.4	...	13	512.8	...
22	838	65.0	66.5	641	558.8	100	145	164	...	564.4	565.2	...	13	...	...
24	914	68.3	68.8	702	609.6	105	152	167	83	616.0	616.0	...	13	614.4	...

To be specified by the purchaser

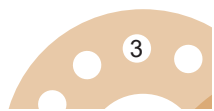


Dimensions of Class 400 Flanges

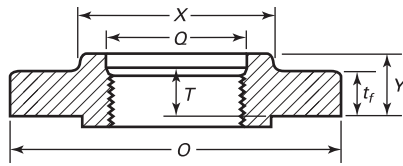


Nom. Pipe Size, NPS	Outside Diam. of Flange, O	Min. Thickness of Flange, t _f	Diam. of Hub, X	Hub Diam. Beginning of Chamfer Welding Neck, A _h	Length Through Hub			Minimum Thread Length Threaded Flange, T	Bore			Corner Bore Radius of Lapped Flange and Pipe, r	Minimum Counterbore Threaded Flange, Q
					Threaded/ Slip-On, Y	Lapped, Y	Welding Neck, Y		Min. Slip-On, B	Min. Lapped, B	Welding Neck, B		
1/2	3.75	0.56	1.50	0.84	0.88	0.88	2.06	0.62	0.88	0.90	0.12	0.93	
3/4	4.62	0.62	1.88	1.05	1.00	1.00	2.25	0.62	1.09	1.11	0.12	1.14	
1	4.88	0.69	2.12	1.32	1.06	1.06	2.44	0.69	1.36	1.38	0.12	1.41	
1 1/4	5.25	0.81	2.50	1.66	1.12	1.12	2.62	0.81	1.70	1.72	0.19	1.75	
1 1/2	6.12	0.88	2.75	1.90	1.25	1.25	2.75	0.88	1.95	1.97	0.25	1.99	
2	6.50	1.00	3.31	2.38	1.44	1.44	2.88	1.12	2.44	2.46	0.31	2.50	
2 1/2	7.50	1.12	3.94	2.88	1.62	1.62	3.12	1.25	2.94	2.97	0.31	3.00	
3	8.25	1.25	4.62	3.50	1.81	1.81	3.25	1.38	3.57	3.60	0.38	3.63	
3 1/2	9.00	1.38	5.25	4.00	1.94	1.94	3.38	1.56	4.07	4.10	0.38	4.13	
4	10.00	1.38	5.75	4.50	2.00	2.00	3.50	1.44	4.57	4.60	0.44	4.63	
5	11.00	1.50	7.00	5.56	2.12	2.12	4.00	1.69	5.66	5.69	0.44	5.69	
6	12.50	1.62	8.12	6.63	2.25	2.25	4.06	1.81	6.72	6.75	0.50	6.75	
8	15.00	1.88	10.25	8.63	2.69	2.69	4.62	2.00	8.72	8.75	0.50	8.75	
10	17.50	2.12	12.62	10.75	2.88	4.00	4.88	2.19	10.88	10.92	0.50	10.88	
12	20.50	2.25	14.75	12.75	3.12	4.25	5.38	2.38	12.88	12.92	0.50	12.94	
14	23.00	2.38	16.75	14.00	3.31	4.62	5.88	2.50	14.14	14.18	0.50	14.19	
16	25.50	2.50	19.00	16.00	3.69	5.00	6.00	2.69	16.16	16.19	0.50	16.19	
18	28.00	2.62	21.00	18.00	3.88	5.38	6.50	2.75	18.18	18.20	0.50	18.19	
20	30.50	2.75	23.12	20.00	4.00	5.75	6.62	2.88	20.20	20.25	0.50	20.19	
22	33.00	2.88	25.25	22.00	4.25	6.00	6.75	...	22.22	22.25	0.50	...	
24	36.00	3.00	27.62	24.00	4.50	6.25	6.88	3.25	24.25	24.25	0.50	24.19	

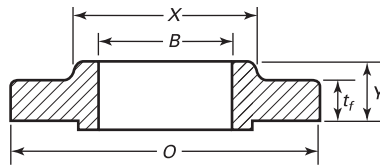
To be specified by the purchaser



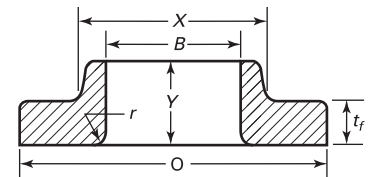
Dimensions of Class 600 Flanges



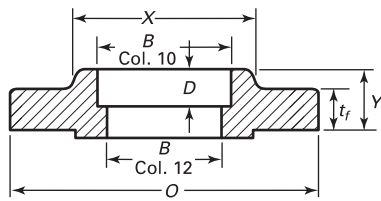
Threaded



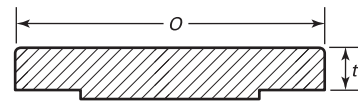
Slip-On Welding



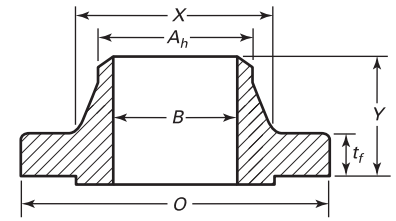
Lapped



Socket Welding (NPS 1/2 to 3 Only)



Blind

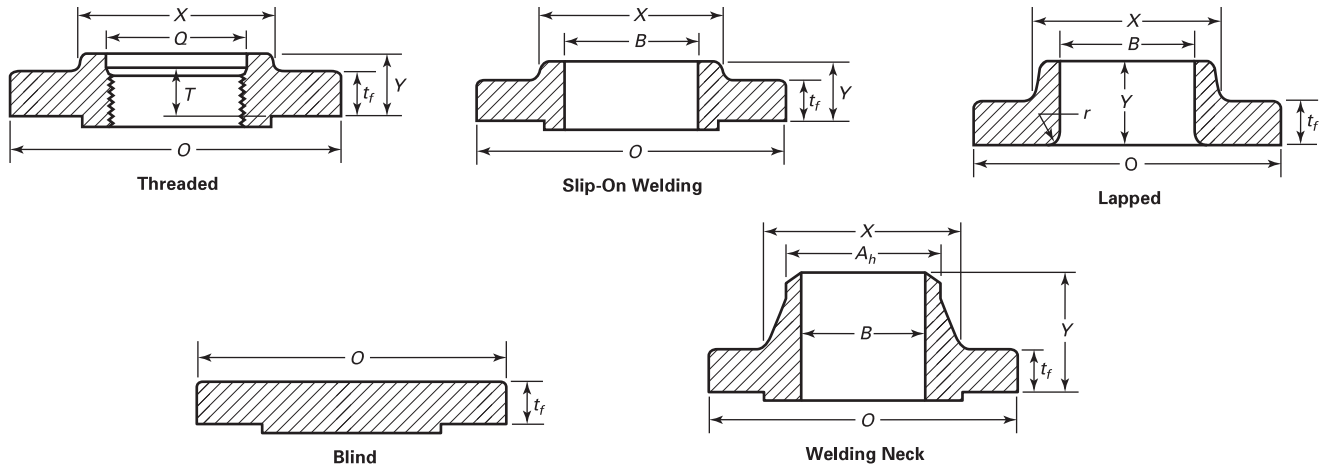


Welding Neck

Nominal Pipe Size	Outside Diameter of Flange, O	Minimum Thickness of Flange, t _f	Diameter of Hub, X	Hub Diameter Beginning of Chamfer Welding Neck, A _h	Length Through Hub			Minimum Thread Length Threaded Flange, T	Bore			Corner Bore Radius of Lapped Flange and Pipe, r	Minimum Counter-bore Threaded Flange, Q	Depth of Socket, D
					Threaded Slip-On Socket Welding, Y	Lapped, Y	Welding Neck, Y		Minimum Slip-On/Socket Welding, B	Minimum Lapped, B	Welding Neck/Socket Welding, B			
1/2	3.75	0.56	1.50	0.84	0.88	0.88	2.06	0.62	0.88	0.90	0.12	0.93	0.38	
3/4	4.62	0.62	1.88	1.05	1.00	1.00	2.25	0.62	1.09	1.11	0.12	1.14	0.44	
1	4.88	0.69	2.12	1.32	1.06	1.06	2.44	0.69	1.36	1.38	0.12	1.41	0.50	
1 1/4	5.25	0.81	2.50	1.66	1.12	1.12	2.62	0.81	1.70	1.72	0.19	1.75	0.56	
1 1/2	6.12	0.88	2.75	1.90	1.25	1.25	2.75	0.88	1.95	1.97	0.25	1.99	0.62	
2	6.50	1.00	3.31	2.38	1.44	1.44	2.88	1.12	2.44	2.46	0.31	2.50	0.69	
2 1/2	7.50	1.12	3.94	2.88	1.62	1.62	3.12	1.25	2.94	2.97	0.31	3.00	0.75	
3	8.25	1.25	4.62	3.50	1.81	1.81	3.25	1.38	3.57	3.60	0.38	3.63	0.81	
3 1/2	9.00	1.38	5.25	4.00	1.94	1.94	3.38	1.56	4.07	4.10	0.38	4.13	...	
4	10.75	1.50	6.00	4.50	2.12	2.12	4.00	1.62	4.57	4.60	0.44	4.63	...	
5	13.00	1.75	7.44	5.56	2.38	2.38	4.50	1.88	5.66	5.69	0.44	5.69	...	
6	14.00	1.88	8.75	6.63	2.62	2.62	4.62	2.00	6.72	6.75	0.50	6.75	...	
8	16.50	2.19	10.75	8.63	3.00	3.00	5.25	2.25	8.72	8.75	0.50	8.75	...	
10	20.00	2.50	13.50	10.75	3.38	4.38	6.00	2.56	10.88	10.92	0.50	10.88	...	
12	22.00	2.62	15.75	12.75	3.62	4.62	6.12	2.75	12.88	12.92	0.50	12.94	...	
14	23.75	2.75	17.00	14.00	3.69	5.00	6.50	2.88	14.14	14.18	0.50	14.19	...	
16	27.00	3.00	19.50	16.00	4.19	5.50	7.00	3.06	16.16	16.19	0.50	16.19	...	
18	29.25	3.25	21.50	18.00	4.62	6.00	7.25	3.12	18.18	18.20	0.50	18.19	...	
20	32.00	3.50	24.00	20.00	5.00	6.50	7.50	3.25	20.20	20.25	0.50	20.19	...	
22	34.25	3.75	26.25	22.00	5.25	6.88	7.75	...	22.22	22.25	0.50	...	...
24	37.00	4.00	28.25	24.00	5.50	7.25	8.00	3.62	24.25	24.25	0.50	24.19	...	

To be specified by the purchaser

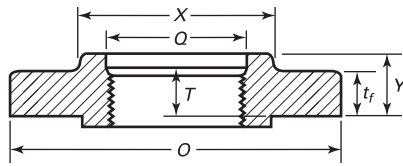
Dimensions of Class 900 Flanges



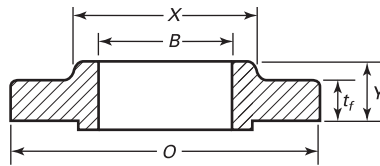
Nom. Pipe Size, NPS	Outside Diam. of Flange, O	Min. Thickness of Flange, t_f	Diam. of Hub, X	Hub Diam. Beginning of Chamfer Welding Neck, A_h	Length Through Hub			Minimum Thread Length Threaded Flange, T	Bore			Corner Bore Radius of Lapped Flange and Pipe, r	Minimum Counter-bore Threaded Flange, Q
					Threaded/ Slip-On, Y	Lapped, Y	Welding Neck, Y		Min. Slip-On, B	Min. Lapped, B	Welding Neck, B		
1/2	121	22.4	38	21.3	32	32	60	22	22.4	22.9	3	23.6	
3/4	130	25.4	44	26.7	35	35	70	25	27.7	28.2	3	29.0	
1	149	28.4	52	33.5	41	41	73	28	34.5	35.4	3	35.8	
1 1/4	159	28.4	64	42.2	41	41	73	30	43.2	43.7	5	44.4	
1 1/2	178	31.8	70	48.3	44	44	83	32	49.5	50.0	6	50.5	
2	216	38.1	105	60.5	57	57	102	38	62.0	62.5	8	63.5	
2 1/2	244	41.1	124	73.2	64	64	105	48	74.7	75.4	8	76.2	
3	241	38.1	127	88.9	54	54	102	41	90.7	91.4	10	92.2	
4	292	44.5	159	114.3	70	70	114	48	116.1	116.8	11	117.6	
5	349	50.8	190	141.2	79	79	127	54	143.8	144.5	11	144.5	
6	381	55.6	235	168.4	86	86	140	57	170.7	171.4	13	171.4	
8	470	63.5	298	219.2	102	114	162	64	221.5	222.2	13	222.2	
10	546	69.8	368	273.0	108	127	184	71	276.4	277.4	13	276.4	
12	610	79.2	419	323.8	117	143	200	76	327.2	328.2	13	328.7	
14	641	85.9	451	355.6	130	155	213	83	359.2	360.2	13	360.4	
16	705	88.9	508	406.4	133	165	216	86	410.5	411.2	13	411.2	
18	787	101.6	565	457.2	152	190	229	89	461.8	462.3	13	462.0	
20	857	108.0	622	508.0	159	210	248	92	513.1	514.4	13	512.8	
24	1,041	139.7	749	609.6	203	267	292	102	616.0	616.0	13	614.4	

To be specified by the purchaser

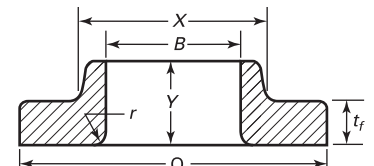
Dimensions of Class 1500 Flanges



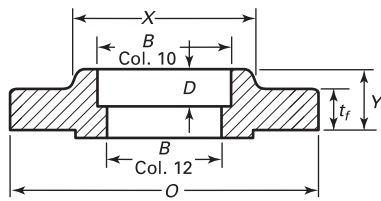
Threaded



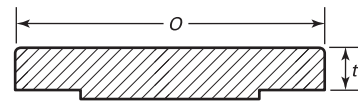
Slip-On Welding



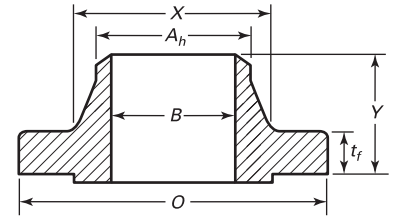
Lapped



Socket Welding (NPS 1/2 to 3 Only)



Blind

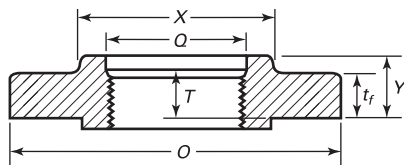


Welding Neck

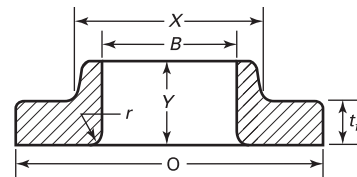
Nominal Pipe Size, NPS	Outside Diameter of Flange, O	Minimum Thickness of Flange, t _f	Diameter of Hub, X	Hub Diameter Beginning of Chamfer Welding Neck, A _h	Length Through Hub			Minimum Thread Length Threaded Flange, T	Bore			Corner Bore Radius of Lapped Flange and Pipe, r	Minimum Counterbore Threaded Flange, Q	Depth of Socket, D
					Threaded/ Slip-On/ Socket Welding, Y	Lapped, Y	Welding Neck, Y		Minimum Slip-On/ Socket Welding, B	Minimum Lapped, B	Welding Neck/ Socket Welding, B			
1/2	121	22.4	38	21.3	32	32	60	22	22.4	22.9	3	23.6	10	
3/4	130	25.4	44	26.7	35	35	70	25	27.7	28.2	3	29.0	11	
1	149	28.4	52	33.5	41	41	73	28	34.5	35.4	3	35.8	13	
1 1/4	159	28.4	64	42.2	41	41	73	30	43.2	43.7	5	44.4	14	
1 1/2	178	31.8	70	48.3	44	44	83	32	49.5	50.0	6	50.5	16	
2	216	38.1	105	60.5	57	57	102	38	62.0	62.5	8	63.5	18	
2 1/2	244	41.1	124	73.2	64	64	105	48	74.7	75.4	8	76.2	19	
3	267	47.8	133	88.9	...	73	117	...	...	91.4	10	...	...
4	311	53.8	162	114.3	...	90	124	...	...	116.8	11	...	...
5	375	73.2	197	141.2	...	105	155	...	...	144.5	11	...	...
6	394	82.6	229	168.4	...	119	171	...	...	171.4	13	...	...
8	483	91.9	292	219.2	...	143	213	...	...	222.2	13	...	...
10	584	108.0	368	273.0	...	178	254	...	...	277.4	13	...	...
12	673	124.0	451	323.8	...	219	282	...	...	328.2	13	...	...
14	749	133.4	495	355.6	...	241	298	...	...	360.2	13	...	...
16	826	146.0	552	406.4	...	260	311	...	...	411.2	13	...	...
18	914	162.1	597	457.2	...	276	327	...	...	462.3	13	...	...
20	984	177.8	641	508.0	...	292	356	...	...	514.4	13	...	...
24	1 168	203.2	762	609.6	...	330	406	...	...	616.0	13	...	...

To be specified by the purchaser

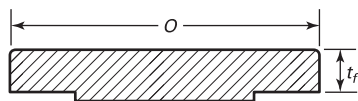
Dimensions of Class 2500 Flanges



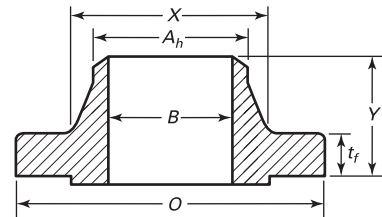
Threaded



Lapped



Blind



Welding Neck

Nom. Pipe Size, NPS	Outside Diam. of Flange, O	Min. Thickness of Flange, t_f	Diam. of Hub, X	Hub Diam. Beginning of Chamfer Welding Neck, A_h (2)	Length Through Hub			Minimum Thread Length Threaded Flange, T (3)	Bore		Corner Bore Radius of Lapped Flange and Pipe, r	Minimum Counterbore Threaded Flange, Q
					Threaded, Y	Lapped, Y	Welding Neck, Y		Min. Lapped, B	Welding Neck, B		
1/2	133	30.2	43	21.3	40	40	73	28	22.9	3	23.6	
3/4	140	31.8	51	26.7	43	43	79	32	28.2	3	29.0	
1	159	35.1	57	33.5	48	48	89	35	35.1	3	35.8	
1 1/4	184	38.1	73	42.2	52	52	95	38	43.7	5	44.4	
1 1/2	203	44.4	79	48.3	60	60	111	44	50.0	6	50.5	
2	235	50.8	95	60.5	70	70	127	51	62.5	8	63.5	
2 1/2	267	57.2	114	73.2	79	79	143	57	75.4	8	76.2	
3	305	66.5	133	88.9	...	92	168	...	91.4	10	...	
4	356	76.2	165	114.3	...	108	190	...	116.8	11	...	
5	419	91.9	203	141.2	...	130	229	...	144.5	11	...	
6	483	108.0	235	168.4	...	152	273	...	171.4	13	...	
8	552	127.0	305	219.2	...	178	318	...	222.2	13	...	
10	673	165.1	375	273.0	...	229	419	...	277.4	13	...	
12	762	184.2	441	323.8	...	254	464	...	328.2	13	...	

To be specified by the purchaser

ASME B16.5

ALL TYPE

150/300/400/600/900/1500/2500

<https://eliteflange.com>

