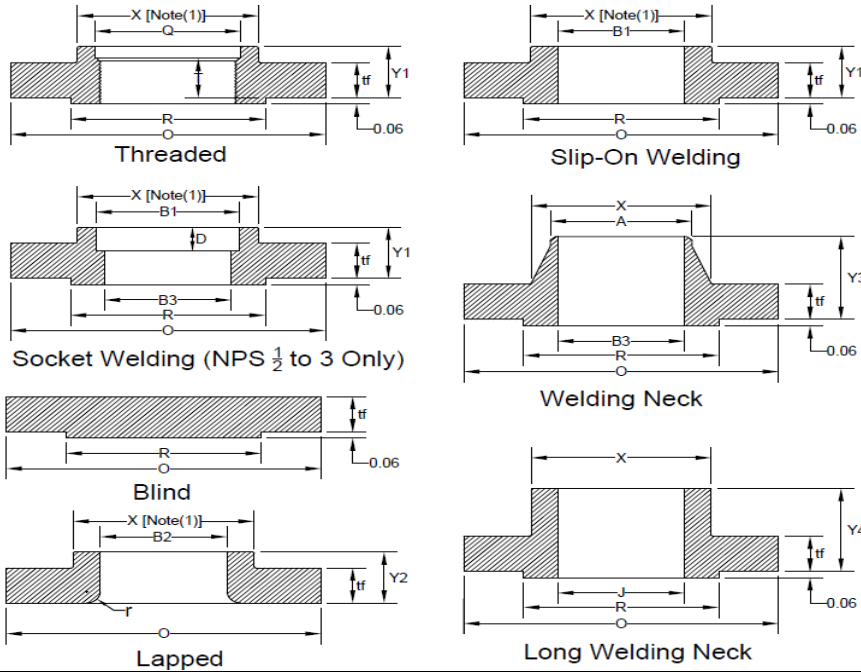


# CLASS 300 FLANGE

## ASME B16.5-2017



Nominal Pipe Size/ Bore for LWN	Length Through Hub										Bore				Bolt					
	Outside Diameter <i>O</i>	Min. Thickness <i>t<sub>f</sub></i>	Diameter of Raised Face <i>R</i>	Min. Thickness Lap Joint <i>t<sub>l</sub></i>	Diameter of Hub <i>X</i>	Diameter Beginning of Chamfer Neck <i>A</i>	Threaded Slip-On Socket Welding <i>Y1</i>	Lapped <i>Y2</i>	Welding Neck <i>Y3</i>	Long Welding Neck <i>Y4</i>	Minimum Thread Length Threaded <i>T</i>	Minimum Slip-On Socket Welding <i>B1</i>	Minimum Lapped <i>B2</i>	Welding Neck / Socket Welding <i>B3</i>	Corner Bore Radius of Lapped Flange and Pipe <i>r</i>	Depth of Socket <i>D</i>	Minimum Counter-bore Threaded Flange <i>Q</i>	Bolt Circle Dia	Number of Holes	Diameter of Holes
<i>J</i>	<i>O</i>	<i>t<sub>f</sub></i>	<i>R</i>	<i>t<sub>l</sub></i>	<i>X</i>	<i>A</i>	<i>Y1</i>	<i>Y2</i>	<i>Y3</i>	<i>Y4</i>	<i>T</i>	<i>B1</i>	<i>B2</i>	<i>B3</i>	<i>r</i>	<i>D</i>	<i>Q</i>			
1/2	3.75	0.50	1.38	0.56	1.50	0.84	0.81	0.88	2.00	9.00	0.62	0.88	0.90	Note-3	0.12	0.38	0.93	2.62	4	0.63
3/4	4.62	0.56	1.69	0.62	1.88	1.05	0.94	1.00	2.19	9.00	0.62	1.09	1.11	Note-3	0.12	0.44	1.14	3.25	4	0.75
1	4.88	0.62	2.00	0.69	2.12	1.32	1.00	1.06	2.38	9.00	0.69	1.36	1.38	Note-3	0.12	0.50	1.41	3.50	4	0.75
1 1/4	5.25	0.69	2.50	0.75	2.50	1.66	1.00	1.06	2.50	9.00	0.81	1.70	1.72	Note-3	0.19	0.56	1.75	3.88	4	0.75
1 1/2	6.12	0.75	2.88	0.81	2.75	1.90	1.13	1.19	2.63	9.00	0.88	1.95	1.97	Note-3	0.25	0.62	1.98	4.50	4	0.88
2	6.50	0.81	3.62	0.88	3.31	2.38	1.25	1.31	2.69	9.00	1.12	2.44	2.46	Note-3	0.31	0.69	2.50	5.00	8	0.75
2 1/2	7.50	0.94	4.12	1.00	3.94	2.88	1.44	1.50	2.94	9.00	1.25	2.94	2.97	Note-3	0.31	0.75	3.00	5.88	8	0.88
3	8.25	1.06	5.00	1.12	4.62	3.50	1.63	1.69	3.06	9.00	1.25	3.57	3.60	Note-3	0.38	0.81	3.63	6.62	8	0.88
3 1/2	9.00	1.12	5.50	1.19	5.25	4.00	1.69	1.75	3.13	9.00	1.44	4.07	4.10	Note-3	0.38	-	4.13	7.25	8	0.88
4	10.00	1.19	6.19	1.25	5.75	4.50	1.82	1.88	3.32	Note-3	1.44	4.57	4.60	Note-3	0.44	-	4.63	7.88	8	0.88
5	11.00	1.31	7.31	1.38	7.00	5.56	1.94	2.00	3.82	12.00	1.69	5.66	5.69	Note-3	0.44	-	5.69	9.25	8	0.88
6	12.50	1.38	8.50	1.44	8.12	6.63	2.00	2.06	3.82	12.00	1.81	6.72	6.75	Note-3	0.50	-	6.75	10.62	12	0.88
8	15.00	1.56	10.62	1.62	10.25	8.63	2.38	2.44	4.32	12.00	2.00	8.72	8.75	Note-3	0.50	-	8.75	13.00	12	1.00
10	17.50	1.81	12.75	1.88	12.62	10.75	2.56	3.75	4.56	12.00	2.19	10.88	10.92	Note-3	0.50	-	10.88	15.25	16	1.13
12	20.50	1.94	15.00	2.00	14.75	12.75	2.82	4.00	5.06	12.00	2.38	12.88	12.92	Note-3	0.50	-	12.94	17.75	16	1.25
14	23.00	2.06	16.25	2.12	16.75	14.00	2.94	4.38	5.56	12.00	2.50	14.14	14.18	Note-3	0.50	-	14.19	20.25	20	1.25
16	25.50	2.19	18.50	2.25	19.00	16.00	3.19	4.75	5.69	12.00	2.69	16.16	16.19	Note-3	0.50	-	16.19	22.50	20	1.38
18	28.00	2.31	21.00	2.38	21.00	18.00	3.44	5.12	6.19	12.00	2.75	18.18	18.20	Note-3	0.50	-	18.19	24.75	24	1.38
20	30.50	2.44	23.00	2.50	23.12	20.00	3.69	5.50	6.32	12.00	2.88	20.20	20.25	Note-3	0.50	-	20.19	27.00	24	1.38
22	33.00	2.56	25.25	2.62	25.25	22.00	3.94	5.69	6.44	12.00	-	22.22	22.25	Note-3	0.50	-	-	29.25	24	1.63
24	36.00	2.69	27.25	2.75	27.62	24.00	4.13	6.00	6.56	12.00	3.25	24.25	24.25	Note-3	0.50	-	24.19	32.00	24	1.63

Notes:

- (1) This dimension is for the large end of the hub, which may be straight or tapered. Taper shall not exceed 7 deg on threaded, slip-on, socket-welding, and lapped flanges.
- (2) When these flanges are required with flat face, the flat face may be either the full *t<sub>f</sub>* dimension thickness plus 0.06 in. or the *t<sub>f</sub>* dimension thickness without the raised face height.
- (3) To be specified by the Customer; *Y4* - the length can be 9" (B16.5) or 12" (industry), shall be specified by the customer.