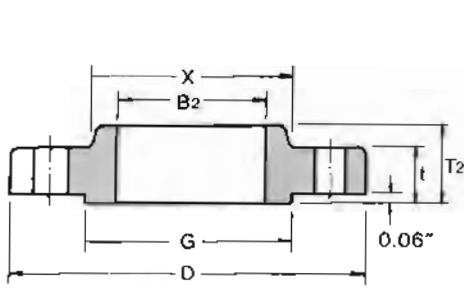
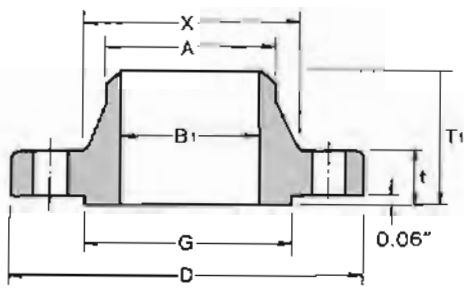


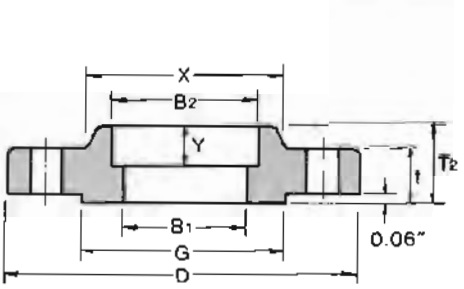
# CLASS 150 FLANGES



SLIP-ON



WELDING NECK



SOCKET WELDING

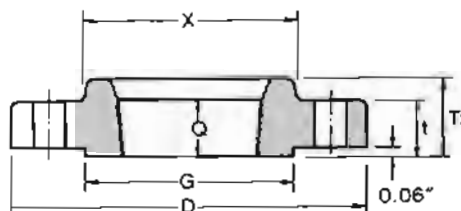
## ANSI B16.5 FORGED FLANGES

Dimensions in inches

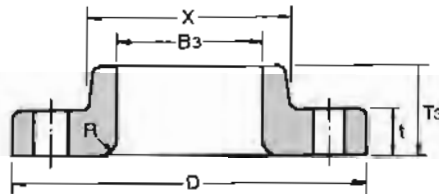
Nominal Pipe Size	Outside Diam. D	Thick-ness t	O.D. of Raised Face G	Diam. at Base of Hub X	BORE			LENGTH THRU HUB			Diam. of Hub at Bevel A	Radius of Fillet R	Thread Length Q
					Welding Neck Socket Welding B <sub>1</sub>	Slip-on Socket Welding B <sub>2</sub>	Lap Joint B <sub>3</sub>	Welding Neck T <sub>1</sub>	Slip-on Threaded Socket Welding T <sub>2</sub>	Lap Joint T <sub>3</sub>			
1/2 3/4 1	3.50	0.44	1.38	1.19	0.62	0.88	0.90	1.88	0.62	0.62	0.84	0.12	0.62
	3.88	0.50	1.69	1.50	0.82	1.09	1.11	2.06	0.62	0.62	1.05	0.12	0.62
	4.25	0.56	2.00	1.94	1.05	1.36	1.38	2.19	0.69	0.69	1.32	0.12	0.69
1 1/4 1 1/2 2	4.62	0.62	2.50	2.31	1.38	1.70	1.72	2.25	0.81	0.81	1.66	0.19	0.81
	5.00	0.69	2.88	2.56	1.61	1.95	1.97	2.44	0.88	0.88	1.90	0.25	0.88
	6.00	0.75	3.62	3.06	2.07	2.44	2.46	2.50	1.00	1.00	2.38	0.31	1.00
2 1/2 3 3 1/2	7.00	0.88	4.12	3.56	2.47	2.94	2.97	2.75	1.12	1.12	2.88	0.31	1.12
	7.50	0.94	5.00	4.25	3.07	3.57	3.60	2.75	1.19	1.19	3.50	0.38	1.19
	8.50	0.94	5.50	4.81	3.55	4.07	4.10	2.81	1.25	1.25	4.00	0.38	1.25
4 5 6	9.00	0.94	6.19	5.31	4.03	4.57	4.60	3.00	1.31	1.31	4.50	0.44	1.31
	10.00	0.94	7.31	6.44	5.05	5.66	5.69	3.50	1.44	1.44	5.56	0.44	1.44
	11.00	1.00	8.50	7.56	6.07	6.72	6.75	3.50	1.56	1.56	6.63	0.50	1.56
8 10 12	13.50	1.12	10.62	9.69	7.98	8.72	8.75	4.00	1.75	1.75	8.63	0.50	1.75
	16.00	1.19	12.75	12.00	10.02	10.88	10.92	4.00	1.94	1.94	10.75	0.50	1.94
	19.00	1.25	15.00	14.38	12.00	12.88	12.92	4.50	2.19	2.19	12.75	0.50	2.19
14 16 18	21.00	1.38	16.25	15.75	13.25	14.14	14.18	5.00	2.25	3.12	14.00	0.50	2.25
	23.50	1.44	18.50	18.00	15.25	16.16	16.19	5.00	2.50	3.44	16.00	0.50	2.50
	25.00	1.56	21.00	19.88	17.25	18.18	18.20	5.50	2.69	3.81	18.00	0.50	2.69
20 24	27.50	1.69	23.00	22.00	19.25	20.20	20.25	5.69	2.88	4.06	20.00	0.50	2.88
	32.00	1.88	27.25	26.12	23.25	24.25	24.25	6.00	3.25	4.38	24.00	0.50	3.25

Notes:

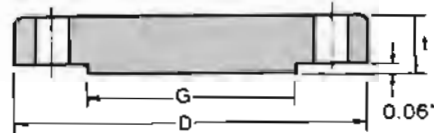
- (1) For the 'Bore' (B<sub>1</sub>) other than Standard Wall Thickness, refer to page 61.
- (2) Class 150 flanges except Lap Joint will be furnished with 0.06" raised face, which is included in 'Thickness' (t) and 'Length through Hub' (T<sub>1</sub>), (T<sub>2</sub>).
- (3) For Slip-on, Threaded, Socket Welding and Lap Joint Flanges, the hubs can be shaped either vertical from base to top or tapered within the limits of 7 degrees.



THREADED



LAP JOINT



BLIND

Dimensions in inches

Depth of Socket Y	DRILLING			BOLTING			APPROXIMATE WEIGHT												Nominal Pipe Size	
	Bolt Circle Diam.	Number of Holes	Diam. of Holes	Diam. of Bolts	Machine Bolt Length		Stud Bolt Length	Welding Neck		Slip-on and Threaded		Lap Joint		Blind		Socket Welding				
					Raised Face	Raised Face		Ring-Joint	Kg	lb.	Kg	lb.	Kg	lb.	Kg	lb.	Kg	lb.		
0.38	2.38	4	0.62	1/2	2.00	2.25	-	0.51	1.10	0.47	1.00	0.51	1.00	0.47	1.00	0.47	1.00	0.47	1.00	1/2
0.44	2.75	4	0.62	1/2	2.00	2.50	-	0.73	1.60	0.58	1.30	0.64	1.40	0.63	1.40	0.59	1.30	0.59	1.30	3/4
0.50	3.12	4	0.62	1/2	2.25	2.50	3.00	1.07	2.40	0.86	1.90	0.93	1.80	0.94	2.10	0.87	1.90	0.87	1.90	1
0.56	3.50	4	0.62	1/2	2.25	2.75	3.25	1.40	3.10	1.08	2.40	1.16	2.00	1.23	2.70	1.11	2.40	1.11	2.40	1 1/4
0.62	3.88	4	0.62	1/2	2.50	2.75	3.25	1.81	4.00	1.41	3.10	1.51	3.30	1.62	3.60	1.45	3.20	1.45	3.20	1 1/2
0.69	4.75	4	0.75	3/8	2.75	3.25	3.75	2.59	5.70	2.26	5.00	2.38	5.20	2.64	5.80	2.33	5.00	2.33	5.00	2
0.75	5.50	4	0.75	3/8	3.00	3.50	4.00	4.28	9.40	3.43	7.60	3.60	7.90	4.06	9.00	3.55	7.80	3.55	7.80	2 1/2
0.81	6.00	4	0.75	3/8	3.00	3.50	4.00	5.18	11.40	3.87	8.50	4.04	8.90	4.90	10.80	4.02	8.90	4.02	8.90	3
0.88	7.00	8	0.75	3/8	3.00	3.50	4.00	5.45	12.00	4.99	11.00	4.99	11.00	5.90	13.00	4.99	11.00	4.99	11.00	3 1/2
0.94	7.50	8	0.75	3/8	3.00	3.50	4.00	7.32	16.10	5.75	12.70	5.96	13.00	7.41	16.30	5.99	13.20	5.99	13.20	4
0.94	8.50	8	0.88	3/4	3.25	3.75	4.25	8.91	19.60	6.22	13.70	6.44	14.00	8.76	19.30	6.68	14.70	6.68	14.70	5
1.06	9.50	8	0.88	3/4	3.25	4.00	4.50	11.26	24.80	7.38	16.30	7.59	16.70	11.31	24.90	7.99	17.60	7.99	17.60	6
1.25	11.75	8	0.88	3/4	3.50	4.25	4.75	17.68	39.00	12.36	27.30	12.66	27.90	19.92	43.90	13.29	29.30	13.29	29.30	8
1.31	14.25	12	1.00	1	4.00	4.50	5.00	24.79	54.70	17.10	37.70	16.78	37.00	29.39	64.80	19.50	43.00	19.50	43.00	10
1.56	17.00	12	1.00	1	4.00	4.75	5.25	38.98	85.90	27.68	61.00	28.30	62.40	43.70	96.30	29.03	64.00	29.03	64.00	12
1.63	18.75	12	1.12	1	4.50	5.25	5.75	51.71	114.00	35.20	77.60	41.50	91.50	59.42	140.00	38.56	85.00	38.56	85.00	14
1.75	21.25	16	1.12	1	4.50	5.25	5.75	64.41	142.00	42.18	93.00	52.98	116.80	77.11	170.00	44.49	98.00	44.49	98.00	16
1.94	22.75	16	1.25	1 1/8	5.00	5.75	6.25	74.84	165.00	49.71	109.60	59.00	130.00	94.80	209.00	54.43	120.00	54.43	120.00	18
2.13	25.00	20	1.25	1 1/8	5.50	6.25	6.75	89.36	197.00	65.50	140.00	72.12	159.00	123.38	272.00	70.31	155.00	70.31	155.00	20
2.50	29.50	20	1.38	1 1/4	6.00	6.75	7.25	119.66	263.80	90.50	199.50	99.02	218.30	188.24	415.00	95.25	210.00	95.25	210.00	24

- (4) Blind Flanges may be made with the same hub as that used for Slip-on Flanges or without hub.
- (5) The gasket surface and backside (bearing surface for bolting) are made parallel within 1 degree. To accomplish parallelism, spot facing is carried out according to MSS SP-9, without reducing thickness (t).
- (6) Depth of Socket (Y) is covered by ANSI B16.5 only in sizes through 3 inch, over 3 inch is at the manufacturer's option.