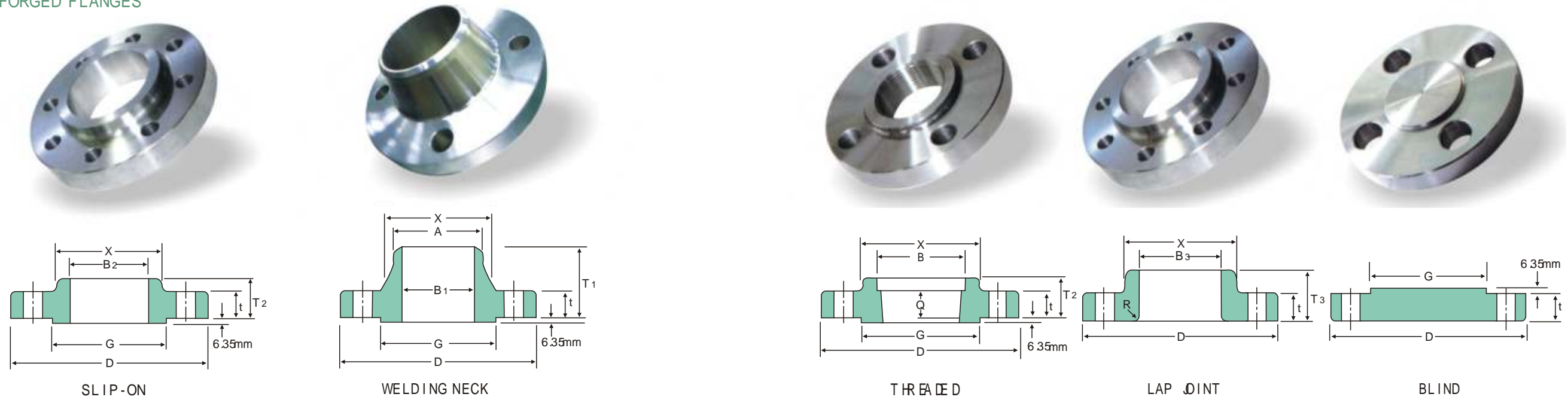


ANSI B16.5 FORGED FLANGES



Unit mm

Nominal Pipe Size	Outside Diam	Diam at Base of Hub	O .D .of Raised Face	Thickness	BORE				LENGTH THRU HUB			Diam .of Hub at Bevel
					Welding Neck	Slip-on	Lap Joint	Counter Bore Min . Threaded Min .	Welding Neck	Slip-on Threaded	Lap Joint	
1/2	121	38.1	35.1	22.4	See Note ↑ To be specified by purchaser	22.4	22.9	23.6	60.5	31.8	31.8	21.3
3/4	130	44.5	42.9	25.4		27.7	28.2	29.0	69.9	35.1	35.1	26.7
1	149	52.3	50.8	28.4		34.5	35.1	35.8	73.2	41.1	41.1	33.5
1 1/4	159	63.5	63.5	28.4		43.2	43.7	44.5	73.2	41.1	41.1	42.2
1 1/2	178	69.9	73.2	31.8		49.5	50.0	50.5	82.6	44.5	44.5	48.3
2	216	104.6	91.9	38.1		62.0	62.5	63.5	101.6	57.2	57.2	60.5
2 1/2	244	124.0	104.6	41.1		74.7	75.4	76.2	104.6	63.5	63.5	73.2
3	241	127.0	127.0	38.1		90.7	91.4	92.2	101.6	53.8	53.8	88.9
4	292	158.8	157.2	44.5		116.1	116.8	117.6	114.3	69.9	69.9	114.3
5	349	190.5	185.7	50.8		143.8	144.5	144.5	127.0	79.2	79.2	141.2
6	381	235.0	215.9	55.6		170.7	171.5	171.5	139.7	85.9	85.9	168.4
8	470	298.5	269.7	63.5		221.5	222.3	222.3	162.1	101.6	114.3	219.2
10	546	368.3	323.9	69.9		276.4	277.4	276.4	184.2	108.0	127.0	273.1
12	610	419.1	381.0	79.2		327.2	328.2	328.7	200.2	117.3	142.7	323.9
14	641	450.9	412.8	85.9		359.2	360.2	360.4	212.9	130.0	155.4	355.6
16	705	508.0	469.9	88.9		410.5	411.2	411.2	215.9	133.4	165.1	406.4
18	787	565.2	533.4	101.6	461.8	462.3	462.0	228.6	152.4	190.5	457.2	
20	857	622.3	584.2	108.0	513.1	514.4	512.8	247.7	158.8	209.6	508.0	
24	1041	749.3	692.2	139.7	616.0	616.0	614.4	292.1	203.2	266.7	609.6	

Notes

- (1) For the inside diameter of pipes (corresponding to Bore (B₁) of Welding Neck Flanges), refer to page 60.
- (2) Class 900 flanges except Lap Joint will be furnished with 0.25" (6.35mm) raised face, which is not included in 'Thickness' (t) and 'Length through Hub' (T₁), (T₂).
- (3) For Slip-on, Threaded and Lap Joint Flanges, the hubs can be shaped either vertical from base to top or tapered within the limits of 7 degrees.

Unit mm

Nominal Pipe Size	Radius of Fillet	Thread Length	DRILLING			BOLTING			APPROXIMATE WEIGHT								
			Bolt Circle Diam .	Number of Holes	Diam . of Holes	Diam . of Bolts (inch)	Stud Bolt Length			Welding Neck		Slip-on and Threaded		Lap Joint		Blind	
							0.25" Raised Face	Male - Female Tongue - Groove	Ring Joint	K g	l b	K g	l b	K g	l b	K g	l b
1/2	3.0	22.4	82.6	4	22.4	3/4	108.0	101.6	108.0	2.10	4.60	1.81	4.00	1.81	4.00	1.90	4.20
3/4	3.0	25.4	88.9	4	22.4	3/4	114.3	108.0	114.3	2.72	6.00	2.40	5.30	2.30	5.00	2.70	6.00
1	3.0	28.4	101.6	4	25.4	7/8	127.0	120.7	127.0	3.86	8.50	3.41	7.50	3.40	7.50	4.09	9.00
1 1/4	4.8	30.2	111.3	4	25.4	7/8	127.0	120.7	127.0	4.54	10.00	4.10	9.00	4.09	9.00	4.54	10.00
1 1/2	6.4	31.8	124.0	4	28.4	1	139.7	133.4	139.7	5.90	13.00	5.45	12.00	5.40	11.90	5.90	13.00
2	7.9	38.1	165.1	8	25.4	7/8	146.1	139.7	146.1	10.89	24.00	9.98	22.00	9.53	21.00	11.34	25.00
2 1/2	7.9	47.8	190.5	8	28.4	1	158.8	152.4	158.8	16.33	36.00	15.80	34.80	13.15	29.00	16.00	35.30
3	9.7	41.1	190.5	8	25.4	7/8	146.1	139.7	146.1	15.00	33.00	11.80	26.00	11.34	25.00	13.17	29.00
4	11.2	47.8	235.0	8	31.8	1 1/8	171.5	165.1	171.5	23.13	51.00	23.20	51.00	22.60	48.50	24.50	54.00
5	11.2	53.8	279.4	8	35.1	1 1/4	190.5	184.2	190.5	38.50	84.90	37.65	83.00	36.74	81.00	39.46	87.00
6	12.7	57.2	317.5	12	31.8	1 1/8	190.5	184.2	196.9	49.89	110.00	48.30	106.50	47.50	104.70	51.50	113.50
8	12.7	63.5	393.7	12	38.1	1 3/8	222.3	215.9	222.3	79.45	175.00	75.00	166.30	86.00	189.60	89.00	106.20
10	12.7	71.4	469.9	16	38.1	1 3/8	235.0	228.6	235.0	118.04	260.00	111.13	245.00	125.64	277.00	131.54	290.00
12	12.7	76.2	533.4	20	38.1	1 3/8	254.0	247.7	254.0	157.00	346.00	146.00	321.80	167.00	368.00	187.00	412.30
14	12.7	82.6	558.8	20	41.1	1 1/2	273.1	266.7	292.1	181.60	400.40	172.36	380.00	180.07	397.00	224.07	494.00
16	12.7	85.9	616.0	20	44.5	1 5/8	285.8	279.4	298.5	224.73	495.50	192.95	425.40	211.11	465.40	272.40	600.50
18	12.7	88.9	685.8	20	50.8	1 7/8	323.9	317.5	333.6	308.72	680.60	272.40	600.50	295.10	650.60	385.90	850.80
20	12.7	91.9	749.3	20	53.8	2	349.3	342.9	362.0	376.82	830.70	331.42	730.60	367.74	810.70	488.00	1076.00
24	1 7/8	101.6	901.7	20	66.5	2 1/2	438.2	431.8	457.2	685.00	1510.00	632.00	1393.30	700.00	1543.00	905.00	1995.00

- (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 MSSP-9, without reducing thickness (t).
- (6) Depth of sizes 1/2" through 2 1/2" are the same as for Class 1500 Flanges.