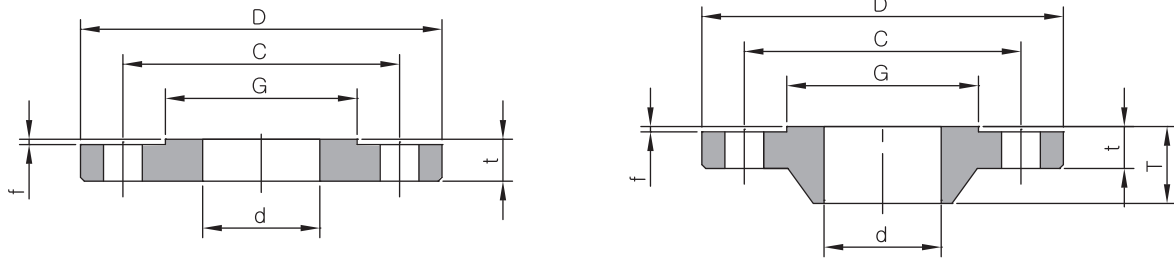


■ Specification of Flange

KS/JIS Code



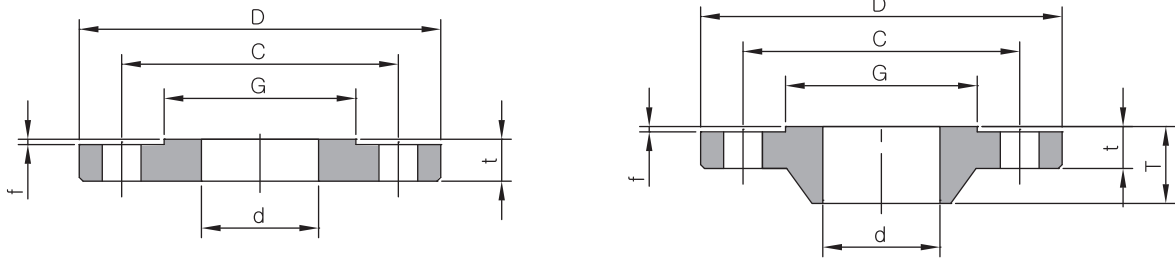
KS B 1503 /JIS B 2220 : 2012

Unit : mm

Class	Size	D	t	f	G	T	d	Bolting			
								C	Number of Holes	Diam. of Holes	Bolt Size
KS/JIS 5K	10	75	9	1	39	24	17.8	55	4	12	M10
	15	80	9	1	44	25	22.2	60	4	12	M10
	20	85	10	1	49	28	27.7	65	4	2	M10
	25	95	10	1	59	30	34.5	75	4	12	M10
	32	115	12	2	70	33	43.2	90	4	15	M12
	40	120	12	2	75	34	49.1	95	4	15	M12
	50	130	14	2	85	36	61.1	105	4	15	M12
	65	155	14	2	110	39	77.1	130	4	15	M12
	80	180	14	2	121	41	90.0	145	4	19	M16
	100	200	16	2	141	41	115.4	165	8	19	M16
	125	235	16	2	176	43	141.2	200	8	19	M16
	150	265	18	2	206	49	166.6	230	8	19	M16
	200	320	20	2	252	53	218	280	8	23	M20
	250	385	22	2	317	61	269.5	345	12	23	M20
	300	430	22	2	360	62	321.0	390	12	23	M20
	350	480	24	3	403	73	358.1	435	12	25	M22
	400	540	24	3	463	76	409	495	16	25	M22
450	605	24	3	523	79	460	555	16	25	M22	
500	655	24	3	573	79	511	605	20	25	M22	

Class	Size	D	t	f	G	T	d	Bolting			
								C	Number of Holes	Diam. of Holes	Bolt Size
KS/JIS 10K	10	90	12	1	46	29	17.8	65	4	15	M12
	15	95	12	1	51	31	22.2	70	4	15	M12
	20	100	14	1	56	32	27.7	75	4	15	M12
	25	125	14	1	67	36	34.5	90	4	19	M16
	32	135	16	2	76	38	43.2	100	4	19	M16
	40	140	16	2	81	38	49.1	105	4	19	M16
	50	155	16	2	96	40	61.1	120	4	19	M16
	65	175	18	2	116	44	77.1	140	4	19	M16
	80	185	18	2	126	45	90.0	150	8	19	M16
	100	210	18	2	151	45	115.4	175	8	19	M16
	125	250	20	2	182	47	141.2	210	8	23	M20
	150	280	22	2	212	53	166.6	240	8	23	M20
	200	330	22	2	262	58	218	290	12	23	M20
	250	400	24	2	324	65	269.5	355	12	25	M22
	300	445	24	3	368	68	321.0	400	16	25	M22
	350	490	26	3	413	79	358.1	445	16	25	M22
	400	560	28	3	475	85	409	510	16	27	M24
450	620	30	3	530	90	460	565	20	27	M24	
500	675	30	3	585	99	511	620	20	27	M24	

KS/JIS Code



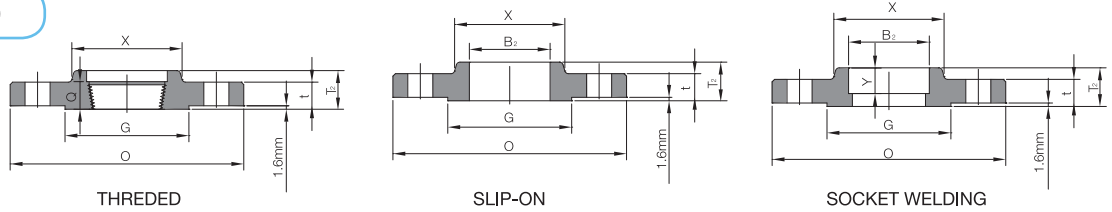
KS B 1503 /JIS B 2220 : 2012

Unit : mm

Class	Size	D	t	f	G	T	d	Bolting			
								C	Number of Holes	Diam. of Holes	Bolt Size
KS/JIS 20K	10	90	14	1	46	33	17.8	65	4	15	M12
	15	95	14	1	51	34	22.2	70	4	15	M12
	20	100	16	1	56	36	27.7	75	4	15	M12
	25	125	16	1	67	38	34.5	90	4	19	M16
	32	135	18	2	76	41	43.2	100	4	19	M16
	40	140	18	2	81	41	49.1	105	4	19	M16
	50	155	18	2	96	42	61.1	120	8	19	M16
	65	175	20	2	116	48	77.1	140	8	19	M16
	80	200	22	2	132	51	90.0	160	8	23	M20
	100	225	24	2	160	58	115.4	185	8	23	M20
	125	270	26	2	195	64	141.2	225	8	25	M22
	150	305	28	2	230	73	166.6	260	12	25	M22
	200	350	30	2	275	77	218	305	12	25	M22
	250	430	34	2	345	87	269.5	380	12	27	M24
	300	480	36	3	395	94	321.0	430	16	27	M24
	350	540	40	3	440	110	358.1	480	16	33	M30
	400	605	46	3	495	123	409	540	16	33	M30
450	675	48	3	560	134	460	605	20	33	M30	
500	730	50	3	615	136	511	660	20	33	M30	

Class	Size	D	t	f	G	T	d	Bolting			
								C	Number of Holes	Diam. of Holes	Bolt Size
KS/JIS 30K	10	110	16	1	52	-	17.8	75	4	19	M16
	15	115	18	1	55	45	22.2	80	4	19	M16
	20	120	18	1	60	45	27.7	85	4	19	M16
	25	130	20	1	70	48	34.5	95	4	19	M16
	32	140	22	2	80	52	43.2	105	4	19	M16
	40	160	22	2	90	54	49.1	120	4	23	M20
	50	165	22	2	105	57	61.1	130	8	19	M16
	65	200	26	2	130	69	77.1	160	8	23	M20
	80	210	28	2	140	73	90.0	170	8	23	M20
	100	240	32	2	160	76	115.4	195	8	25	M22
	125	275	36	2	195	86	141.2	230	8	25	M22
	150	325	38	2	235	95	166.6	275	12	27	M24
	200	370	42	2	280	102	218	320	12	27	M24
	250	450	48	2	345	118	269.5	390	12	33	M30
	300	515	52	3	405	127	321.0	450	16	33	M30
	350	560	54	3	450	134	358.1	495	16	33	M30

CLASS 150

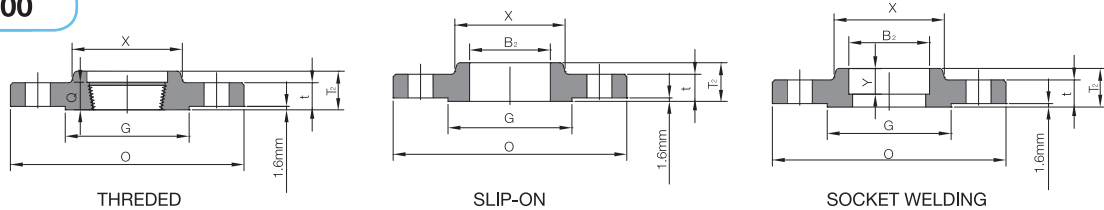


ANSI 150 lbs
ANSI B16.5 FORGED FLANGED

Unit : mm

Size (inch)	Out-Side Diam. of Flange	Thick-ness of Flange	Thick-ness Lap Joint	Diam. of HUB Base	O.D of Raised Face	Diam. of HUB Base	Length Through Hub			Thread Length	Bore			
							Welding Neck	Slip-On Threaded Socket	Lap Joint		Welding Neck/Socket Welding	Slip-On Threaded Socket	Lap Joint	
														T1
O	t	t	X	G	A									
1/2	90	9.6	11.2	30	34.9	21.3	46	14	16	16	16	15.8	22.2	22.9
3/4	100	11.2	12.7	38	42.9	26.7	51	14	16	16	16	20.9	27.7	28.2
1	110	12.7	14.3	49	50.8	33.4	54	16	17	17	17	26.6	34.5	34.9
1 1/4	115	14.3	15.9	59	63.5	42.2	56	19	21	21	21	35.1	43.2	43.7
1 1/2	125	15.9	17.5	65	73	48.3	60	21	22	22	22	40.9	49.5	50
2	150	17.5	19.1	78	92.1	60.3	62	24	25	25	25	52.5	61.9	62.5
2 1/2	180	20.7	22.3	90	104.8	73	68	27	29	29	29	62.7	74.6	75.4
3	190	22.3	23.9	108	127	88.9	68	29	30	30	30	77.9	90.7	91.4
3 1/2	215	22.3	23.9	122	139	101.6	70	30	32	32	32	90.1	103.4	104.1
4	230	22.3	23.9	135	157.2	114.3	75	32	33	33	33	102.3	116.1	116.8
5	255	22.3	23.9	164	185.7	141.3	87	35	36	36	36	128.2	143.8	144.4
6	280	23.9	25.4	192	215.9	168.3	87	38	40	40	40	154.1	170.7	171.4
8	345	27	28.6	246	269.9	219.1	100	43	44	44	44	202.7	221.5	222.2
10	405	28.6	30.2	305	323.8	273	100	48	49	49	49	254.6	276.2	277.4
12	485	30.2	31.8	365	381	323.8	113	54	56	56	56	304.8	327	328.2
14	535	33.4	35	400	412.8	355.6	125	56	79	79	57	To be Specified by Pur-chaser	359.2	360.2
16	595	35	36.6	457	469.9	406.4	125	62	87	87	64		410.5	411.2
18	635	38.1	39.7	505	533.4	457	138	67	97	97	68		461.8	462.3
20	700	41.3	42.9	559	584.2	508	143	71	103	103	73		513.1	514.4
24	815	46.1	47.7	663	692.2	610	151	81	111	111	83		616	616

CLASS 300

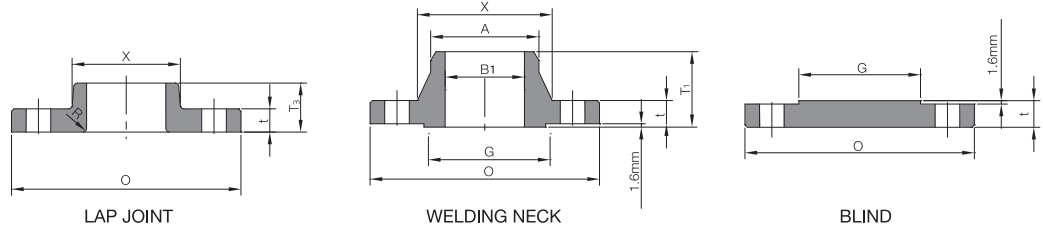


ANSI 300 lbs
ANSI B16.5 FORGED FLANGED

Unit : mm

Size (inch)	Out-Side Diam. of Flange	Thick-ness of Flange	Thick-ness Lap Joint	Diam. of HUB Base	O.D of Raised Face	Diam. of HUB Base	Length Through Hub			Thread Length	Bore				
							Welding Neck	Slip-On Threaded Socket	Lap Joint		Welding Neck/Socket Welding	Slip-On Threaded Socket	Lap Joint	Counter Bore Min. Threaded	
															T1
O	t	t	X	G	A										
1/2	95	12.7	14.3	38	34.9	21.3	51	21	22	16	16	15.8	22.2	22.9	23.6
3/4	115	14.3	15.9	48	42.9	26.7	54	24	25	16	16	20.9	27.7	28.2	29
1	125	15.9	17.5	54	50.8	33.4	56	25	27	18	18	26.6	34.5	34.9	35.8
1 1/4	135	17.5	19.1	64	63.5	42.2	60	25	27	21	21	35.1	43.2	43.7	44.4
1 1/2	155	19.1	20.7	70	73	48.3	62	29	20	23	23	40.9	49.5	50	50.3
2	165	20.7	22.3	84	92.1	60.3	68	32	33	29	29	52.5	61.9	62.5	63.5
2 1/2	190	23.9	25.4	100	104.8	73	75	37	38	32	32	62.7	74.6	75.4	76.2
3	210	27	28.6	117	127	88.9	78	41	43	32	32	77.9	90.7	91.4	92.2
3 1/2	230	28.6	30.2	133	139.7	101.6	79	43	44	37	37	90.1	103.4	104.1	104.9
4	255	30.2	31.8	146	157.2	114.3	84	46	48	37	37	102.3	116.1	116.8	117.6
5	280	33.4	35	178	185.7	141.3	97	49	51	43	43	128.2	143.8	144.4	144.4
6	320	35	36.6	206	215.9	168.3	97	51	52	47	47	154.1	170.7	171.4	171.4
8	380	39.7	41.3	260	269.9	219.1	100	60	62	51	51	202.7	221.5	222.2	222.2
10	445	46.1	47.7	321	323.8	273	116	65	95	56	56	254.6	276.2	277.4	276.2
12	520	49.3	50.8	375	381	323.8	129	71	102	61	61	304.8	327	328.2	328.6
14	585	52.4	54	425	412.8	355.6	141	75	111	64	64	To be Specified by Pur-chaser	359.2	360.2	360.4
16	650	55.6	57.2	483	469.9	406.4	144	81	121	69	69		410.5	411.2	411.2
18	710	58.8	60.4	533	533.4	457	157	87	130	70	70		461.8	462.3	462
20	775	62	63.5	587	584.2	508	160	94	140	74	74		513.1	514.4	512.8
24	915	68.3	69.9	702	692.2	610	167	105	152	84	84		616	616	614.4

CLASS 150



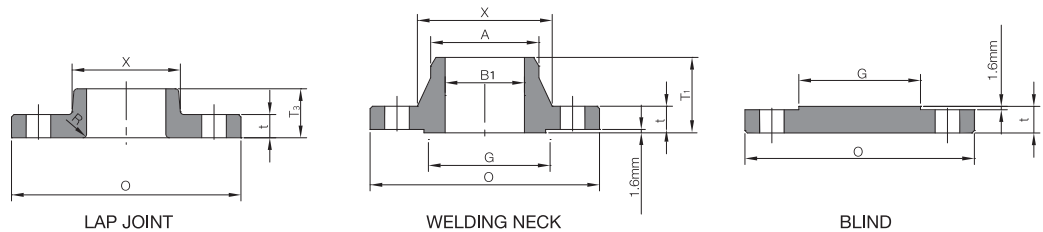
ANSI 150 lbs

ANSI B16.5 FORGED FLANGED

Unit : mm

RADIUS OF FILLE R	DEPTH OF SOCKET Y	DRILLING			LENGTH OF BOLTS				APPROXIMATE WEIGHT(kg)			
		Bolt Circle Diam.	Number of Holes	Daim. of Holes	Daim. of Bolt (inch)	Machine Bolt (Raised Face)	Stud Bolt Length		Welding Neck	Slip-On/Thre-aded	Lap Joint	Blind
							2mm Raised Face	Ring Joint				
3	10	60.3	4	15.9	1/2	50	55	-	0.51	0.47	0.51	0.47
3	11	69.9	4	15.9	1/2	50	65	-	0.73	0.58	0.64	0.63
3	13	79.4	4	15.9	1/2	55	65	75	1.07	0.86	0.93	0.94
5	14	88.9	4	15.9	1/2	55	70	85	1.4	1.08	1.16	1.23
6	16	98.4	4	15.9	1/2	65	70	85	1.81	1.41	1.51	1.62
8	17	120.7	4	19.1	5/8	70	85	95	2.59	2.26	2.38	2.64
8	19	139.7	1	19.1	5/8	75	90	100	4.28	3.43	3.6	4.06
10	21	152.4	4	19.1	5/8	75	90	100	5.18	3.87	4.04	4.9
10	22.4	177.8	8	19.1	5/8	75	90	100	5.45	4.99	4.99	5.9
11	24.1	190.5	8	19.1	5/8	75	90	100	7.32	5.75	5.96	7.41
11	23.9	215.9	8	22.2	3/4	85	95	110	8.91	6.22	6.44	8.76
13	26.9	241.3	8	22.2	3/4	85	100	115	11.26	7.38	7.59	11.31
13	31.8	298.5	8	22.2	3/4	90	110	120	17.68	12.36	12.66	19.92
13	33.3	362	12	25.4	7/8	100	115	125	24.79	17.1	16.78	29.39
13	39.6	431.8	12	25.4	7/8	100	120	135	38.98	27.68	28.3	43.7
13	41.4	476.3	12	28.6	1	115	135	145	51.71	35.2	41.5	59.42
13	44.5	538.8	16	28.6	1	115	135	145	64.41	42.18	52.98	77.11
13	49.3	577.9	16	31.8	1 1/8	125	145	160	74.84	49.71	59	94.8
13	54.1	635	20	31.8	1 1/8	140	160	170	89.36	65.5	72.12	123.38
13	63.5	749.3	20	34.9	1 1/4	150	170	185	119.66	90.5	99.02	188.24

CLASS 300



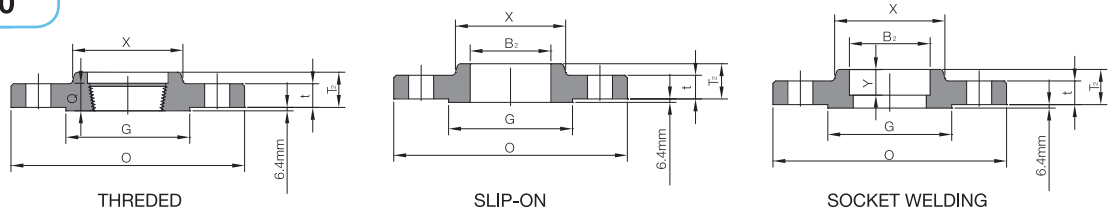
ANSI 300 lbs

ANSI B16.5 FORGED FLANGED

Unit : mm

RADIUS OF FILLE R	DEPTH OF SOCKET Y	DRILLING			LENGTH OF BOLTS				APPROXIMATE WEIGHT(kg)			
		Bolt Circle Diam.	Number of Holes	Daim. of Holes	Daim. of Bolt (inch)	Machine Bolt (Raised Face)	Stud Bolt Length		Welding Neck	Slip-On/Thre-aded	Lap Joint	Blind
							2mm Raised Face	Ring Joint				
3	10	66.7	4	15.9	1/2	55	65	75	0.78	0.62	0.61	0.62
3	11	82.6	4	19.1	5/8	65	75	90	1.34	1.15	1.15	1.16
3	13	88.9	4	19.1	5/8	65	75	90	1.64	1.39	1.38	1.42
5	14	98.4	4	19.1	5/8	70	85	95	2.06	1.67	1.66	1.79
6	16	114.3	4	22.2	3/4	75	90	100	3.06	2.53	2.52	2.68
8	17	127.7	8	19.1	5/8	75	90	100	3.4	2.8	2.79	3.09
8	19	149.2	8	22.2	3/4	85	100	115	5.31	4.25	4.22	4.75
10	21	168.3	8	22.2	3/4	90	110	120	7.32	5.81	5.78	6.79
10	22.4	184.2	8	22.2	3/4	95	110	125	8.17	7.72	7.72	9.53
11	24.1	200	8	22.2	3/4	95	115	125	11.3	10.13	10.07	12
11	23.9	235	8	22.2	3/4	110	120	135	15.12	12.58	12.52	15.96
13	26.9	269.9	12	25.4	3/4	110	120	140	19.68	16.04	15.95	21.2
13	31.8	330.2	12	28.6	7/8	120	140	150	30.48	24.5	24.37	34.6
13	33.3	387.4	16	31.8	1	140	160	170	43.74	34.16	39.92	55.34
13	39.6	450.8	16	31.8	1 1/8	145	170	185	64.41	51.26	58.7	78.9
13	41.4	514.4	20	34.9	1 1/8	160	180	190	88.3	71.12	83.46	107.05
13	44.5	571.5	20	34.9	1 1/4	165	190	205	112.94	90.4	106.14	139.25
13	49.3	628.6	24	34.9	1 1/4	170	195	210	138.34	109	133.95	176.9
13	54.1	685.8	24	34.9	1 1/4	185	205	220	167.37	136	157.65	223.17
13	63.5	812.8	24	41.3	1 1/2	205	230	255	135.41	204	204.4	342

CLASS 600



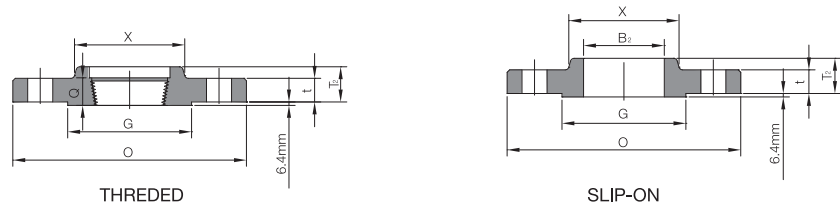
ANSI 600 lbs

ANSI B16.5 FORGED FLANGED

Unit : mm

Size (inch)	Out-Side Diam. of Flange	Thick-ness of Flange	Diam. of HUB Base	O.D of Raised Face	Diam. of HUB Base	Length Through Hub			Thread Length	Bore			
						Welding Neck	Slip-On Threaded Socket	Lap Joint		Welding Neck/Socket Welding	Slip-On Threaded Socket	Lap Joint	Counter Bore Min. Threaded
1/2	95	14.3	38	34.9	21.3	52	21	22	16	To be Specified by Pur-chaser	22.2	22.9	23.6
3/4	115	15.9	48	42.9	26.7	57	25	25	16		27.7	28.2	29
1	125	17.5	54	50.8	33.4	62	27	27	18		34.5	34.9	35.8
1 1/4	135	20.7	64	63.5	42.2	67	29	29	21		43.2	43.7	44.4
1 1/2	155	22.3	70	73	48.3	70	32	32	23		49.5	50	50.3
2	165	25.4	84	92.1	60.3	73	37	37	29		61.9	62.5	63.5
2 1/2	190	28.6	100	104.8	73	79	41	41	32		74.6	75.4	76.2
3	210	31.8	117	127	88.9	83	46	46	35		90.7	91.4	92.2
3 1/2	230	35	133	139.7	101.6	86	49	49	40		103.4	104.1	104.9
4	275	38.1	152	157.2	114.3	102	54	54	42		116.1	116.8	117.6
5	330	44.5	189	185.7	141.3	114	60	60	48		143.8	144.4	144.4
6	355	47.7	222	215.9	168.3	117	67	67	51		170.7	171.4	171.4
8	420	55.6	273	269.9	219.1	133	76	76	58		221.5	222.2	222.2
10	510	63.5	343	323.8	273	152	86	111	66		276.2	277.4	276.2
12	560	66.7	400	381	323.8	156	92	117	70		327	328.2	328.6
14	605	69.9	432	412.8	355.6	165	94	127	74		359.2	360.2	360.4
16	685	76.2	495	469.9	406.4	178	106	140	78		410.5	411.2	411.2
18	745	82.6	546	533.4	457	184	117	152	80		461.8	462.3	462
20	815	88.9	610	584.2	508	190	127	165	83		513.1	514.4	512.8
24	940	101.6	718	692.2	610	203	140	184	93		616	616	614.4

CLASS 900



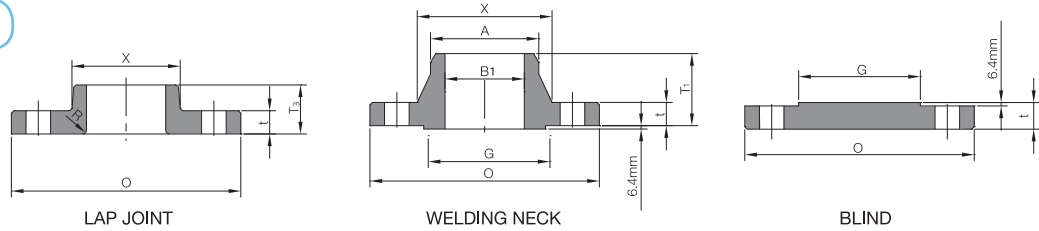
ANSI 900 lbs

ANSI B16.5 FORGED FLANGED

Unit : mm

Size (inch)	Out-Side Diam. of Flange	Thick-ness of Flange	Diam. of HUB Base	O.D of Raised Face	Diam. of HUB Base	Length Through Hub			Thread Length	Bore			
						Welding Neck	Slip-On Threaded Socket	Lap Joint		Welding Neck/Socket Welding	Slip-On Threaded Socket	Lap Joint	Counter Bore Min. Threaded
1/2	120	22.3	38	34.9	21.3	60	32	32	23	To be Specified by Pur-chaser	22.2	22.9	23.6
3/4	130	25.4	44	42.9	26.7	70	35	35	26		27.7	28.2	29
1	150	28.6	52	50.8	33.4	73	41	41	29		34.5	34.9	35.8
1 1/4	160	28.6	64	63.5	42.2	73	41	41	31		43.2	43.7	44.4
1 1/2	180	31.8	70	73	48.3	83	44	44	32		49.5	50	50.3
2	215	38.1	105	92.1	60.3	102	57	57	39		61.9	62.5	63.5
2 1/2	245	41.3	124	104.8	73	105	64	64	48		74.6	75.4	76.2
3	240	38.1	127	127	88.9	102	54	54	42		90.7	91.4	92.2
4	290	44.5	159	157.2	114.3	114	70	70	48		116.1	116.8	117.6
5	350	50.8	190	185.7	141.3	127	79	79	54		143.8	144.4	144.4
6	380	55.6	235	215.9	168.3	140	86	86	58		170.7	171.4	171.4
8	470	63.5	298	269.9	219.1	162	102	114	64		221.5	222.2	222.2
10	545	69.9	369	323.8	273	184	108	127	72		276.2	277.4	276.2
12	610	79.4	419	381	323.8	200	117	143	77		327	328.2	328.6
14	640	85.8	451	412.8	355.6	213	130	156	83		359.2	360.2	360.4
16	705	88.9	508	469.9	406.4	216	133	165	86		410.5	411.2	411.2
18	785	101.6	565	533.4	457	229	152	190	89		461.8	462.3	462
20	855	108	622	584.2	508	248	159	210	93		513.1	514.4	512.8
24	1040	139.7	749	692.2	610	292	203	267	102		616	616	614.4

CLASS 600



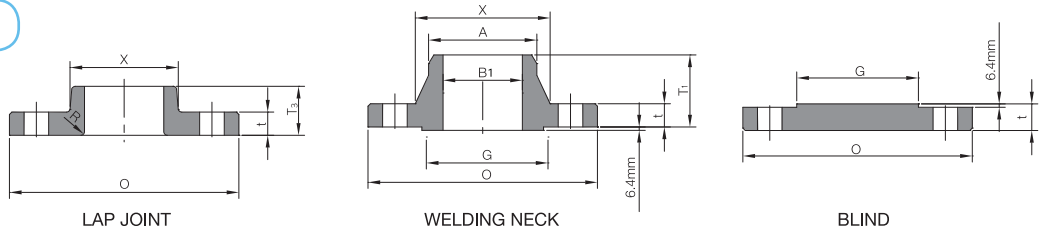
ANSI 600 lbs

ANSI B16.5 FORGED FLANGED

Unit : mm

Radius of Flange	Depth of Socket	DRILLING			LENGTH OF BOLTS				APPROXIMATE WEIGHT(kg)			
		Bolt Circle Diam.	Number of Holes	Diam. of Holes	Diam. of Bolt (inch)	Male and Female/Tongue and Groove	Stud Bolt Length		Welding Neck	Slip-On/Thre-aded	Lap Joint	Blind
R	Y						2mm Raised Face	Ring Joint				
3	10	66.7	4	15.9	1/2	70	75	75	0.9	0.91	0.8	0.91
3	11	82.6	4	19.1	5/8	85	90	90	1.59	1.4	1.36	1.4
3	13	88.9	4	19.1	5/8	85	90	90	1.9	1.7	1.59	1.81
5	14	98.4	4	19.1	5/8	90	95	95	2.49	2.27	2.04	2.04
6	16	114.3	4	22.2	3/4	100	110	110	3.63	3.1	2.95	3.4
8	17	127	8	19.1	5/8	100	110	110	4.54	3.63	3.63	4.4
8	19	149.2	8	22.2	3/4	115	120	120	6.35	5.44	4.99	6.8
10	21	168.3	8	22.2	3/4	120	125	125	8.16	7.26	6.35	8.9
10	22.4	184.2	8	25.4	7/8	135	140	140	11.8	9.53	9.08	13.17
11	24.1	215.9	8	25.4	7/8	140	145	145	16.78	14.97	14.06	18.6
11	23.9	266.7	8	28.6	1	160	165	165	30.87	28.5	27.5	30.84
13	26.9	292.1	12	28.6	1	165	170	170	36.77	36.32	35.38	38
13	31.8	349.2	12	31.8	1 1/8	185	190	190	50.8	44	50.8	62.2
13	33.3	431.8	16	34.9	1 1/4	210	215	215	86.26	76.2	74	102
13	39.6	489	20	34.9	1 1/4	215	220	220	102.51	97.52	108.86	132
13	41.4	527	20	38.1	1 3/8	230	235	235	121.56	102	111	158
13	44.5	603.2	20	41.3	1 1/2	250	255	255	177.06	149.82	165.71	224.73
13	49.3	654	20	44.5	1 5/8	265	275	275	215.65	180.1	194	285
13	54.1	723.9	24	44.5	1 5/8	280	285	290	267.86	231.54	258.78	365
13	63.5	838.2	24	50.8	1 7/8	325	330	335	372	330	362	533.45

CLASS 900



ANSI 900 lbs

ANSI B16.5 FORGED FLANGED

Unit : mm

Radius of Flange	DRILLING				LENGTH OF BOLTS			APPROXIMATE WEIGHT(kg)			
	Bolt Circle Diam.	Number of Holes	Diam. of Holes	Diam. of Bolt (inch)	Male and Female/Tongue and Groove	7mm Raised Face	Ring Joint	Welding Neck	Slip-On/Thre-aded	Lap Joint	Blind
3	82.6	4	22.2	3/4	100	110	110	2.1	1.81	1.81	1.9
3	88.9	4	22.2	3/4	110	115	115	2.72	2.4	2.3	2.7
3	101.6	4	25.4	7/8	120	125	125	3.86	3.41	3.4	4.09
5	111.1	4	25.4	7/8	120	125	125	4.54	3.41	4.09	4.54
6	123.8	4	28.6	1	135	140	140	5.9	5.45	5.4	5.9
8	165.1	8	25.4	7/8	140	145	145	10.89	9.98	9.53	11.34
8	190.5	8	28.6	1	150	160	160	16.33	15.8	13.15	16
10	190.5	8	25.4	7/8	140	145	145	15	11.8	11.34	13.17
11	235	8	31.8	1 1/8	165	170	170	23.13	23.2	22.6	24.5
11	279.4	8	34.9	1 1/4	185	190	190	38.5	37.65	36.74	39.46
13	317.5	12	31.8	1 1/8	185	190	195	49.89	48.3	47.5	51.5
13	393.7	12	38.1	1 3/8	215	220	220	79.45	75	86	89
13	469.9	16	38.1	1 3/8	230	235	235	118.04	111.13	125.64	131.54
13	533.4	20	38.1	1 3/8	250	255	255	157	146	167	187
13	558.8	20	41.3	1 1/2	265	275	280	181.6	172.36	180.07	224.07
13	616	20	44.5	1 5/8	280	285	290	224.73	192.95	211.11	272.4
13	685.8	20	50.8	1 7/8	320	325	335	308.72	272.4	295.1	385.9
13	749.3	20	54	2	345	350	360	376.82	331.42	367.74	488
13	901.7	20	66.7	2 1/2	430	440	455	685	632	700	905