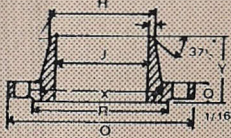
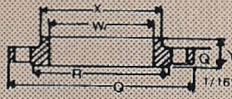


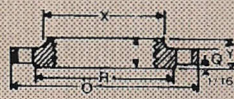
WELDING NECK



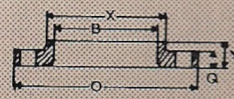
SLIP-ON



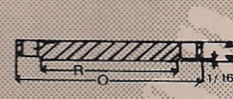
THREADED



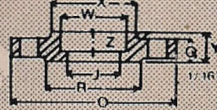
LAP JOINT



BLIND



SOCKET TYPE



ANSI B 16.5 150 CLASS FLANGES

Nominal Pipe Size	Outside Diam. Of Flange O	Thick. of Flange Q	Diam. of Raised Face R	DRILLING			Diam. of Hub at Base X	Diam. of Hub at Bevel H	LENGTH THRU HUB			Min. Thread Length T	DIAM. OF BORE			Radius of fillet r	Depth of Socket Z
				Diam. of Bolt Circle	Number Of Bolts	Diam. of Bolt Holes			Slip-on, Threaded, Socket Y	Lap Joint Y	Welding Neck Y		Slip-on Socket W	Lap Joint B	Welding Neck, Socket J		
1/2	3 1/2	7/16	1 3/8	2 3/8	4	5/8	1 1/2	.84	5/8	5/8	1 7/8	5/8	.88	.90	.62	1/8	3/8
3/4	3 3/8	1/2	1 11/16	2 3/4	4	5/8	1 1/2	1.05	5/8	5/8	2 1/16	5/8	1.09	1.11	.82	1/8	7/16
1	4 1/4	9/16	2	3 3/8	4	5/8	1 5/8	1.32	11/16	11/16	2 3/16	11/16	1.36	1.38	1.05	1/8	1/2
1 1/4	4 5/8	5/8	2 1/2	3 1/2	4	5/8	2 5/16	1.66	13/16	13/16	2 1/4	13/16	1.70	1.72	1.38	3/16	9/16
1 1/2	5	11/16	2 5/8	3 5/8	4	5/8	2 7/16	1.90	7/8	7/8	2 7/16	7/8	1.95	1.97	1.61	1/4	5/8
2	6	3/4	3 3/8	4 3/4	4	3/4	3 1/16	2.38	1	1	2 1/2	1	2.44	2.46	2.07	5/16	11/16
2 1/2	7	7/8	4 1/8	5 1/2	4	3/4	3 5/16	2.88	1 1/8	1 1/8	2 3/4	1 1/8	2.94	2.97	2.47	5/16	3/4
3	7 1/2	15/16	5	6	4	3/4	4 1/4	3.50	1 3/8	1 3/8	2 3/4	1 3/8	3.57	3.60	3.07	3/8	13/16
3 1/2	8 1/2	15/16	5 1/2	7	8	3/4	4 13/16	4.00	1 1/4	1 1/4	2 5/8	1 1/4	4.07	4.10	3.55	3/8	---
4	9	15/16	6 3/16	7 1/2	8	3/4	5 5/16	4.50	1 5/16	1 5/16	3	1 5/16	4.57	4.60	4.03	7/16	---
5	10	15/16	7 7/16	8 1/2	8	7/8	6 1/16	5.56	1 7/16	1 7/16	3 1/2	1 7/16	5.66	5.69	5.05	7/16	---
6	11	1	8 1/2	9 1/2	8	7/8	7 7/16	6.63	1 9/16	1 9/16	3 1/2	1 9/16	6.72	6.75	6.07	1/2	---
8	13 1/2	1 1/8	10 5/8	11 3/4	8	7/8	9 1/16	8.63	1 3/4	1 3/4	4	1 3/4	8.72	8.75	7.98	1/2	---
10	16	1 3/8	12 3/4	14 1/4	12	1	12	10.75	1 15/16	1 15/16	4	1 15/16	10.88	10.92	10.02	1/2	---
12	19	1 1/4	15	17	12	1	14 3/4	12.75	2 1/16	2 1/16	4 1/2	2 1/16	12.88	12.92	---	1/2	---
14	21	1 5/8	16 1/4	18 3/4	12	1 1/8	15 3/4	14.00	2 1/4	3 3/8	5	2 1/4	14.14	14.18	To be Specified by Purchaser	1/2	---
16	23 1/2	1 7/8	18 1/2	21 1/4	16	1 1/8	18	16.00	2 1/2	3 1/2	5	2 1/2	16.16	16.19		1/2	---
18	25	1 7/8	21	22 3/4	16	1 1/4	19 7/8	18.00	2 1/16	3 1/16	5 1/2	2 1/16	18.18	18.20		1/2	---
20	27 1/2	1 11/16	23	25	20	1 1/4	22	20.00	2 3/8	4 1/8	5 1/16	2 3/8	20.20	20.25	To be Specified by Purchaser	1/2	---
22	29 1/2	1 13/16	25 1/4	27 1/4	20	1 3/8	24	22.00	3 1/8	---	5 7/8	---	22.22	---		---	---
24	32	1 7/8	27 1/4	29 1/2	20	1 3/8	26 1/8	24.00	3 1/4	4 3/8	6	3 1/4	24.25	24.25		1/2	---

ANSI B 16.5 300 CLASS FLANGES

Nominal Pipe Size	Outside Diam. Of Flange O	Thick. of Flange Q	Diam. of Raised Face R	DRILLING			Diam. of Hub at Base X	Diam. of Hub at Bevel H	LENGTH THRU HUB			Min. Thread Length T	DIAM. OF BORE			Radius of fillet r	Depth of Socket Z
				Diam. of Bolt Circle	Number Of Bolts	Diam. of Bolt Holes			Slip-on, Threaded, Socket Y	Lap Joint Y	Welding Neck Y		Slip-on Socket W	Lap Joint B	Welding Neck, Socket J		
1/2	3 3/4	9/16	1 3/8	2 5/8	4	5/8	1 1/2	.84	7/8	7/8	2 1/16	5/8	.88	.90	.62	1/8	3/8
3/4	4 3/8	5/8	1 11/16	3 1/4	4	3/4	1 1/8	1.05	1	1	2 1/4	5/8	1.09	1.11	.82	1/8	7/16
1	4 7/8	11/16	2	3 1/2	4	3/4	2 1/8	1.32	1 1/8	1 1/8	2 7/16	11/16	1.36	1.38	1.05	1/8	1/2
1 1/4	5 1/4	3/4	2 1/2	3 7/8	4	3/4	2 1/2	1.66	1 1/8	1 1/8	2 9/16	13/16	1.70	1.72	1.38	3/16	9/16
1 1/2	6 1/8	13/16	2 5/8	4 1/2	4	7/8	2 3/4	1.90	1 1/8	1 3/8	2 11/16	7/8	1.95	1.97	1.61	1/4	5/8
2	6 3/2	7/8	3 3/8	5	8	3/4	3 3/16	2.38	1 5/8	1 5/8	2 3/4	1 1/8	2.44	2.46	2.07	5/16	11/16
2 1/2	7 1/2	1	4 1/8	5 7/8	8	7/8	3 15/16	2.88	1 1/2	1 1/2	3	1 1/4	2.94	2.97	2.47	5/16	3/4
3	8 1/4	1 1/8	5	6 3/8	8	7/8	4 7/8	3.50	1 11/16	1 11/16	3 1/8	1 1/4	3.57	3.60	3.07	3/8	13/16
3 1/2	9	1 1/16	5 1/2	7 1/4	8	7/8	5 1/4	4.00	1 3/4	1 3/4	3 3/16	1 1/16	4.07	4.10	3.55	3/8	---
4	10	1 1/4	6 3/16	7 7/8	8	7/8	5 3/4	4.50	1 7/8	1 7/8	3 9/16	1 1/16	4.57	4.60	4.03	7/16	---
5	11	1 3/8	7 7/16	9 1/4	8	7/8	7	5.56	2	2	3 7/8	1 11/16	5.66	5.69	5.05	7/16	---
6	12 1/2	1 7/8	8 1/2	10 3/8	12	7/8	8 1/8	6.63	2 1/16	2 1/16	3 7/8	1 13/16	6.72	6.75	6.07	1/2	---
8	15	1 5/8	10 5/8	13	12	1	10 1/4	8.63	2 7/16	2 7/16	4 3/8	2	8.72	8.75	7.98	1/2	---
10	17 1/2	1 7/8	12 3/4	15 1/4	16	1 1/8	12 3/4	10.75	2 3/8	3 1/4	4 3/8	2 3/16	10.88	10.92	10.02	1/2	---
12	20 1/2	2	15	17 3/4	16	1 1/4	14 3/4	12.75	2 7/8	4	5 1/8	2 3/8	12.88	12.92	---	1/2	---
14	23	2 1/8	16 1/4	20 1/4	20	1 1/4	16 3/4	14.00	3	4 3/8	5 3/8	2 1/2	14.14	14.18	To be Specified by Purchaser	1/2	---
16	25 1/2	2 1/4	18 1/2	22 1/2	20	1 3/8	19	16.00	3 1/4	4 3/4	5 3/4	2 11/16	16.16	16.19		1/2	---
18	28	2 3/8	21	24 3/4	24	1 7/8	21	18.00	3 3/2	5 1/8	6 1/4	2 3/4	18.18	18.20		1/2	---
20	30 1/2	2 1/2	23	27	24	1 3/8	23 1/8	20.00	3 3/4	5 1/2	6 3/8	2 7/8	20.20	20.25	To be Specified by Purchaser	1/2	---
22	33	2 5/8	25 1/4	29 1/4	24	1 5/8	25 1/4	22.00	4	---	6 1/2	---	22.22	---		---	---
24	36	2 3/4	27 1/4	32	24	1 5/8	27 5/8	24.00	4 3/16	6	6 5/8	3 1/4	24.25	24.25		1/2	---

All Dimensions Are In Inches