



150# Flanges

304/304L 316/316L A182

unit: inch

Nominal Pipe Size	FLANGE DIAMETER (O.D.)	MINIMUM FLANGE THICKNESS (Q) (1)	HUB DIA. AT BASE (X)	RAISED FACE DIA. (F)	HUB DIA. AT WELDING POINT (H)	BORE DIAMETER (B)			COUNTER BORE OF THREADED FLANGE (C)	DEPTH OF SOCKET (D)	LENGTH THROUGH HUB (Y)			MIN. THREAD LENGTH	RADIUS LAP JOINT (R)	DRILLING			BOLTING			
						WELDING NECK AND SOCKET WELD (B1)(2)	SLIP-ON AND SOCKET WELD MIN. (B2)	LAP JOINT MIN. (B3)			WELDING NECK (Y)	SLIP-ON SOCKET WELD AND THREADED (Y)	LAP JOINT (Y)			DIAMETER OF BOLT CIRCLE	NO. OF HOLES	DIAMETER OF HOLES	DIAMETER OF BOLTS	MACHINE BOLT LENGTH		STUD BOLT LENGTH
																				Raised Face .06"	Raised Face .06"	Ring Joint Raised Face
1/2"	3.50	0.44	1.19	1.38	0.84	0.62	0.88	0.90	0.38	1.88	0.62	0.62	0.62	0.12	2.38	4.00	0.62	1/2"	2.00	2.50	-	
3/4"	3.88	0.50	1.50	1.69	1.05	0.82	1.09	1.11	0.44	2.06	0.62	0.62	0.62	0.12	2.75	4.00	0.62	1/2"	2.25	2.50	-	
1"	4.25	0.56	1.94	2.00	1.32	1.05	1.36	1.38	0.50	2.19	0.69	0.69	0.69	0.12	3.12	4.00	0.62	1/2"	2.25	2.75	3.25	
1-1/4"	4.62	0.62	2.31	2.50	1.66	1.38	1.70	1.72	0.56	2.25	0.81	0.81	0.81	0.19	3.50	4.00	0.62	1/2"	2.50	2.75	3.25	
1-1/2"	5.00	0.69	2.56	2.88	1.90	1.61	1.95	1.97	0.62	2.44	0.88	0.88	0.88	0.25	3.88	4.00	0.62	1/2"	2.50	3.00	3.50	
2"	6.00	0.75	3.06	3.62	2.38	2.07	2.44	2.46	0.69	2.50	1.00	1.00	1.00	0.31	4.75	4.00	0.75	5/8"	2.75	3.25	3.75	
2-1/2"	7.00	0.88	3.56	4.12	2.88	2.47	2.94	2.97	0.75	2.75	1.12	1.12	1.12	0.31	5.50	4.00	0.75	5/8"	3.00	3.50	4.00	
3"	7.50	0.94	4.25	5.00	3.50	3.07	3.57	3.60	0.81	2.75	1.19	1.19	1.19	0.38	6.00	4.00	0.75	5/8"	3.25	3.75	4.25	
3-1/2"	8.50	0.94	4.81	5.50	4.00	3.55	4.07	4.10	0.88	2.81	1.25	1.25	1.25	0.38	7.00	8.00	0.75	5/8"	3.25	3.75	4.25	
4"	9.00	0.94	5.31	6.19	4.50	4.03	4.57	4.60	0.94	3.00	1.31	1.31	1.31	0.44	7.50	8.00	0.75	5/8"	3.25	3.75	4.25	
5"	10.00	0.94	6.44	7.31	5.56	5.05	5.66	5.69	0.94	3.50	1.44	1.44	1.44	0.50	8.50	8.00	0.88	3/4"	3.25	4.00	4.50	
6"	11.00	1.00	7.56	8.50	6.63	6.07	6.72	6.75	1.06	3.50	1.56	1.56	1.56	0.50	9.50	8.00	0.88	3/4"	3.50	4.00	4.50	
8"	13.50	1.12	9.69	10.62	8.63	7.98	8.72	8.75	1.25	4.00	1.75	1.75	1.75	0.50	11.75	8.00	0.88	3/4"	3.75	4.25	4.75	
10"	16.00	1.19	12.00	12.75	10.75	10.02	10.88	10.92	1.31	4.00	1.94	1.94	1.94	0.50	14.25	12.00	1.00	7/8"	4.00	4.75	5.25	
12"	19.00	1.25	14.38	15.00	12.75	12.00	12.88	12.92	1.56	4.50	2.19	2.19	2.19	0.50	17.00	12.00	1.00	7/8"	4.25	4.75	5.25	
14"	21.00	1.38	15.75	16.25	14.00	13.25	14.14	14.18	1.63	5.00	2.25	3.12	2.25	0.50	18.75	12.00	1.12	1"	4.50	5.25	5.75	
16"	23.50	1.14	18.00	18.50	16.00	15.25	16.16	16.19	1.75	5.00	2.50	3.44	2.50	0.50	21.25	16.00	1.12	1"	4.75	5.50	6.00	
18"	25.00	1.56	19.88	21.00	18.00	17.25	18.18	18.20	1.94	5.50	2.69	3.81	2.69	0.50	22.75	16.00	1.25	1-1/8"	5.00	6.00	6.50	
20"	27.50	1.69	22.00	23.00	20.00	19.25	20.20	20.25	2.12	5.69	2.88	4.06	2.88	0.50	25.00	20.00	1.25	1-1/8"	5.50	6.25	6.75	
24"	32.00	1.88	26.12	27.25	24.00	23.25	24.25	24.25	2.50	6.00	3.25	4.38	3.25	0.50	29.50	20.00	1.38	1-1/4"	6.00	7.00	7.50	