

C.Z.IT DEVELOPMENT CO.,LTD

1134-HUAYING BUILDING CENTER AVENUE,TIANJIN FREE TRADE ZONE
(AIRPORT ECONOMIC ZONE)TIANJIN,CHINA

Tel: 0086-22-66185520 Fax: 0086-22-66185520



Website:www.chinesefittings.com.cn

Standard

- ANSI B16.5
- ANSI B16.47 A/B
- API 605
- API 6A

Summary of flange sizes specified by common standards

Flange Type	Specification		
	ASME/ANSI B16.5	ASME B16.47 Series A (or MSS SP-44)	ASME B16.47 Series B (or API605)
	Nominal Pipe Sizes		
	<NPS 26	≥NPS 26	≤NPS 26
	Nominal Pressure (Class)		
	Class(lb)	Class(lb)	Class(lb)
Weld Neck	150-2500	150-900	75-900
Slip-on	150-1500	-	-
Blind	150-2500	300-900	300-900
Lap Joint	150-2500	-	-
Socket Weld	150-1500	-	-
Threaded	150-2500	-	-
Flat/Raised Fachings	As above	As above	As above
Ring Joint Fachings	150-2500	300-900	300-900
Other Fachings	150-2500 ³	-	-

Grade SS	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Other
A182 F304/1.4301	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	—	8.0-11.0	18.0-20.0	—	—
A182 304L/1.4307	≤0.035	≤1.00	≤2.00	≤0.045	≤0.030	—	8.0-13.0	18.0-20.0	—	—
304H/1.4948	0.04-0.10	≤1.00	≤2.00	≤0.045	≤0.030	—	8.0-11.0	18.0-20.0	—	—
A182 F316/1.4401	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	—	11.0-14.0	16.0-18.0	2.0-3.0	—
A182 316L/1.4404	≤0.35	≤1.00	≤2.00	≤0.045	≤0.030	—	10.0-14.0	16.0-18.0	2.0-3.0	—
316H/1.4919	0.04-0.10	≤1.00	≤2.00	≤0.045	≤0.030	—	10.0-14.0	16.0-18.0	2.0-3.0	—
316Ti/1.4571	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	—	10.0-14.0	16.0-18.0	2.0-3.0	0.7>5X(C+N) N≤0.10
A182 F321/1.4541	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	—	9.0-12.0	17.0-19.0	—	Ti ≥5×C%
321H/1.4878	0.04-0.10	≤1.00	≤2.00	≤0.040	≤0.030	—	9.0-12.0	17.0-20.0	—	Ti4×C≤0.60
A182 F317/1.4449	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	—	11.0-14.0	18.0-20.0	3.0-4.0	—
A182 F317L1.4438	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	—	11.0-15.0	18.0-20.0	3.0-4.0	—
A182 F310s/1.4845	≤0.08	≤1.50	≤2.00	≤0.045	≤0.030	—	19.0-22.0	24.0-26.0	—	N≤0.11
310H/1.4845	0.04-0.10	≤1.00	≤2.00	≤0.045	≤0.030	—	19.0-22.0	24.0-26.0	—	—
A182 F347/1.4550	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	—	9.0-13.0	17.0-19.0	—	Cb+Ta≥10×C
347H/1.4912	0.04-0.10	≤1.00	≤2.00	≤0.045	≤0.030	—	9.0-13.0	17.0-20.0	—	—
904L/1.4539 (NO8904)	≤0.03	≤1.00	≤2.00	≤0.035	≤0.030	1.0-2.0	23.0-28.0	18.0-23.0	5.0-6.0	N ≤ 0.1
S31254/1.4547 (254Mo)	≤0.02	≤0.8	≤1.00	≤0.03	≤0.01	0.5-1.0	17.5-18.5	19.5-20.5	6-6.5	N 0.18-0.22

Grade CS	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti
A105	≤0.35	≤0.35	0.6-1.05	≤0.040	≤0.050	≤0.4	≤0.4	≤0.30	≤0.12	≤0.08	–	–
A350 LF2	≤0.30	0.15-0.3	0.6-1.35	≤0.035	≤0.040	≤0.4	≤0.4	≤0.30	≤0.12	≤0.08	≤0.02	–
St37	≤0.17	–	≤1.0	≤0.035	≤0.030	–	–	–	–	–	–	–
Q235	≤0.22	≤0.35	≤1.4	≤0.045	≤0.05	–	–	–	–	–	–	–
P235GH	≤0.16	≤0.35	0.6-1.2	≤0.025	≤0.010	≤0.3	≤0.3	≤0.30	≤0.08	≤0.02	≤0.02	≤0.03
P265GH	≤0.20	≤0.4	0.8-1.4	≤0.025	≤0.010	≤0.3	≤0.3	≤0.3	≤0.08	≤0.02	≤0.02	≤0.03
P280GH	≤0.2	≤0.4	≤1.5	≤0.025	≤0.015	≤0.3	≤0.3	–	≤0.08	≤0.02	≤0.01	–

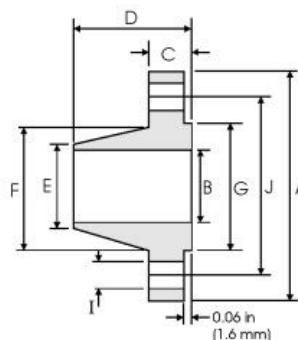
Grade AS	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Al	Nb	N
A182F11/ Class 1	0.05-0.15	0.5-1	0.3-0.6	≤0.03	≤0.03	–	–	1.25%	0.5%	–	–	–
A182F11/ Class 2	0.10-0.2	0.5-1.0	0.3-0.8	≤0.04	≤0.04	–	–	1.25%	0.5%	–	–	–
A182F11/ Class 3	0.1-0.2	≤0.5-1.0	0.3-0.8	≤0.04	≤0.04	–	–	1.25%	0.5%	–	–	–
A182F22/ Class 1	0.05-0.15	≤0.5	0.3-0.6	≤0.04	≤0.04	–	–	2-2.5	0.87-1.13	–	–	–
A182F22/ Class 3	0.05-0.15	≤0.5	0.3-0.6	≤0.04	≤0.04	–	–	2-2.5	0.87-1.13	–	–	–
A182F5	≤0.15	≤0.5	0.3-0.6	≤0.03	≤0.03	–	≤0.5	4-6	0.44-0.65	–	–	–
A182F9	≤0.15	0.5-1.0	0.3-0.6	≤0.03	≤0.03	–	–	8-10	0.9-1.1	–	–	–
A182 F91	0.08-0.12	0.2-0.5	0.3-0.6	≤0.02	≤0.01	–	≤0.4	8-9.5	0.85-1.05	–	0.06-0.1	–
16Mo3	0.12-0.2	≤0.35	0.4-0.9	≤0.025	≤0.01	≤0.3	≤0.3	≤0.3	0.25-0.35	≥0.02	–	≤0.012

Grade SDSS	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	N	Other
UNS S31803	≤0.03	≤1.0	≤2.0	≤0.03	≤0.02	–	4.5-6.5	21-23	2.5-3.5	0.08-0.2	–
S32205	≤0.03	–	–	–	–	–	≤5	≤22	≤3	0.14-0.2	–
S32750	≤0.03	–	–	–	–	–	≤7	≤25	≤4	0.24-0.32	–
S32550	≤0.04	–	–	–	–	≤2	≤5	≤22	≤3	0.1-0.25	–
S32760	≤0.019	≤0.526	≤0.737	≤0.015	≤0.005	≤0.752	≤6.85	24-54	–	0.256	W≤0.722
SAF2205	≤0.03	–	≤2	–	≤0.03	–	≤5	≤22	3.3	–	–
SAF2507	≤0.03	≤0.8	≤1.2	≤0.035	≤0.02	–	6-8	24-26	3-5	0.24-0.32	–
S32304	≤0.03	–	–	–	–	–	≤4	≤23	–	0.05-0.2	–

Grade PIPELINE	C	Si	Mn	P	S
A694 F42	≤0.26	≤0.15-0.35	≤1.6	≤0.025	≤0.025
A694 F52	≤0.26	≤0.15-0.35	≤1.6	≤0.025	≤0.025
A694 F60	≤0.26	≤0.15-0.35	≤1.6	≤0.025	≤0.025
A694 F65	≤0.26	≤0.15-0.35	≤1.6	≤0.025	≤0.025
A694 F70	≤0.26	≤0.15-0.35	≤1.6	≤0.025	≤0.025
A694 F80	≤0.26	≤0.15-0.35	≤1.6	≤0.025	≤0.025

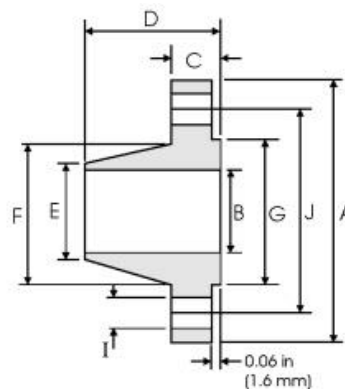
Nickel alloy	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Ti	Fe	Al	Other
Inconel 600/N06600/2.4816	≤0.15	≤0.15	≤1.00	—	≤0.015	≤0.5	≥72	14-17	—	—	6-10	—	—
Inconel 601/N00601/2.4851	≤0.10	≤0.5	≤1.5	—	≤0.015	≤1.00	58-63	21-25	—	—	≤	1-1.7	—
Inconel 690/N06690	≤0.05	≤0.5	≤0.5	—	≤0.015	≤0.5	≤28	27-31	—	—	7-11	—	—
Inconel 625/N06625/2.4856	≤0.1	≤0.5	≤0.5	≤0.015	≤0.015	—	≥58	20-23	8-10	≤0.4	≤5.0	≤0.4	Nb≤3.15-4.15
Inconel 718/N07718/24668	≤0.08	≤0.35	≤0.35	≤0.015	≤0.015	≤0.3	50-55	17-21	2.8-3.3	0.65-1.15	remainder	0.2-0.8	N≤0.006 Co≤1.0 Nb≤4.75-5.5
Incoloy 800/N08800/14876	≤0.1	≤1.00	≤1.5	—	≤0.015	≤0.75	30-35	19-23	—	0.15-0.6	≥39.5	0.15-0.6	—
incoloy800H/N08810/14958	0.05-0.1	≤1.00	≤1.5	—	≤0.015	≤0.75	30-35	19-23	—	0.15-0.6	≥39.5	0.15-0.6	—
Incoloy 825/N08825/24858	≤0.05	≤0.5	≤1.0	—	≤0.03	1.5-3	≤38-46	19.5-23.5	2.5-3.5	0.6-1.2	≥22	≤0.2	—
C-276/N010276/24819	≤0.01	≤0.08	≤1.00	≤0.04	≤0.03	—	balance	14.5-16.5	15-17	—	4-7	—	Zr≤25 Tu≤3-4.5 Va≤0.35
Monel 400/N04400/24360	≤0.3	≤0.5	≤2.00	—	≤0.024	28-34	≥63	—	—	—	≤2.5	—	—
Monel K-500/N05500	≤0.18	≤0.5	≤1.5	—	≤0.01	27-33	≤63	—	—	0.35-0.85	≤2.0	2.3-3.15	—
ALLOY 20/N08020/24660	≤0.07	≤1.00	≤2.00	≤0.045	≤0.035	3-4	32-38	19-21	2-3	—	balance	—	Nb≤8C-1.0
ALLOY 28/N08028	≤0.03	≤1.00	≤2.5	≤0.03	≤0.03	0.6-1.4	30-34	26-28	3-4	—	Remainder	—	—

Weld Neck Flanges -ANSI B16.5--Class150



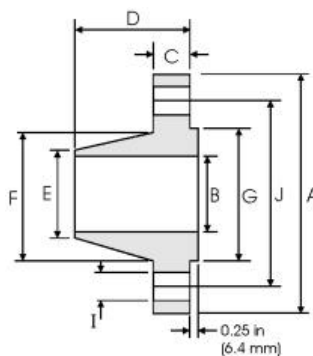
pipe	Flange Data					Hub Data		Raised Face	Drilling Data			Weight
Nominal pipe size	A	B	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.500 88.90	0.620 15.70	0.440 11.20	1.880 47.80	0.840 21.30	1.190 30.20	1.380 35.00	4	0.620 15.70	2.380 60.45	0.48
3/4	1.050 26.70	3.880 98.60	0.820 20.80	0.500 12.70	2.060 52.30	1.050 26.70	1.500 38.10	1.690 42.90	4	0.620 15.70	2.750 69.85	0.71
1	1.315 33.40	4.250 108.0	1.050 26.70	0.560 14.20	2.190 55.60	1.320 33.50	1.940 49.30	2.000 50.80	4	0.620 15.70	3.120 79.25	1.01
1 1/4	1.660 42.20	4.620 117.3	1.380 35.10	0.620 15.70	2.250 57.15	1.660 42.20	2.310 58.70	2.500 63.50	4	0.620 15.70	3.500 88.90	1.33
1 1/2	1.900 48.30	5.000 127.0	1.610 40.90	0.690 17.50	2.440 62.00	1.900 48.30	2.560 65.00	2.880 73.15	4	0.620 15.70	3.880 98.60	1.72
2	2.375 60.30	6.000 152.4	2.070 52.60	0.750 19.10	2.500 63.50	2.380 60.45	3.060 77.70	3.620 91.90	4	0.750 19.10	4.750 120.7	2.58
2 1/2	2.875 73.00	7.000 177.8	2.470 62.70	0.880 22.40	2.750 69.85	2.880 73.15	3.560 90.40	4.120 104.6	4	0.750 19.10	5.500 139.7	4.11
3	3.500 88.90	7.500 190.5	3.070 78.00	0.940 23.90	2.750 69.85	3.500 88.9	4.250 108.0	5.000 127.0	4	0.750 19.10	6.000 152.4	4.92
3 1/2	4.000 101.6	8.500 215.9	3.500 90.20	0.940 23.90	2.810 71.40	4.000 101.6	4.810 122.2	5.500 139.7	8	0.750 19.10	7.000 177.8	6.08
4	4.500 114.3	9.000 228.6	4.032 102.4	0.940 23.90	3.000 76.20	4.500 114.3	5.310 134.9	6.190 157.2	8	0.720 19.10	7.500 190.5	6.84
5	5.563 141.3	10.00 254.0	5.050 128.3	0.940 23.90	3.500 88.90	5.560 141.2	6.440 163.6	7.310 185.7	8	0.880 22.40	8.500 215.9	8.56
6	6.625 168.3	11.00 279.4	6.070 154.2	1.000 25.40	3.500 88.90	6.630 168.4	7.560 192.0	8.500 215.9	8	0.880 22.40	9.500 241.3	10.6
8	8.625 219.1	13.50 342.9	7.980 202.7	1.120 28.40	4.000 101.6	8.630 219.2	9.690 246.1	10.62 269.7	8	0.880 22.40	11.75 298.5	17.6
10	10.75 273	16.00 406.4	10.02 254.5	1.190 30.20	4.000 101.6	1075 273.0	12.00 304.8	12.75 323.8	12	1.000 25.40	14.25 362.0	24.0
12	12.75 323.8	19.00 482.6	12.00 304.8	1.250 31.75	4.500 114.3	12.75 323.8	14.38 365.3	15.00 381.0	12	1.000 25.40	17.00 431.8	36.5
14	14.00 355.6	21.00 533.4	To be specified by Purchaser	1.380 35.10	5.000 127.0	14.00 355.60	15.75 400.1	16.25 412.7	12	1.120 28.40	18.75 476.3	48.4
16	16.00 406.4	23.50 596.9		1.440 36.60	5.000 127.0	16.00 406.4	18.00 475.2	18.50 469.9	16	1.120 28.40	21.25 539.8	60.6
18	18.00 457.2	25.00 635.00		1.560 39.60	5.500 139.7	18.00 457.2	19.88 505.0	21.00 533.4	16	1.250 31.75	22.75 577.9	68.3
20	20.00 508.0	27.50 698.5		1.690 42.90	5.690 144.5	20.00 508.0	22.00 558.8	23.00 584.2	20	1.250 31.75	25.00 635.0	84.5
24	24.00 609.0	32.00 812.0		1.880 47.80	6.000 152.4	24.00 209.6	26.12 663.14	27.25 672.1	20	1.380 35.10	29.50 749.3	115

Weld Neck Flanges -ANSI B16.5--Class300



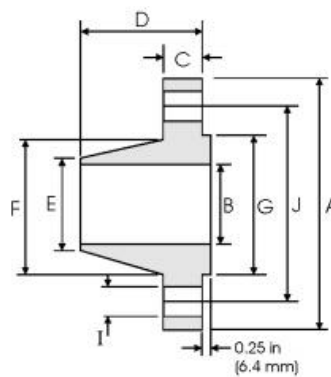
pipe	Flange Data				Hub Data		Raised Face	Drilling Data			Weight	
Nominal pipe size	A	B	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.750 95.20	0.620 15.70	0.560 14.20	2.060 52.30	0.840 21.30	1.500 38.10	1.380 35.00	4	0.620 15.70	2.620 66.55	0.75
3/4	1.050 26.70	4.620 117.3	0.820 20.80	0.620 15.70	2.250 57.15	1.050 26.70	1.880 47.70	1.690 42.90	4	0.750 19.00	3.250 82.50	1.26
1	1.315 33.40	4.880 123.9	1.050 26.70	0.690 17.50	2.440 62.00	1.320 42.20	2.500 63.50	2.500 63.50	4	0.750 19.00	3.880 88.90	1.52
1 1/4	1.660 42.20	5.250 133.3	1.380 35.10	0.750 19.00	2.560 65.00	1.660 42.20	2.500 63.50	2.500 63.50	4	0.750 19.00	3.880 98.50	2.03
1 1/2	1.900 48.30	6.120 155.4	1.610 40.90	0.810 20.60	2.690 68.30	1.900 48.30	2.750 69.82	2.880 73.15	4	0.880 22.30	4.500 114.3	2.89
2	2.375 60.30	6.500 165.1	2.070 52.60	0.880 22.30	2.750 69.85	2.380 60.45	3.310 84.00	3.620 91.90	8	0.750 19.00	5.000 127.0	3.40
2 1/2	2.875 73.00	7.500 190.5	2.470 62.70	1.000 25.40	3.000 76.20	2.880 60.45	3.310 84.00	3.620 91.90	8	0.880 22.30	5.880 149.3	5.17
3	3.500 88.90	8.250 209.5	3.070 78.00	1.120 28.40	3.120 79.25	3.500 88.90	4.620 117.3	5.000 127.0	8	0.880 22.30	6.620 168.1	6.93
3 1/2	4.000 101.6	9.000 228.6	3.550 90.20	1.190 30.20	3.190 81.00	4.000 101.6	5.250 133.3	5.500 139.7	8	0.880 22.30	7.250 184.1	8.67
4	4.500 114.3	10.00 254.0	4.030 102.4	1.250 31.70	3.380 85.80	4.500 114.3	5.750 146.0	6.190 157.2	8	0.880 22.30	7.880 200.1	11.2
5	5.563 141.3	11.00 279.4	5.050 128.3	1.380 35.00	3.880 98.50	5.560 141.2	7.000 177.8	7.310 185.7	8	0.880 22.3	9.250 234.9	15.1
6	6.625 168.3	12.50 317.5	6.070 154.2	1.440 36.50	3.880 98.50	6.630 168.4	8.120 206.2	8.500 215.9	12	0.880 22.30	10.62 269.7	19.1
8	8.625 219.1	15.00 381.0	7.980 202.7	1.620 41.10	4.380 111.2	8.630 219.2	10.25 260.3	10.62 269.7	12	1.000 25.40	13.00 330.2	29.9
10	10.75 273.0	17.50 444.5	10.02 254.5	1.880 47.70	4.620 117.3	10.75 273.0	12.62 320.5	12.75 323.8	16	1.120 28.40	15.25 387.3	42.7
12	12.75 323.8	20.50 520.7	12.00 304.8	2.000 50.80	5.120 130.0	12.75 323.8	14.75 374.6	15.00 381.0	16	1.250 31.70	17.75 450.8	61.8
14	14.00 355.6	23.00 584.2	To be specified by Purchaser	2.120 53.80	5.620 142.7	14.00 355.6	16.75 425.4	16.25 425.4	20	1.250 31.70	20.25 514.3	85.8
16	16.00 406.4	25.50 647.7		2.250 57.15	5.570 146.0	16.00 406.4	19.00 482.6	18.50 469.9	20	1.380 35.00	22.50 571.5	106
18	18.00 457.2	28.00 711.2		2.380 60.45	6.250 158.7	18.00 457.2	21.00 533.4	21.00 533.4	24	1.380 35.00	24.75 628.6	131
20	20.00 508.0	30.50 774.7		2.500 63.50	6.380 162.0	20.00 508.0	23.12 587.2	23.00 584.2	24	1.380 35.00	27.00 685.8	158
24	24.00 609.6	36.00 914.4		2.750 69.85	6.620 168.1	24.00 609.6	27.62 701.5	27.25 692.1	24	1.620 41.10	32.00 812.8	230

Weld Neck Flanges -ANSI B16.5--Class400



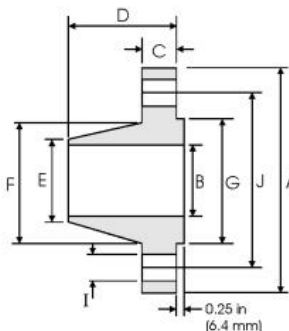
pipe	Flange Data				Hub Data		Raised Face	Drilling Data			Weight	
Nominal pipe size	A	B	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.750 95.30	To be specified by Purchaser	0.560 14.20	2.060 52.30	0.840 21.30	1.500 38.10	1.380 35.00	4	0.620 15.70	2.620 66.55	0.87
3/4	1.050 26.70	4.620 117.3		0.620 15.70	2.250 57.15	1.050 26.70	1.880 47.80	1.690 42.90	4	0.750 16.10	3.250 82.60	1.45
1	1.315 33.40	4.880 124.0		0.690 17.50	2.440 62.0	1.320 33.50	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.76
1 1/4	1.660 42.20	5.250 133.1		0.810 20.60	2.620 66.55	1.660 42.20	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	2.49
1 1/2	1.900 48.30	6.120 155.4		0.880 22.40	2.750 69.85	1.900 48.30	2.750 69.85	2.880 73.15	4	0.880 22.40	4.500 114.3	3.49
2	2.375 60.30	6.500 165.1		1.000 25.40	2.880 73.15	2.380 60.45	3.310 84.10	3.620 91.90	8	0.750 19.10	5.000 127.0	4.36
2 1/2	2.875 73.00	7.500 190.5		1.120 28.40	3.120 79.25	2.880 73.15	3.940 100.1	4.120 104.6	8	0.880 22.40	5.880 149.4	6.43
3	3.50 88.90	8.250 209.6		1.250 31.75	3.250 82.60	3.500 88.90	4.620 117.3	5.000 127.0	8	0.880 22.40	6.620 168.1	8.53
3 1/2	4.000 101.6	9.000 228.6		1.380 35.10	3.380 85.90	4.000 101.6	5.250 133.4	5.500 139.7	8	1.000 25.40	7.250 184.2	10.7
4	4.500 114.3	10.00 254.0		1.380 35.10	3.500 88.90	4.500 114.3	5.750 146.1	6.190 157.2	8	1.000 25.40	7.880 200.2	12.8
5	5.563 141.3	11.00 279.4		1.500 38.10	4.000 101.6	5.560 141.2	7.000 177.8	7.310 185.7	8	1.000 25.40	9.250 235.0	16.9
6	6.625 168.3	12.50 317.5		1.620 41.10	4.060 103.1	6.630 168.4	8.120 206.2	8.500 215.9	12	1.000 25.40	10.62 269.7	22.0
8	8.625 219.1	15.00 381.0		1.880 47.80	4.620 117.3	8.630 219.2	10.25 260.4	10.62 269.7	12	1.120 28.40	13.00 330.2	34.7
10	10.75 273.0	17.50 444.5		2.120 53.80	4.880 124.0	10.75 273.0	12.62 320.5	12.75 323.8	16	1.250 31.75	15.25 387.4	48.5
12	12.75 323.8	2.50 520.7		2.250 57.15	5.380 136.7	12.75 323.8	14.75 374.7	15.00 381.0	16	1.380 35.10	17.75 450.9	69.6
14	14.00 355.6	23.00 584.2		2.380 60.45	5.880 149.4	14.00 355.6	16.57 425.5	16.25 412.7	20	1.380 35.10	20.25 514.4	95.5
16	16.00 406.4	25.50 647.7		2.500 63.50	6.000 152.4	16.00 406.4	19.0 482.6	18.50 469.9	20	1.500 38.10	22.50 571.5	118
18	18.00 457.2	28.00 711.2		2.620 66.55	6.500 165.1	18.00 457.2	21.00 533.1	21.00 533.1	24	1.500 38.10	24.75 628.7	145
20	20.00 508.0	30.50 774.7		2.750 69.85	6.620 168.1	20.00 508.0	23.12 587.2	23.00 584.2	24	1.620 41.10	27.00 685.8	173
24	24.00 609.6	36.00 914.4	3.000 76.20	6.800 174.8	24.00 609.6	27.62 701.5	27.25 692.1	24	1.880 47.80	32.00 812.8	249	

Weld Neck Flanges -ANSI B16.5--Class600



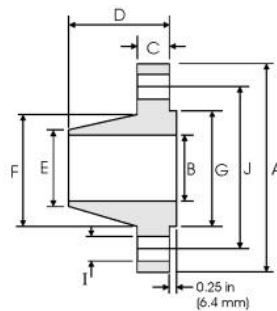
pipe	Flange Data				Hub Data		Raised Face	Drilling Data			Weight	
Nominal pipe size	A	B	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.75 95.30	To be specified by Purchaser	0.560 14.20	2.060 52.30	0.840 21.30	1.500 38.10	1.380 35.00	4	0.620 15.70	2.620 66.55	0.87
3/4	1.050 26.70	4.620 117.3		0.620 15.70	2.250 57.15	1.050 26.70	1.880 47.80	1.690 42.90	4	0.750 19.10	3.250 82.60	1.45
1	1.315 33.40	4.880 124.0		0.690 17.50	2.440 62.00	1.320 33.50	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.76
1 1/4	1.660 42.20	5.250 133.4		0.810 20.60	2.620 66.55	1.660 42.20	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	2.49
1 1/2	1.900 48.30	6.120 155.4		0.880 22.40	2.750 69.85	1.900 48.30	2.750 69.85	2.880 73.15	4	0.880 2.40	4.500 114.3	3.49
2	2.375 60.30	6.500 165.1		1.000 25.40	2.880 73.15	2.380 60.45	3.310 84.10	3.620 91.90	8	0.750 19.10	5.000 127.0	4.36
2 1/2	2.875 73.00	7.500 190.5		1.120 28.40	3.120 79.20	2.880 73.15	3.940 100.1	4.120 104.6	8	0.880 22.40	5.880 149.4	6.43
3	3.500 88.90	8.250 209.6		1.250 31.75	3.250 82.60	3.500 88.90	4.620 117.3	5.000 127.0	8	0.880 22.40	6.620 168.1	8.53
3 1/2	4.000 101.6	9.000 228.6		1.380 35.10	3.380 85.90	4.000 101.6	5.250 133.4	5.500 139.7	8	1.000 25.40	7.250 184.2	10.7
4	4.500 114.3	10.75 273.1		1.500 38.10	4.000 101.6	4.500 114.3	6.000 152.4	6.190 157.2	8	1.000 25.40	8.500 215.	17.4
5	5.563 141.3	13.00 330.2		1.750 44.50	4.500 114.3	5.560 141.2	7.440 189.0	7.310 185.7	8	1.120 28.40	10.50 266.7	29.2
6	6.625 168.3	14.00 355.6		1.880 47.80	4.620 117.3	6.630 168.4	8.750 222.3	8.500 215.9	12	1.120 28.40	11.50 292.1	34.9
8	8.625 219.1	16.50 419.1		2.190 55.60	5.250 133.4	8.630 219.2	10.75 273.1	10.62 269.7	12	1.250 31.75	13.75 349.3	53.9
10	10.75 273.0	20.00 508.0		2.500 63.50	6.000 152.4	10.75 273.0	13.50 342.9	12.75 323.8	16	1.380 35.10	17.00 431.8	86.5
12	12.75 323.8	22.00 558.8		2.620 66.55	6.120 155.4	12.75 323.8	15.75 400.1	15.00 381.0	20	1.380 35.10	19.25 489.0	103
14	14.00 355.6	23.75 603.3		2.750 69.85	6.500 165.1	14.00 355.6	17.00 431.8	16.25 412.7	20	1.500 38.10	20.75 527.1	122
16	16.00 406.4	27.00 685.8		3.000 76.20	7.000 17.8	16.00 406.4	19.50 495.3	18.50 469.9	20	1.620 41.10	23.75 603.3	170
18	18.00 457.2	29.25 743.0		3.250 82.60	7.250 184.2	18.00 457.2	21.50 546.1	21.00 533.1	20	1.750 44.50	25.75 654.1	204
20	20.00 508.0	32.00 812.8		3.500 88.90	7.500 190.5	20.00 508.0	24.00 609.6	23.00 584.2	24	1.750 44.50	28.50 723.9	254
24	24.00 609.6	37.00 939.8		4.000 101.6	8.000 203.2	24.00 609.6	28.25 717.6	27.25 692.1	21	2.000 50.80	33.00 838.2	358

Weld Neck Flanges -ANSI B16.5--Class900



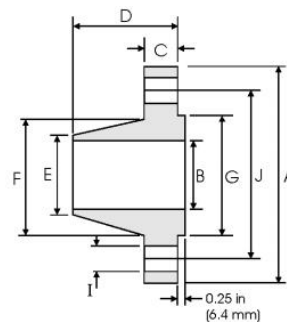
pipe	Flange Data				Hub Data		Raised Face	Drilling Data			Weight	
Nominal pipe size	A	B	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	4.750 120.6	To be specified by Purchaser	0.880 22.30	2.380 60.45	0.840 21.30	1.500 38.10	1.380 35.00	4	0.880 22.30	3.250 82.50	1.87
3/4	1.050 26.70	5.120 130.0		1.000 25.40	2.750 69.85	1.050 26.70	1.750 44.00	1.690 42.90	4	0.880 22.30	3.500 88.90	2.56
1	1.315 33.40	5.880 149.3		1.120 28.40	2.880 73.15	1.320 33.50	2.060 52.30	2.000 50.80	4	1.000 25.40	4.000 101.6	3.74
1 1/4	1.660 42.20	6.250 158.7		1.120 28.40	2.880 73.15	1.660 42.20	2.500 63.50	2.500 63.50	4	1.000 25.40	4.380 111.2	4.33
1 1/2	1.900 48.30	7.000 177.8		1.250 31.70	3.250 82.50	1.900 48.30	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.94
2	2.375 60.30	8.500 215.9		1.500 38.10	4.000 101.6	2.380 60.45	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	10.8
2 1/2	2.875 73.00	9.620 244.3		1.620 41.10	4.120 104.6	2.880 73.15	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	15.0
3	3.500 88.90	9.500 241.3		1.500 38.10	4.00 101.6	3.500 88.90	5.000 127.0	5.000 127.0	8	1.000 25.40	7.500 190.5	13.7
4	4.500 114.3	11.50 292.1		1.750 44.40	4.500 114.3	4.500 114.3	6.250 158.7	6.190 157.2	8	1.250 31.70	9.250 234.9	22.5
5	5.563 141.3	13.75 349.2		2.000 50.80	5.000 127.0	5.560 141.2	7.500 190.5	7.310 185.7	8	1.380 35.00	11.00 279.4	37.4
6	6.625 168.3	15.00 381.0		2.190 55.60	5.500 139.7	6.630 168.4	9.250 234.9	8.500 215.9	12	1.250 31.70	12.50 317.5	47.7
8	8.625 219.1	18.50 469.9		2.500 63.50	6.380 162.0	8.630 219.2	11.75 298.4	10.62 269.7	12	1.500 38.10	15.50 393.7	81.3
10	10.75 273.0	21.50 546.1		2.750 69.85	7.250 184.1	10.75 273.0	14.50 368.3	12.75 323.8	16	1.500 38.10	18.50 469.9	119
12	12.75 323.8	24.00 609.6		3.125 79.25	7.880 200.1	12.75 323.8	16.50 419.1	15.00 381.0	20	1.500 38.10	21.00 533.4	157
14	14.00 355.6	25.25 641.3		3.380 85.80	8.380 212.8	14.00 355.6	17.75 450.8	16.25 412.7	20	1.620 41.10	22.00 558.8	180
16	16.00 406.4	27.75 704.8		3.500 88.90	8.500 215.9	16.00 406.4	20.00 508.0	18.50 469.9	20	1.750 44.40	24.25 615.9	217
18	18.00 457.2	31.00 787.4	4.000 101.6	9.000 228.6	18.00 457.2	22.25 565.1	21.00 533.4	20	2.000 50.80	27.00 685.8	292	
20	20.00 508.0	33.75 857.2	4.50 107.9	9.750 247.6	20.00 508.0	24.50 622.3	23.00 584.2	20	2.120 53.80	29.50 749.3	362	
24	24.00 209.6	41.00 1041.1	5.500 139.7	11.50 292.1	24.00 609.6	29.50 749.3	27.25 692.1	20	2.620 66.55	35.50 901.7	665	

Weld Neck Flanges -ANSI B16.5--Class1500



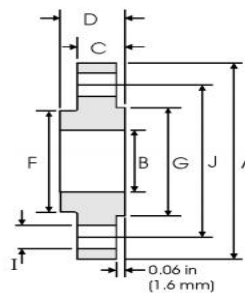
pipe	Flange Data				Hub Data		Raised Face	Drilling Data			Weight	
Nominal pipe size	A	B	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	4.750 120.6	To be specified by Purchaser	0.880 22.30	2.380 60.45	0.840 21.30	1.500 38.10	1.380 35.00	4	0.880 22.30	3.250 82.50	1.87
3/4	1.050 26.70	5.120 130.0		1.000 25.40	2.750 69.85	1.050 26.70	1.750 44.00	1.690 42.90	4	0.880 22.30	3.500 88.90	2.56
1	1.315 33.40	5.880 149.3		1.120 28.40	2.880 73.15	1.320 33.50	2.060 52.30	2.000 50.80	4	1.000 25.40	4.000 101.6	3.74
1 1/4	1.660 42.20	6.250 158.7		1.120 28.40	2.880 73.15	1.660 42.20	2.500 63.50	2.500 63.50	4	1.000 25.40	4.380 111.2	4.33
1 1/2	1.900 48.30	7.000 177.8		1.250 31.70	3.250 82.50	1.900 48.30	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.94
2	2.375 60.30	8.500 215.9		1.500 38.10	4.000 101.6	2.380 60.45	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	10.8
2 1/2	2.875 73.00	9.620 244.3		1.620 41.10	4.120 104.6	2.880 73.15	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	15.0
3	3.500 88.90	10.50 266.7		1.880 47.70	4.620 117.3	3.500 88.90	5.250 133.3	5.000 127.0	8	1.250 31.70	8.000 203.2	19.9
4	4.500 114.3	12.25 311.1		2.120 53.80	4.880 123.9	4.500 114.3	6.380 162.0	6.190 157.2	8	1.380 35.00	9.500 241.3	29.9
5	5.563 141.3	14.75 374.6		2.880 73.15	6.120 155.4	5.560 141.2	7.750 196.8	7.310 185.7	8	1.620 41.10	11.50 292.1	55.4
6	6.625 168.3	15.50 393.7		3.250 82.50	6.750 171.4	6.630 168.4	9.000 228.6	8.500 215.9	12	1.500 38.10	12.50 317.5	68.4
8	8.625 219.1	19.00 482.6		3.620 91.90	8.380 212.8	8.630 219.2	11.50 292.1	10.62 269.7	12	1.750 44.40	15.50 393.7	117
10	10.75 273.0	23.00 584.2		4.250 107.9	10.00 254.0	10.75 273.0	14.50 368.3	12.75 323.8	12	2.000 50.80	19.00 482.6	194
12	12.75 323.8	26.50 673.1		4.880 123.9	11.12 282.4	12.75 323.8	17.75 450.8	15.00 381.0	16	2.120 53.80	22.50 571.5	288
14	14.00 355.6	29.50 749.3		5.250 133.3	11.75 298.4	14.00 355.6	19.50 495.3	16.25 412.7	16	2.380 60.45	25.00 635.0	380
16	16.00 406.1	32.50 825.5		5.750 146.0	12.25 311.1	16.00 406.4	21.75 522.1	18.50 469.9	16	2.620 66.55	27.75 704.8	485
18	18.00 457.2	36.00 914.4	6.380 162.0	12.88 327.1	18.00 457.2	23.50 596.9	21.00 533.4	16	2.880 73.15	30.50 774.7	644	
20	20.00 508.0	38.75 984.2	7.000 177.8	14.00 355.6	20.00 508.0	25.25 641.3	23.00 584.2	16	3.120 79.25	32.75 831.8	775	
24	24.00 609.6	46.00 1168.4	8.000 203.2	16.00 406.4	24.00 609.6	30.00 762.0	27.25 692.1	16	3.620 91.90	39.00 990.6	1232	

Weld Neck Flanges -ANSI B16.5--Class2500



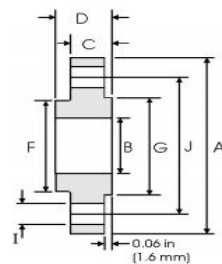
pipe	Flange Data					Hub Data		Raised Face	Drilling Data			Weight
	A	B	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm		
1/2	0.840 21.30	5.250 133.4	To be specified by Purchaser	1.190 30.20	2.880 73.15	0.840 21.30	1.690 42.90	1.380 35.00	4	0.880 22.40	3.500 88.90	3.12
3/4	1.050 26.70	5.500 139.7		1.250 31.75	3.120 79.25	1.050 26.70	2.000 50.80	1.690 42.90	4	0.880 22.40	3.750 95.30	3.70
1	1.315 33.40	6.250 158.8		1.380 35.10	3.500 88.90	1.320 33.50	2.250 57.15	2.000 50.80	4	1.000 25.40	4.250 108.0	5.24
1 1/4	1.660 42.20	7.250 184.2		1.500 38.10	3.750 95.30	1.660 42.20	2.880 73.15	2.500 63.50	4	1.120 28.40	5.120 130.0	7.74
1 1/2	1.900 48.30	8.000 203.2		1.750 44.50	4.380 111.3	1.900 48.30	3.120 79.25	2.880 73.15	4	1.250 31.75	5.750 146.1	10.9
2	2.375 60.30	9.250 235.0		2.000 50.80	5.000 127.0	2.380 60.45	3.750 95.30	3.620 91.90	8	1.120 28.40	6.750 171.5	16.2
2 1/2	2.875 73.00	10.50 266.7		2.250 57.15	5.620 142.7	2.880 73.15	4.500 114.3	4.120 104.6	8	1.250 31.75	7.750 196.9	23.7
3	3.500 88.90	12.00 304.8		2.620 66.55	6.620 168.1	3.500 88.90	5.250 133.4	5.000 127.0	8	1.380 35.10	9.000 228.6	36.2
4	4.500 114.3	14.00 355.6		3.000 76.20	7.500 190.5	4.500 114.3	6.500 165.1	6.190 157.2	8	1.620 41.10	10.75 273.1	55.3
5	5.563 141.3	16.50 419.1		3.620 91.90	9.000 228.6	5.560 141.2	8.000 203.2	7.310 185.7	8	1.880 47.8	12.75 323.9	92.5
6	6.625 168.3	19.00 482.6		4.250 108.0	10.75 273.1	6.630 168.4	9.250 235.0	8.500 215.9	8	2.120 53.80	14.50 368.3	143
8	8.625 219.1	21.75 552.5		5.000 127.0	12.50 317.5	8.630 219.3	12.00 304.8	10.62 269.7	12	2.120 53.80	17.25 438.2	215
10	10.75 273.0	26.50 673.1	6.500 165.1	16.50 419.1	10.75 273.0	14.75 374.7	12.75 323.8	12	2.620 66.55	21.25 539.8	406	
12	12.75 323.8	30.00 762.0	7.250 184.2	18.25 463.6	12.75 323.8	17.38 441.5	15.00 381.0	12	2.880 73.15	24.38 619.3	572	

Slip On Flanges -ANSI B16.5--Class150



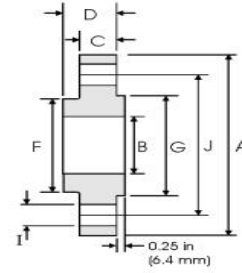
pipe	Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size	A	B	C	D	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.500 88.90	0.880 22.40	0.440 11.20	0.620 15.70	1.190 30.20	1.380 35.10	4	0.620 15.70	2.380 60.45	0.39
3/4	1.050 26.70	3.880 98.60	1.0960 27.70	0.500 12.70	0.620 15.70	1.500 38.10	1.690 42.90	4	0.620 15.70	2.750 69.85	0.56
1	1.315 33.40	4.250 108.0	1.360 34.50	0.560 14.20	0.690 17.50	1.940 49.30	2.000 50.80	4	0.620 15.70	3.120 79.25	0.78
1 1/4	1.660 42.20	4.620 117.3	1.700 43.20	0.620 15.70	0.810 20.60	2.310 58.70	2.500 63.50	4	0.620 15.70	3.500 88.90	1.03
1 1/2	1.900 48.30	5.000 127.0	1.950 49.50	0.690 17.50	0.880 22.40	2.560 65.00	2.880 73.15	4	0.620 15.70	3.880 98.60	1.32
2	2.375 60.30	6.000 152.4	2.440 62.00	0.750 19.10	1.000 25.40	3.060 77.70	3.620 91.90	4	0.750 19.10	4.750 120.7	2.06
2 1/2	2.875 73.00	7.000 177.8	2.940 74.70	0.880 22.40	1.120 28.40	3.560 90.40	4.120 104.6	4	0.750 19.10	5.500 139.7	3.28
3	3.500 88.90	7.500 190.5	3.570 90.70	0.940 23.90	1.190 30.20	4.250 108.0	5.000 127.0	4	0.750 19.10	6.000 152.4	3.85
3 1/2	4.000 101.6	8.500 215.9	4.070 103.4	0.940 23.90	1.250 31.75	4.810 122.2	5.500 139.7	8	0.750 19.10	7.000 177.8	4.81
4	4.500 114.3	9.000 228.6	4.570 116.1	0.940 23.90	1.310 33.30	5.310 134.9	6.190 157.2	8	0.750 19.10	7.500 190.5	5.30
5	5.563 141.3	10.00 254.0	5.660 143.8	0.940 23.90	1.440 36.60	6.440 163.6	7.310 185.7	8	0.880 22.40	8.500 215.9	6.07
6	6.625 168.3	11.00 279.4	6.720 170.7	1.000 25.40	1.560 39.60	7.560 192.0	8.500 215.9	8	0.880 22.40	9.500 241.3	7.45
8	8.625 319.1	13.50 342.9	8.720 221.5	1.120 28.40	1.750 44.50	9.690 246.1	10.62 269.7	8	0.880 22.40	11.75 298.5	12.1
10	10.75 273.0	16.00 406.4	10.88 276.3	1.190 30.20	1.940 49.30	12.00 304.8	12.75 323.9	12	1.000 25.40	14.25 362.0	16.5
12	12.75 323.8	19.00 482.6	12.88 327.1	1.250 31.75	2.190 55.60	14.38 365.3	15.00 381.0	12	1.000 25.40	17.00 431.8	26.2
14	14.00 355.6	21.00 533.4	14.14 359.1	1.380 35.10	2.250 57.15	15.75 400.1	16.25 412.8	12	1.120 28.40	18.75 476.3	34.6
16	16.00 406.4	23.50 569.9	16.16 410.5	1.440 36.60	2.500 63.50	18.00 457.2	18.50 469.9	16	1.120 28.40	21.25 539.8	44.8
18	18.00 457.2	25.00 635.0	18.18 461.8	1.560 39.60	2.690 68.30	19.88 505.0	21.00 533.1	16	1.250 31.75	22.75 577.9	48.9
20	20.00 508.0	27.50 698.5	20.20 513.1	1.690 42.90	2.880 73.15	22.00 558.8	23.00 584.2	20	1.250 31.75	25.00 635.0	61.9
24	24.00 609.6	32.00 812.8	24.25 616.0	1.880 47.80	3.250 82.60	26.12 663.4	27.25 692.2	20	1.380 35.10	29.50 749.3	86.9

Slip On Flanges -ANSI B16.5--Class300



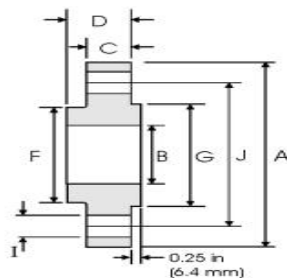
pipe	Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size	A	B	C	D	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		
1/2	0.840 21.30	3.750 95.20	0.880 22.40	0.560 14.20	0.880 22.40	1.500 38.10	1.380 35.10	4	0.620 15.70	2.620 66.55	0.64
3/4	1.050 26.70	4.620 117.3	1.090 27.70	0.620 15.70	1.000 25.40	1.880 47.70	1.690 42.90	4	0.750 19.10	3.250 82.50	1.12
1	1.315 33.40	4.880 123.9	1.360 34.50	0.690 17.50	1.060 26.90	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.36
1 1/4	1.660 42.20	5.250 133.3	1.700 43.20	0.750 19.00	1.060 26.90	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	1.68
1 1/2	1.900 48.30	6.120 155.4	1.950 49.50	0.810 20.60	1.190 30.20	2.750 69.85	2.880 73.15	4	0.880 22.40	4.500 114.3	2.49
2	2.375 60.30	6.500 165.1	2.440 62.00	0.880 22.30	1.310 33.20	3.310 84.00	3.620 91.90	8	0.750 19.10	5.000 127.0	2.87
2 1/2	2.875 73.00	7.500 190.5	2.940 74.70	1.000 25.40	1.500 38.10	3.940 100.0	4.120 104.6	8	0.880 22.40	5.880 149.4	4.32
3	3.500 88.90	8.250 209.5	3.570 90.70	1.120 28.40	1.690 42.90	4.620 117.3	5.000 127.0	8	0.880 22.40	6.620 168.1	5.85
3 1/2	4.000 101.6	9.000 228.6	4.070 103.4	1.190 30.20	1.750 44.40	5.250 133.3	5.500 139.7	8	0.880 22.40	7.250 184.2	7.34
4	4.500 114.3	10.0 254.0	4.570 116.1	1.250 31.70	1.880 47.70	5.750 146.0	6.190 157.2	8	0.880 22.40	7.880 200.1	9.61
5	5.563 141.3	11.00 279.4	5.660 143.8	1.380 35.00	2.000 50.80	7.000 177.8	7.310 185.7	8	0.880 22.40	9.250 234.9	12.3
6	6.625 168.3	12.50 317.5	6.720 170.7	1.440 36.50	2.060 52.30	8.120 206.2	8.500 215.9	12	0.880 22.40	10.62 269.7	15.6
8	8.625 219.1	15.00 381.0	8.720 221.5	1.620 41.10	2.440 61.90	10.25 260.3	10.62 269.7	12	1.000 25.40	13.00 330.2	24.2
10	10.75 273.0	17.50 444.5	10.88 276.3	1.880 47.70	2.620 66.55	12.62 320.5	12.75 323.9	16	1.120 28.40	15.25 387.3	34.1
12	12.75 323.8	20.50 520.7	12.88 327.1	2.000 50.80	2.880 73.15	14.75 374.6	15.00 381.0	16	1.250 31.70	17.75 450.8	49.8
14	14.00 355.6	23.00 584.2	14.14 359.1	2.120 53.80	3.000 76.20	16.75 425.4	16.25 412.8	20	1.250 31.70	20.25 514.4	69.6
16	16.00 406.4	25.50 647.7	16.16 410.5	2.250 57.15	3.250 82.50	19.00 482.6	18.5 469.9	20	1.380 35.00	22.50 571.5	88.1
18	18.00 457.2	28.00 711.2	18.18 461.8	2.380 60.45	3.50 88.90	21.00 533.4	21.00 533.1	24	1.380 35.00	24.75 628.7	109
20	20.00 508.0	30.50 774.7	20.20 513.1	2.500 63.50	3.750 95.20	23.12 587.2	23.00 584.2	24	1.380 35.00	27.00 685.8	134
24	24.00 609.6	36.00 914.4	24.25 616.0	2.750 69.85	4.190 106.4	27.62 701.5	27.25 692.2	24	1.620 41.00	32.00 812.8	201

Slip On Flanges -ANSI B16.5--Class400



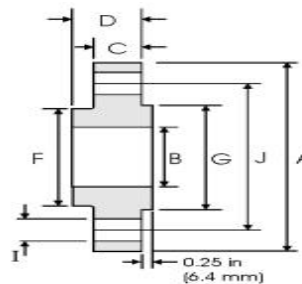
pipe	Flange Data				Hub	Raised Face	Drilling Data			Weight	
Nominal pipe size	A	B	C	D	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.75 95.30	0.880 22.40	0.560 14.20	0.880 22.40	1.500 38.10	1.380 35.10	4	0.620 15.70	2.620 66.55	0.74
3/4	1.050 26.70	4.620 117.3	1.090 27.70	0.620 15.70	1.000 25.40	1.880 47.70	1.690 42.90	4	0.750 19.10	3.250 85.50	1.27
1	1.315 33.40	4.880 124.30	1.360 34.50	0.690 17.50	1.060 26.90	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.52
1 1/4	1.660 42.20	5.250 133.4	1.700 43.20	0.810 20.60	1.120 28.40	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	2.03
1 1/2	1.900 48.30	6.120 155.4	1.950 49.50	0.880 22.40	1.250 31.75	2.750 69.85	2.880 73.15	4	0.880 22.40	4.500 114.3	2.96
2	2.375 60.30	6.500 165.1	2.440 62.00	1.000 25.40	1.440 36.60	3.310 84.00	3.620 91.90	8	0.750 19.10	5.000 127.0	3.62
2 1/2	2.875 73.00	7.500 190.5	2.940 74.70	1.120 28.40	1.620 41.10	3.940 100.0	4.120 104.6	8	0.880 22.40	5.880 149.4	5.28
3	3.500 88.90	8.250 209.6	3.570 90.70	1.250 31.75	1.810 46.00	4.620 117.3	5.000 127.0	8	0.880 22.40	6.620 168.1	7.00
3 1/2	4.00 101.6	9.000 228.6	4.070 103.4	1.380 35.10	1.940 49.30	5.520 133.3	5.500 139.7	8	1.000 25.40	7.250 184.2	8.84
4	4.500 114.3	10.00 254.0	4.570 116.1	1.380 35.10	2.000 50.80	5.750 146.0	6.190 157.2	8	1.000 25.40	7.880 200.1	11.1
5	5.563 141.3	11.00 279.4	5.660 143.8	1.500 38.10	2.120 53.80	7.000 177.8	7.310 185.7	8	1.000 25.40	9.250 234.9	13.9
6	6.625 168.3	12.50 317.5	6.720 170.7	1.620 41.10	2.250 57.15	8.120 206.2	8.500 215.9	12	1.000 25.40	10.62 269.7	18.3
8	8.625 219.1	15.00 381.0	8.720 221.5	1.880 47.80	2.690 68.30	10.25 260.3	10.62 269.7	12	1.120 28.40	13.00 330.2	28.6
10	10.75 273.0	17.50 444.5	10.88 276.3	2.120 53.80	2.880 73.15	12.62 320.5	12.75 323.9	16	1.250 31.75	15.25 387.3	39.2
12	12.75 323.8	20.50 520.7	12.88 327.1	2.250 57.15	3.120 79.25	14.75 374.6	15.00 381.0	16	1.380 35.10	17.75 450.8	57.0
14	14.00 355.6	23.00 584.2	14.14 359.1	2.380 60.05	3.310 84.10	16.75 425.4	16.25 412.8	20	1.380 35.10	20.25 514.4	79.1
16	16.00 406.4	25.50 647.7	16.16 410.5	2.500 63.50	3.690 93.70	19.00 482.6	18.50 469.9	20	1.500 38.10	22.50 571.5	10.1
18	18.00 457.2	28.00 711.2	18.18 461.8	2.620 66.55	3.880 98.60	21.00 533.4	21.00 533.4	24	1.500 38.10	24.75 628.7	123
20	20.00 508.0	30.50 774.7	20.20 513.1	2.750 69.85	4.000 101.6	23.12 587.2	23.00 584.2	24	1.620 41.10	27.00 685.8	146
24	24.00 609.6	36.00 914.4	24.25 616.0	3.000 76.20	4.500 114.3	27.62 701.5	27.25 692.2	24	1.880 47.80	32.00 812.8	219

Slip On Flanges -ANSI B16.5--Class600



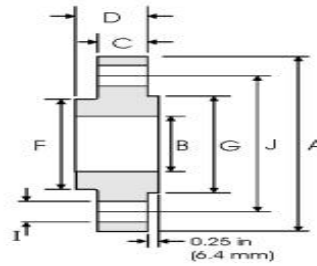
pipe	Flange Data				Hub	Raised Face	Drilling Data			Weight	
Nominal pipe size	A	B	C	D	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm				
1/2	0.84 21.30	3.750 95.30	0.880 22.40	0.560 14.20	0.880 22.40	1.500 38.10	1.380 35.10	4	0.620 15.70	2.620 66.55	0.74
3/4	1.050 26.70	4.620 117.3	1.090 27.70	0.620 15.70	1.000 25.40	1.880 47.80	1.690 42.90	4	0.750 19.10	3.250 82.60	1.27
1	1.315 33.40	4.880 124.0	1.360 34.50	0.690 17.50	1.060 26.90	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.52
1 1/4	1.660 42.20	5.250 133.4	1.700 43.20	0.810 20.60	1.120 28.40	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	2.03
1 1/2	1.900 48.30	6.120 155.4	1.950 49.50	0.880 22.40	1.250 31.75	2.750 69.85	2.880 73.15	4	0.880 22.40	4.500 114.3	2.96
2	2.375 60.30	6.500 165.1	2.440 62.00	1.000 25.40	1.440 36.60	3.310 84.10	3.620 91.90	8	0.750 19.10	5.000 127.0	3.62
2 1/2	2.875 73.00	7.500 190.5	2.940 74.70	1.120 28.40	1.620 41.10	3.940 100.1	4.120 104.6	8	0.880 22.40	5.880 149.4	5.28
3	3.500 88.90	8.250 209.6	3.570 90.70	1.250 31.75	1.810 46.00	4.620 117.3	5.000 127.0	8	0.880 22.40	6.620 168.1	7.00
3 1/2	4.000 101.6	9.000 228.6	4.070 103.4	1.380 35.10	1.940 49.30	5.250 133.4	5.500 139.7	8	1.000 25.40	7.250 184.2	8.84
4	4.500 114.3	10.75 273.1	4.750 116.1	1.500 38.10	2.120 53.80	6.000 152.4	6.190 157.2	8	1.000 25.40	8.500 215.9	14.5
5	5.563 141.3	13.00 330.2	5.660 143.8	1.750 44.50	2.380 60.45	7.440 189.0	7.310 185.7	8	1.120 28.40	10.50 266.7	24.4
6	6.625 168.3	14.00 355.6	6.720 170.7	1.880 47.80	2.620 66.55	8.750 222.3	8.500 215.9	12	1.120 28.40	11.50 292.1	28.7
8	8.625 219.1	16.50 419.1	8.720 221.5	2.190 55.60	3.000 76.20	10.75 273.1	10.62 269.7	12	1.250 31.75	13.75 349.3	43.4
10	10.75 273.0	20.00 508.0	10.88 276.3	2.500 63.50	3.380 85.90	13.50 342.9	12.75 323.9	16	1.38 35.10	17.00 431.8	70.3
12	12.75 323.8	22.00 558.8	12.88 327.1	2.620 66.55	3.620 91.90	15.75 400.1	15.00 381.0	20	1.380 35.10	19.25 489.0	84.2
14	14.00 355.6	23.75 603.3	14.14 359.1	2.750 69.85	3.690 93.70	17.00 431.8	16.25 412.8	20	1.500 38.10	20.75 527.1	98.7
16	16.00 406.1	27.00 685.8	16.16 410.5	3.000 76.20	4.190 106.4	19.50 495.3	18.52 469.9	20	1.620 41.10	23.75 603.3	142
18	18.00 457.2	29.25 743.0	18.18 461.8	3.250 82.60	4.620 117.3	21.50 546.1	21.00 533.1	20	1.750 44.50	25.75 654.1	173
20	20.00 508.0	32.00 812.8	20.20 513.1	3.500 88.90	5.000 127.0	24.00 609.6	23.00 584.2	24	1.750 44.50	28.50 723.9	220
24	24.00 609.6	37.00 939.8	24.25 616.0	4.000 101.6	5.500 139.7	28.25 717.6	27.25 692.2	24	2.000 50.80	33.00 838.2	312

Slip On Flanges -ANSI B16.5--Class900



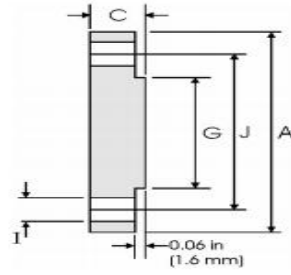
pipe	Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size	A	B	C	D	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	4.750 120.6	0.880 22.40	0.880 22.40	1.250 31.70	1.500 38.10	1.380 35.10	4	0.880 22.40	3.250 82.50	1.74
3/4	1.050 26.70	5.120 130.0	1.090 27.70	1.000 25.40	1.380 35.00	1.750 44.40	1.690 42.90	4	0.880 22.40	3.500 88.90	2.34
1	1.315 33.40	5.880 149.3	1.360 34.50	1.120 28.40	1.620 41.10	2.060 52.30	2.000 50.80	4	1.000 25.10	4.000 101.6	3.44
1 1/4	1.660 42.20	6.250 158.7	1.700 43.20	1.120 28.40	1.620 41.10	2.500 63.50	2.500 63.50	4	1.000 25.40	4.380 111.2	3.91
1 1/2	1.900 48.30	7.000 177.8	1.950 49.50	1.250 31.70	1.750 44.50	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.36
2	2.375 60.30	8.500 215.9	2.440 62.00	1.500 38.10	2.250 57.15	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	9.85
2 1/2	2.875 73.00	9.620 244.3	2.940 74.70	1.620 41.10	2.500 63.50	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	13.7
3	3.500 88.90	9.500 241.3	3.570 90.70	1.500 38.10	2.120 53.80	5.000 127.0	5.000 127.0	8	1.000 25.40	7.500 190.5	11.6
4	4.500 114.3	11.50 292.1	4.570 116.1	1.750 44.40	2.750 69.85	6.250 158.7	6.190 157.2	8	1.250 31.70	9.250 234.9	19.7
5	5.563 141.3	13.75 349.2	5.660 143.8	2.000 50.80	3.120 79.25	7.500 190.5	7.310 185.7	8	1.380 35.00	11.00 279.4	31.9
6	6.625 168.3	15.00 381.0	6.720 170.7	2.190 55.60	3.380 85.80	9.250 234.9	8.500 215.9	12	1.250 31.70	12.50 317.5	41.1
8	8.625 219.1	18.50 469.9	8.720 221.5	2.500 63.50	4.000 101.6	11.75 298.4	10.62 269.7	12	1.500 38.10	15.50 393.7	70.7
10	10.75 273.0	21.50 546.1	10.88 276.3	2.750 69.85	4.250 107.9	14.50 368.3	12.75 323.9	16	1.500 38.10	18.50 469.9	101
12	12.75 323.8	24.00 609.6	12.88 327.1	3.120 79.25	4.620 117.3	16.50 419.1	15.00 381.0	20	1.500 38.10	21.00 533.4	133
14	14.00 355.6	25.25 641.3	14.14 359.1	3.380 85.80	5.120 130.0	17.75 450.8	16.25 412.8	20	1.620 41.10	22.00 558.8	153
16	16.00 406.4	27.75 704.8	16.16 410.5	3.500 88.90	5.250 133.3	20.00 508.0	18.50 469.9	20	1.750 44.40	24.25 615.9	185
18	18.00 457.2	31.00 787.4	18.18 461.8	4.000 101.6	6.000 152.4	22.25 565.1	21.00 533.4	20	2.000 50.80	27.00 685.8	258
20	20.00 508.0	33.75 857.2	20.20 513.1	4.250 107.9	6.250 158.7	24.50 622.3	23.00 584.2	20	2.120 53.80	29.50 749.3	317
24	24.00 609.6	41.00 1041.1	24.25 616.0	5.500 139.7	8.000 203.2	29.50 749.3	27.25 692.2	20	2.620 66.55	35.50 901.7	606

Slip On Flanges -ANSI B16.5--Class1500



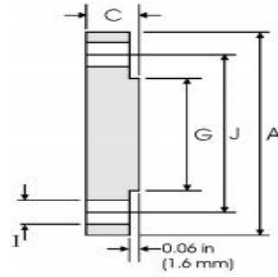
pipe	Flange Data					Hub	Raised Face	Drilling Data			Weight
	A	B	C	D	F			G	H	I	
Nominal pipe size	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	0.880 22.40	0.880 22.40	1.250 31.70	1.500 38.10	1.380 35.10	4	0.880 22.40	3.250 82.50	1.74
3/4	1.050 26.70	5.120 130.0	1.090 27.70	1.000 25.40	13.80 35.00	1.750 44.40	1.690 42.90	4	0.880 22.40	3.500 88.90	2.34
1	1.315 33.40	5.880 149.3	1.360 34.50	1.120 28.40	1.620 41.10	2.060 52.30	2.000 50.80	4	1.000 25.40	4.000 101.6	3.44
1 1/4	1.660 42.20	6.250 158.7	1.700 43.20	1.120 28.40	1.620 41.10	2.500 63.50	2.500 63.50	4	1.000 25.40	4.380 111.2	3.91
1 1/2	1.900 48.30	7.000 177.8	1.950 49.50	1.250 31.70	1.750 44.50	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.36
2	2.375 60.30	8.500 215.9	2.440 62.00	1.500 38.10	2.250 57.15	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	9.85
2 1/2	2.875 73.00	9.620 244.3	2.940 74.70	1.620 41.10	2.500 63.50	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	13.7

Blind Flanges -ANSI B16.5--Class150



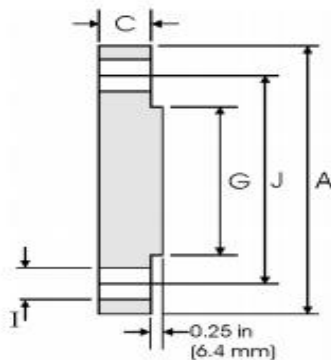
pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal pipe size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.500 88.90	0.440 11.20	1.380 35.10	4	0.620 15.70	2.380 60.45	0.42
3/4	1.050 26.70	3.880 98.60	0.500 12.70	1.690 42.90	4	0.620 15.70	2.750 69.85	0.61
1	1.315 33.40	4.250 108.0	0.560 14.20	2.000 50.80	4	0.620 15.70	3.120 79.25	0.86
1 1/4	1.660 42.20	4.620 117.3	0.620 15.70	2.500 63.50	4	0.620 15.70	3.500 88.90	1.17
1 1/2	1.900 48.30	5.000 127.0	0.690 17.50	2.880 73.15	4	0.620 15.70	3.880 98.60	1.53
2	2.375 60.30	6.000 152.4	0.750 19.10	3.620 91.90	4	0.750 19.10	4.750 120.7	2.42
2 1/2	2.875 73.00	7.000 177.8	0.880 22.40	4.120 104.6	4	0.750 19.10	5.500 139.7	3.94
3	3.500 88.90	7.500 190.5	0.940 23.90	5.000 127.0	4	0.750 19.10	6.000 152.4	4.93
3 1/2	4.000 101.6	8.500 215.9	0.940 23.90	5.500 139.7	8	0.750 19.10	7.000 177.8	6.17
4	4.500 114.3	9.000 228.6	0.940 23.90	6.190 157.2	8	0.750 19.10	7.500 190.5	7.00
5	5.563 141.3	10.00 254.0	0.940 23.90	7.310 185.7	8	0.880 22.40	8.500 215.9	8.63
6	6.625 168.3	11.00 279.4	1.000 25.40	8.500 215.9	8	0.880 22.40	9.500 241.3	11.3
8	8.625 219.1	13.50 342.9	1.120 28.40	10.62 269.7	8	0.880 22.40	11.75 298.5	19.6
10	10.75 273.0	16.00 406.4	1.190 30.20	12.75 323.9	12	1.000 25.40	14.25 362.0	28.8
12	12.75 323.8	19.00 482.6	1.250 31.75	15.00 381.0	12	1.000 25.40	17.00 431.8	43.2
14	14.00 355.6	21.00 533.4	1.380 35.10	16.25 412.8	12	1.120 28.40	18.75 475.3	58.1
16	16.00 406.4	23.50 596.9	1.440 36.60	18.50 469.9	16	1.120 28.40	21.25 539.8	76.0
18	18.00 457.2	25.00 635.0	1.560 39.60	21.00 533.4	16	1.250 31.75	22.75 577.9	93.7
20	20.00 508.0	27.50 698.5	1.690 42.90	23.00 584.2	20	1.250 31.75	25.00 635.0	122
24	24.00 609.6	32.00 812.8	1.880 47.80	27.25 692.2	20	1.380 35.10	29.50 749.3	185

Blind Flanges -ANSI B16.5--Class300



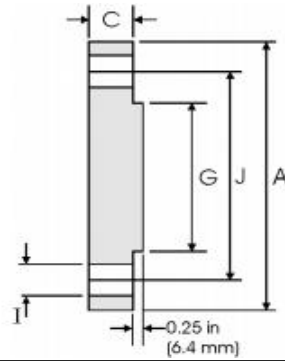
pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal pipe size	A	C	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.750 95.20	0.560 14..20	1.380 35.10	4	0.620 15.701	2.620 66.55	0.64
3/4	1.050 26.70	4.620 117.3	0.620 15.70	1.690 42.90	4	0.750 19.00	3.250 82.50	1.11
1	1.315 33.40	4.880 123.9	0.690 17.50	2.000 50.80	4	0.750 19.00	3.500 88.90	1.39
1 1/4	1.660 42.20	5.250 133.3	0.750 19.00	2.500 63.50	4	0.750 19.00	3.880 98.50	1.79
1 1/2	1.900 48.30	6.120 155.4	0.810 20.60	2.880 73.15	4	0.880 22.3	4.500 114.3	2.66
2	2.375 60.30	6.500 165.1	0.880 22.30	3.620 91.90	8	0.750 19.10	5.000 127.0	3.18
2 1/2	2.875 73.00	7.500 190.5	1.000 25.40	4.120 104.6	8	0.880 22.30	5.880 149.3	4.85
3	3.500 88.9	8.250 209.5	1.120 28.40	5.000 127.0	8	0.880 22.30	6.620 168.1	6.81
3 1/2	4.000 101.6	9.000 228.6	1.190 30.20	5.500 139.7	8	0.880 22.30	7.250 184.1	8.71
4	4.500 114.3	10.00 254.0	1.250 31.70	6.190 157.2	8	0.880 22.30	7.800 200.1	11.5
5	5.563 141.3	11.00 279.4	1.380 35.00	7.310 185.7	8	0.880 22.30	9.250 234.9	15.6
6	6.625 168.3	12.50 317.5	1.440 36.50	8.500 215.9	12	0.880 22.30	10.62 269.7	20.9
8	8.625 219.1	15.00 381.0	1.620 41.10	10.62 269.7	12	1.000 25.40	13.00 330.2	34.3
10	10.75 273.0	17.50 444.5	1.880 47.70	12.75 323.9	16	1.120 28.40	15.25 387.3	53.3
12	12.75 323.8	20.50 520.7	2.000 50.80	15.00 381.0	16	1.250 31.70	17.75 450.8	78.8
14	14.00 355.6	23.00 584.2	2.120 53.80	16.25 412.8	20	1.250 31.70	20.25 514.3	105
16	16.00 406.4	25.50 647.7	2.250 57.15	18.50 469.9	20	1.380 35.00	22.50 571.5	137
18	18.00 457.2	28.00 711.2	2.380 60.45	21.00 533.4	24	1.380 35.00	24.75 628.6	175
20	20.00 508.0	30.50 774.7	2.500 63.50	23.00 584.2	24	1.380 35.00	27.00 685.8	221
24	24.00 609.6	36.00 914.4	2.750 69.85	27.25 692.2	24	1.620 41.10	32.00 812.8	339

Blind Flanges -ANSI B16.5--Class400



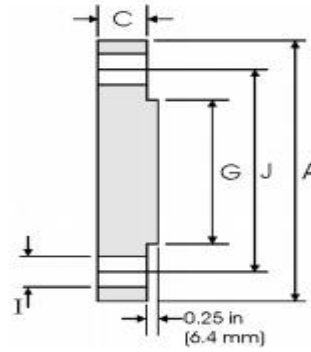
pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal pipe size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.20	0.560 14.20	1.380 35.10	4	0.620 15.70	2.620 66.55	0.76
3/4	1.050 26.70	4.620 117.3	0.620 15.70	1.690 42.90	4	0.750 19.10	3.250 82.60	1.28
1	1.315 33.40	4.880 123.9	0.690 17.50	2.000 50.80	4	0.750 19.10	3.500 88.90	1.60
1 1/4	1.660 42.20	5.250 133.3	0.810 20.60	2.500 63.50	4	0.750 19.10	3.880 98.60	2.23
1 1/2	1.900 48.30	6.120 155.4	0.880 22.30	2.880 73.15	4	0.880 22.40	4.500 114.3	3.25
2	2.375 60.30	6.500 165.1	1.000 25.40	3.620 91.90	8	0.750 19.10	5.000 127.0	4.15
2 1/2	2.875 73.00	7.500 190.5	1.120 28.40	4.120 104.6	8	0.880 22.40	5.880 149.4	6.13
3	3.500 88.90	8.250 209.5	1.250 31.70	5.000 127.0	8	0.880 22.40	6.620 168.1	8.44
3 1/2	4.000 101.6	9.000 228.6	1.380 35.00	5.500 139.7	8	1.000 25.40	7.250 184.2	11.0
4	4.500 114.3	10.00 254.0	1.380 35.10	6.190 157.2	8	1.000 25.40	7.880 200.2	13.7
5	5.563 141.3	11.00 279.4	1.500 38.10	7.310 185.7	8	1.000 25.40	9.250 235.0	18.5
6	6.625 168.3	12.50 317.5	1.620 41.10	8.500 215.9	12	1.000 25.40	10.62 269.7	25.5
8	8.625 219.1	15.00 381.0	1.880 47.80	10.62 269.7	12	1.120 28.40	13.00 330.2	42.6
10	10.75 273.0	17.50 444.5	2.120 53.80	12.75 323.9	16	1.250 31.75	15.25 387.4	64.5
12	12.75 323.8	20.50 520.7	2.250 57.15	15.00 381.0	16	1.380 35.10	17.75 450.9	94.30
14	14.00 355.6	23.00 584.2	2.380 60.45	16.25 412.8	20	1.380 35.10	20.25 514.4	124
16	16.00 406.4	25.50 647.7	2.500 63.50	18.50 469.9	20	1.500 38.10	22.50 571.5	162
18	18.00 457.2	28.00 711.2	2.620 66.55	21.00 533.4	24	1.500 38.10	24.75 628.7	205
20	20.00 508.0	30.50 774.7	2.750 69.85	23.00 584.2	24	1.620 41.10	27.00 685.8	254
24	24.00 609.6	36.00 914.4	3.000 76.20	27.25 692.2	24	1.880 47.80	32.00 812.8	386

Blind Flanges -ANSI B16.5--Class600



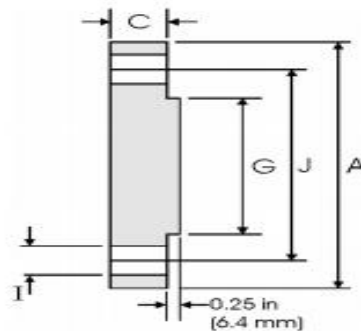
pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal pipe size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.20	0.560 14.20	1.380 35.10	4	0.620 15.70	2.620 66.55	0.76
3/4	1.050 26.70	4.620 117.3	0.620 15.70	1.690 42.90	4	0.750 19.10	3.250 82.60	1.28
1	1.315 33.40	4.880 123.9	0.690 17.50	2.000 50.80	4	0.750 19.10	3.500 88.90	1.60
1 1/4	1.660 42.20	5.250 133.3	0.810 20.60	2.500 63.50	4	0.750 19.10	3.880 98.60	2.23
1 1/2	1.900 48.30	6.120 155.4	0.880 22.30	2.880 73.15	4	0.880 22.40	4.500 114.3	3.25
2	2.375 60.30	6.500 165.1	1.000 25.40	3.620 91.90	8	0.750 19.10	5.000 127.0	4.15
2 1/2	2.875 73.00	7.500 190.5	1.120 28.40	4.120 104.6	8	0.880 22.40	5.880 149.4	6.13
3	3.500 88.90	8.250 209.5	1.250 31.70	5.000 127.0	8	0.880 22.40	6.620 168.1	8.44
3 1/2	4.000 101.6	9.000 228.6	1.380 35.00	5.500 139.7	8	1.000 25.40	7.250 184.2	11.00
4	4.500 114.3	10.75 273.1	1.500 38.10	6.190 157.2	8	1.000 25.40	8.500 215.9	17.3
5	5.563 141.3	13.00 330.2	1.750 44.50	7.310 185.7	8	1.120 28.40	10.50 266.7	29.4
6	6.625 168.3	14.00 355.6	1.880 47.80	8.500 215.9	12	1.120 28.40	11.50 292.1	36.1
8	8.625 219.1	16.50 419.1	2.190 55.60	10.62 269.7	12	1.250 31.75	13.75 349.3	58.9
10	10.75 273.0	20.00 508.0	2.500 63.50	12.75 323.9	16	1.380 35.10	17.00 431.8	97.5
12	12.75 323.8	22.00 558.8	2.620 66.55	15.00 381.0	20	1.380 35.10	19.25 489.0	124
14	14.00 355.6	23.75 603.3	2.750 69.85	16.25 412.8	20	1.500 38.10	20.75 527.1	151
16	16.00 406.4	27.00 685.8	3.000 76.20	18.50 469.9	20	1.620 41.10	23.75 603.3	214
18	18.00 457.2	29.25 743.0	3.250 82.60	21.00 533.4	20	1.750 44.50	25.75 654.1	272
20	20.00 508.0	32.00 812.8	3.500 88.90	23.00 584.2	24	1.750 44.50	28.50 723.9	349
24	24.00 609.6	37.00 939.8	4.000 101.6	27.25 692.2	24	2.000 50.80	33.00 838.2	533

Blind Flanges -ANSI B16.5--Class900



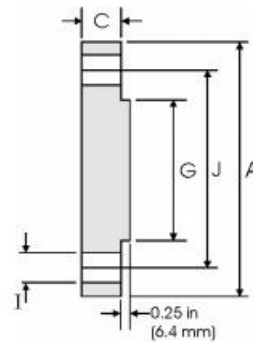
pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal pipe size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	0.880 22.30	1.380 35.10	4	0.880 22.30	3.250 82.50	1.77
3/4	1.050 26.70	5.120 130.0	1.000 25.40	1.690 42.90	4	0.880 22.30	3.500 88.90	2.42
1	1.315 33.40	5.880 149.3	1.120 28.40	2.000 50.80	4	1.000 25.40	4.000 101.6	3.57
1 1/4	1.660 42.20	6.250 158.7	1.120 28.40	2.500 63.50	4	1.000 25.40	4.380 111.2	4.15
1 1/2	1.900 48.30	7.000 177.8	1.250 31.70	2.880 73.15	4	1.120 28.40	4.880 123.9	5.75
2	2.375 60.30	8.500 215.9	1.500 38.10	3.620 91.90	8	1.000 25.40	6.500 165.1	10.1
2 1/2	2.875 73.00	9.620 244.3	1.620 41.10	4.120 104.6	8	1.120 28.40	7.500 190.5	14.0
3	3.500 88.90	9.500 241.3	1.500 38.10	5.000 127.0	8	1.000 25.40	7.500 190.5	13.1
4	4.500 114.3	11.50 292.1	1.750 44.50	6.190 157.2	8	1.250 31.70	9.250 234.9	26.9
5	5.563 141.3	13.75 349.2	2.000 50.80	7.310 185.7	8	1.380 35.00	11.00 279.4	36.5
6	6.625 168.3	15.00 381.0	2.190 55.60	8.500 215.9	12	1.250 31.70	12.50 317.0	47.40
8	8.625 219.1	18.50 469.9	2.500 63.50	10.60 269.7	12	1.500 38.10	15.50 393.7	82.5
10	10.75 273.0	21.50 546.1	2.750 69.85	12.75 323.9	16	1.500 38.10	18.50 469.9	122
12	12.75 323.8	24.00 609.6	3.120 79.25	15.00 381.0	20	1.500 38.10	21.00 533.4	173
14	14.00 355.6	25.25 641.3	3.380 85.80	16.25 412.8	20	1.620 41.10	22.00 558.8	206
16	16.00 406.4	27.75 704.8	3.500 88.90	18.50 469.9	20	1.750 44.40	24.25 615.9	259
18	18.00 457.2	31.00 787.4	4.00 101.6	21.00 533.4	20	2.000 50.80	27.00 685.8	367
20	20.00 508.0	33.75 857.2	4.250 107.9	23.00 587.2	20	2.120 53.80	29.50 749.3	463
24	24.00 609.6	41.00 1041.4	5.500 139.7	27.25 692.2	20	2.620 66.55	35.50 901.7	876

Blind Flanges -ANSI B16.5--Class1500



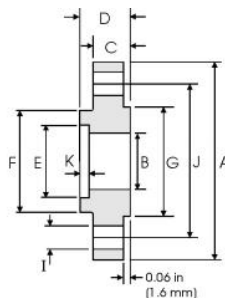
pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal pipe size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	0.880 22.30	1.380 35.10	4	0.880 22.30	3.250 82.50	1.77
3/4	1.050 26.70	5.120 130.0	1.000 25.40	1.690 42.90	4	0.880 22.30	3.500 88.90	2.42
1	1.315 33.40	5.880 149.3	1.120 28.40	2.000 50.80	4	1.000 25.40	4.000 101.6	3.57
1 1/4	1.660 42.20	6.250 158.7	1.120 28.40	2.500 63.50	4	1.000 25.40	4.380 111.2	4.15
1 1/2	1.900 48.30	7.000 177.8	1.250 31.70	2.880 73.15	4	1.120 28.40	4.880 123.9	5.75
2	2.375 60.30	8.500 215.9	1.500 38.10	3.620 91.90	8	1.000 25.40	6.500 165.1	10.1
2 1/2	2.875 73.00	9.620 244.3	1.620 41.10	4.120 104.6	8	1.120 28.40	7.500 190.5	14.0
3	3.500 88.90	10.50 266.7	1.880 47.70	5.000 127.0	8	1.250 31.70	8.000 203.2	19.1
4	4.500 114.3	12.25 311.1	2.120 53.80	6.190 157.2	8	1.380 35.00	9.500 241.3	29.9
5	5.563 141.3	14.75 374.6	2.880 73.15	7.310 185.7	8	1.620 41.10	11.50 292.1	58.4
6	6.625 168.3	15.50 393.7	3.250 82.50	8.500 215.9	12	1.500 38.10	12.50 317.5	71.8
8	8.625 219.1	19.00 482.6	3.620 91.90	10.62 269.7	12	1.750 44.40	15.50 393.7	122
10	10.75 273.0	23.00 584.2	4.250 107.9	12.75 323.9	12	2.000 50.80	19.00 482.6	210
12	12.75 323.8	26.50 673.1	4.880 123.9	15.00 381.0	16	2.120 53.8	22.50 571.5	316
14	14.00 355.6	29.50 749.3	5.250 133.3	16.25 412.8	16	2.380 60.25	25.00 635.0	420
16	16.00 406.4	32.50 825.5	5.750 146.0	18.50 469.9	16	2.620 66.55	27.75 704.8	558
18	18.00 457.2	36.00 914.4	6.380 162.0	21.00 533.4	16	2.880 73.15	30.50 774.7	760
20	20.00 508.0	38.75 984.2	7.000 177.8	23.00 584.2	16	3.120 79.25	32.75 831.8	965
24	24.00 609.6	46.00 1168.4	8.000 203.2	27.25 692.2	16	3.620 91.90	39.00 990.6	1558

Blind Flanges -ANSI B16.5--Class2500



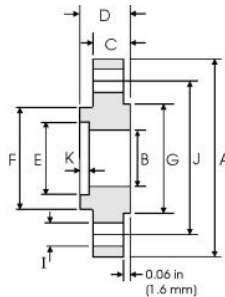
pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal pipe size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	5.250 133.4	1.190 30.20	1.380 35.10	4	0.880 22.40	3.500 88.90	2.99
3/4	1.050 26.70	5.500 139.7	1.250 31.70	1.690 42.90	4	0.880 22.40	3.750 95.30	3.50
1	1.315 33.40	6.250 158.8	1.380 35.10	2.000 50.80	4	1.000 25.40	4.250 108.0	4.96
1 1/4	1.660 42.20	7.250 184.2	1.500 38.10	2.500 63.50	4	1.120 28.40	5.120 130.0	7.35
1 1/2	1.900 48.30	8.000 203.2	1.750 44.50	2.880 73.15	4	1.250 31.75	5.750 146.1	10.4
2	2.375 60.30	9.250 235.0	2.000 50.80	3.620 91.90	8	1.120 28.40	6.750 171.5	15.6
2 1/2	2.875 73.00	10.50 266.7	2.250 57.15	4.120 104.6	8	1.250 31.75	7.750 196.9	22.6
3	3.500 88.90	12.00 304.8	2.620 66.55	5.000 127.0	8	1.380 35.10	9.000 228.6	34.8
4	4.500 114.3	14.00 355.6	3.000 76.20	6.190 157.2	8	1.620 41.10	10.75 273.1	53.9
5	5.563 141.3	16.50 419.1	3.620 91.90	7.310 185.7	8	1.888 47.88	12.75 323.9	90.8
6	6.625 168.3	19.00 482.6	4.250 108.0	8.500 215.9	8	2.120 53.80	14.50 368.3	141
8	8.625 219.1	21.75 552.5	5.000 127.0	10.62 269.7	12	2.120 53.80	17.25 438.2	214
10	10.75 273.0	26.50 673.1	6.500 165.1	12.75 323.9	12	2.620 66.55	21.25 539.8	411
12	12.75 323.8	30.00 762.0	7.250 184.2	15.00 381.0	12	2.880 73.15	24.38 619.3	592

Socket welding Flanges -ANSI B16.5--Class150



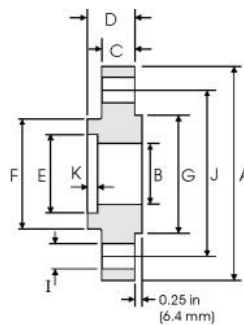
pipe	Flange							Hub	Raised Face	Drilling Data			Weight
	A	B	C	D	E	k	F			G	H	I	
Nominal pipe size	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Socket Diameter	Depth of Socket	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.500 88.90	0.620 15.70	0.440 11.20	0.620 15.70	0.880 22.40	0.380 9.600	1.190 30.20	1.380 35.10	4	0.620 15.70	2.380 60.45	0.42
3/4	1.050 26.70	3.880 98.60	0.820 20.80	0.500 12.70	0.620 15.70	1.090 27.70	0.440 11.10	1.500 38.10	1.690 42.90	4	0.620 15.70	2.750 69.85	0.59
1	1.315 33.40	4.250 108.0	1.050 26.70	0.560 14.20	0.690 17.50	1.360 34.50	0.500 12.70	1.940 49.30	2.000 50.80	4	0.620 15.70	3.120 79.25	0.81
1 1/4	1.660 42.20	4.620 117.3	1.380 35.10	0.620 15.70	0.810 20.60	1.700 43.20	0.560 14.20	2.310 58.70	2.500 63.50	4	0.620 15.70	3.500 88.90	1.07
1 1/2	1.900 48.30	5.000 127.0	1.610 40.90	0.690 17.50	0.880 22.30	1.950 49.50	0.620 15.70	2.560 65.00	2.880 73.15	4	0.620 15.70	3.880 98.60	1.36
2	2.375 60.30	6.000 152.4	2.070 52.60	0.750 19.10	1.000 25.40	2.440 62.00	0.690 17.50	3.060 77.70	3.620 91.90	4	0.750 19.10	4.750 120.7	2.10
2 1/2	2.875 73.00	7.000 177.8	2.470 62.70	0.880 22.40	1.120 28.40	2.940 74.70	0.750 19.00	3.560 90.40	4.120 104.6	4	0.750 19.10	5.500 139.7	3.33
3	3.500 88.90	7.500 190.5	3.070 78.00	0.940 23.90	1.190 30.20	3.570 90.70	0.810 20.60	4.250 108.0	5.000 127.0	4	0.750 19.10	6.000 152.4	3.90

Socket welding Flanges -ANSI B16.5--Class300



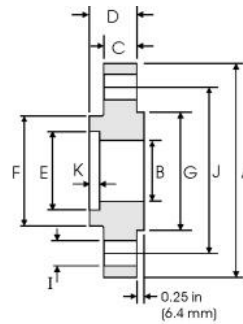
pipe	Flange							Hub	Raised Face	Drilling Data			Weight
	A	B	C	D	E	k	F			G	H	I	
Nominal pipe size	Outside Diameter r	Overall Diameter r	Inside Diameter r	Flange Thickness s min	Overall Length	Socket Diameter r	Depth of Socket	Hub Diameter r	Face Diameter r	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.20	0.620 15.70	0.560 14.20	0.880 22.30	0.880 22.40	0.380 9.600	1.500 38.10	1.380 35.10	4	0.620 15.70	2.620 66.55	0.66
3/4	1.050 26.70	4.620 117.3	0.820 20.80	0.620 15.70	1.000 25.40	1.090 27.70	0.440 11.10	1.880 47.70	1.690 42.90	4	0.750 19.10	3.250 82.50	1.15
1	1.315 33.40	4.880 123.9	1.050 26.70	0.690 17.50	1.060 26.90	1.360 34.50	0.500 12.70	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.40
1 1/4	1.660 42.20	5.250 133.3	1.380 35.10	0.750 19.00	1.060 26.90	1.700 43.20	0.560 14.20	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	1.75
1 1/2	1.900 48.30	6.120 155.4	1.610 40.90	0.810 20.60	1.190 30.20	1.950 49.50	0.620 15.70	2.750 69.85	2.880 73.15	4	0.880 22.30	4.500 114.3	2.55
2	2.375 60.30	6.500 165.1	2.070 52.60	0.880 22.30	1.310 33.20	2.440 62.00	0.690 17.50	3.310 84.00	3.620 91.90	8	0.750 19.10	5.000 127.0	2.93
2 1/2	2.875 73.00	7.500 190.5	2.470 62.70	1.000 25.40	1.500 38.10	2.940 74.70	0.750 19.00	3.940 100.0	4.120 104.6	8	0.880 22.30	5.880 149.3	4.40
3	3.500 88.90	8.250 209.5	3.070 78.00	1.120 28.40	1.690 42.90	3.570 90.70	0.810 20.60	4.620 117.3	5.000 127.0	8	0.880 22.30	6.620 168.1	5.92

Socket welding Flanges -ANSI B16.5--Class600



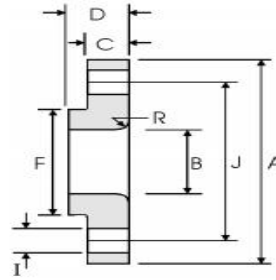
pipe	Flange							Hub	Raised Face	Drilling Data			Weight
	A	B	C	D	E	k	F			G	H	I	
Nominal pipe size	Outside Diameter r	Overall Diameter r	Inside Diameter r	Flange Thickness min	Overall Length in mm	Socket Diameter r	Depth of Socket	Hub Diameter r	Face Diameter r	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 96.20	To be specified by the purchaser	0.560 14.20	0.880 22.30	0.880 22.40	0.380 9.600	1.500 38.10	1.380 35.10	4	0.620 15.70	2.620 66.55	0.76
3/4	1.050 26.70	4.620 117.3		0.620 15.70	1.000 25.40	1.060 27.70	0.440 11.10	1.880 47.70	1.690 42.90	4	0.750 19.10	3.250 82.50	1.29
1	1.315 33.40	4.880 123.9		0.690 17.50	1.060 26.90	1.360 34.50	0.500 12.70	2.120 23.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.55
1 1/4	1.660 42.20	5.250 133.3		0.810 20.60	1.120 28.40	1.700 43.20	0.560 14.20	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	2.06
1 1/2	1.900 48.30	6.120 155.4		0.880 22.30	1.250 31.75	1.950 49.50	0.620 15.70	2.750 69.85	2.880 73.15	4	0.880 22.30	4.500 114.3	3.00
2	2.375 60.30	6.500 165.1		1.000 25.40	1.440 36.60	2.440 62.00	0.690 17.50	3.310 84.00	3.620 91.90	8	0.750 19.10	5.000 127.0	3.67
2 1/2	2.875 73.00	7.500 190.5		1.120 28.40	1.620 41.10	2.940 74.70	0.750 19.00	3.940 100.0	4.120 104.6	8	0.880 22.30	5.880 149.3	5.35
3	3.500 88.90	8.250 209.5		1.250 31.75	1.810 46.00	3.570 90.70	0.810 20.60	4.620 117.3	5.000 127.0	8	0.880 22.30	6.620 168.1	7.06

Socket welding Flanges -ANSI B16.5--Class1500



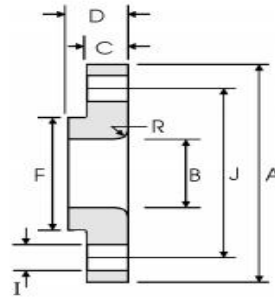
pipe	Flange							Hub	Raised Face	Drilling Data			Weight
	A	B	C	D	E	k	F			G	H	I	
Nominal pipe size	Outside Diameter r	Overall Diameter r	Inside Diameter r	Flange Thickness min	Overall Length in mm	Socket Diameter r	Depth of Socket	Hub Diameter r	Face Diameter r	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	To be specified by the purchaser	0.880 22.30	1.250 31.70	0.880 22.0	0.380 9.600	1.500 38.10	1.380 35.10	4	0.880 22.30	3.250 82.50	1.80
3/4	1.050 26.70	5.120 130.0		1.000 25.40	1.380 35.00	1.090 27.70	0.440 11.10	1.750 44.40	1.690 42.90	4	0.880 22.30	3.500 88.90	2.41
1	1.315 33.40	5.880 149.3		1.120 28.40	1.620 41.10	1.360 34.50	0.500 12.70	2.060 52.30	2.000 50.80	4	1.000 25.40	4.000 101.6	3.55
1 1/4	1.660 42.20	6.250 158.7		1.120 28.40	1.620 41.10	1.700 43.20	0.560 14.20	2.500 63.50	2.500 63.20	4	1.000 25.40	4.380 111.2	4.02
1 1/2	1.900 48.30	7.000 177.8		1.250 31.75	1.750 44.50	1.950 49.50	0.620 15.70	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.45
2	2.375 60.30	8.500 215.9		1.500 38.10	2.250 57.15	2.440 62.00	0.690 17.50	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	10.2
2 1/2	2.875 73.00	9.620 244.3		1.620 41.10	2.500 63.50	2.940 74.70	0.750 19.00	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	13.9

Lap Joint Flanges -ANSI B16.5--Class150



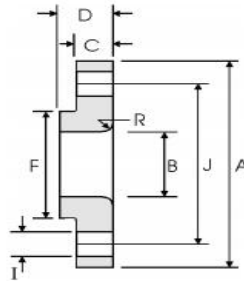
pipe		Flange Data				Lap	Hub	Drilling Data			Weight
Nominal pipe size		A	B	C	D	R	F	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Lap Radius	Hub Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.500 88.90	0.900 22.90	0.440 11.20	0.620 15.70	0.120 3.000	1.190 30.20	4	0.620 15.70	2.380 60.45	0.38
3/4	1.050 26.70	3.880 98.60	1.110 28.20	0.500 12.70	0.620 15.70	0.120 3.000	1.500 38.10	4	0.620 15.70	2.750 69.85	0.55
1	1.315 33.40	4.250 108.0	1.380 35.10	0.560 14.20	0.690 17.50	0.120 3.000	1.940 49.30	4	0.620 15.70	3.120 79.25	0.76
1 1/4	1.660 42.20	4.620 117.3	1.720 43.70	0.620 15.70	0.810 20.60	0.190 4.800	2.310 58.70	4	0.620 15.70	3.500 88.90	1.01
1 1/2	1.900 48.30	5.000 127.0	1.970 50.00	0.690 17.50	0.880 22.40	0.250 6.400	2.560 65.00	4	0.620 15.70	3.880 98.60	1.30
2	2.375 60.30	6.000 152.4	2.460 62.50	0.750 19.10	1.000 25.40	0.310 7.900	3.060 77.70	4	0.750 19.10	4.750 120.7	2.03
2 1/2	2.875 73.00	7.000 177.8	2.970 75.40	0.880 22.40	1.120 28.40	0.310 7.900	3.560 90.40	4	0.750 19.10	5.500 139.7	3.25
3	3.500 88.90	7.500 190.5	3.600 91.40	0.940 23.90	1.190 30.250	0.380 9.700	4.250 108.0	4	0.750 19.10	6.000 152.4	3.81
3 1/2	4.000 101.6	8.500 215.9	4.100 104.1	0.3940 23.90	1.250 31.75	0.380 9.700	4.810 122.2	8	0.750 19.10	7.000 177.8	4.76
4	4.500 114.3	9.000 228.6	4.600 116.8	0.940 23.90	1.310 33.30	0.440 11.20	5.310 134.9	8	0.750 19.10	7.500 190.5	5.25
5	5.563 141.3	10.00 254.0	5.690 114.5	0.940 23.90	1.440 36.60	0.440 11.20	6.440 163.6	8	0.880 22.40	8.500 215.9	6.02
6	6.625 168.3	11.00 279.4	6.750 174.15	1.000 25.40	1.560 39.60	0.500 12.70	7.560 192.0	8	0.880 22.40	9.500 241.3	7.40
8	8.625 219.1	13.50 342.9	8.750 222.3	1.120 28.40	1.750 44.50	0.500 12.70	9.690 246.1	8	0.880 22.40	11.75 298.5	12.1
10	10.75 273.0	16.00 406.4	10.92 277.4	1.190 30.20	1.940 49.30	0.500 12.70	12.00 304.8	12	1.000 25.40	14.25 362.0	16.4
12	12.75 323.8	19.00 482.6	12.92 328.2	1.250 31.75	2.190 55.60	0.500 12.70	14.38 365.3	12	1.000 25.40	17.00 431.8	26.1
14	14.00 355.6	21.00 533.4	14.18 360.2	1.380 35.10	3.120 79.25	0.500 12.70	15.75 400.1	12	1.120 28.40	18.75 476.3	34.5
16	16.00 406.4	23.50 596.9	16.19 411.2	1.440 36.60	3.440 87.40	0.500 12.70	18.00 457.2	16	1.120 28.40	21.25 539.8	44.6
18	18.00 457.2	25.00 635.0	18.20 462.3	1.560 39.60	3.810 96.80	0.500 12.70	19.88 505.0	16	1.250 31.75	22.75 577.9	48.7
20	20.00 508.0	27.50 698.5	20.25 514.4	1.690 42.90	4.060 103.1	0.500 12.70	22.00 558.8	20	1.250 31.75	25.00 635.0	61.6
24	24.00 609.6	32.00 812.8	24.25 616.0	1.880 47.80	4.380 111.3	0.500 12.70	26.12 663.4	20	1.380 35.10	29.50 749.3	86.6

Lap Joint Flanges -ANSI B16.5--Class300



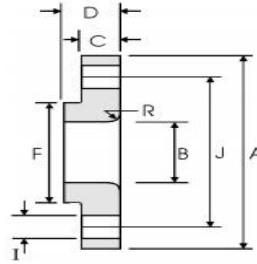
pipe		Flange Data				Lap	Hub	Drilling Data			Weight
Nominal pipe size		A	B	C	D	R	F	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Lap Radius	Hub Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.20	0.900 22.90	0.560 14.20	0.880 22.30	0.120 3.000	1.500 38.10	4	0.620 15.70	2.620 66.55	0.62
3/4	1.050 26.70	4.620 117.3	1.110 28.20	0.620 15.70	1.000 25.40	0.120 3.000	1.880 47.70	4	0.750 19.00	3.250 82.50	1.10
1	1.315 33.40	4.880 123.9	1.380 35.10	0.690 17.50	1.060 26.90	0.120 3.000	2.120 53.80	4	0.750 19.0	3.500 88.90	1.33
1 1/4	1.660 42.20	5.250 133.3	1.720 43.70	0.750 19.00	1.060 26.90	0.190 4.800	2.500 63.50	4	0.750 19.00	3.880 98.50	1.65
1 1/2	1.900 48.30	6.120 155.4	1.970 50.00	0.810 20.60	1.190 30.20	0.250 6.400	2.750 69.85	4	0.880 22.30	4.500 114.3	2.44
2	2.375 60.30	6.500 165.1	2.460 62.50	0.880 22.30	1.310 33.20	0.310 7.900	3.310 84.00	8	0.750 19.10	5.000 127.0	2.83
2 1/2	2.875 73.00	7.500 190.5	2.970 75.40	1.000 25.40	1.500 38.10	0.310 7.900	3.940 100.0	8	0.880 22.30	5.880 149.3	4.25
3	3.500 88.90	8.250 209.5	3.600 91.40	1.120 28.40	1.690 42.90	0.380 9.700	4.620 117.3	8	0.880 22.30	6.620 168.1	5.78
3 1/2	4.000 101.6	9.000 228.6	4.100 104.1	1.190 30.20	1.750 44.40	0.380 9.700	5.250 133.3	8	0.880 22.30	7.250 184.1	7.27
4	4.500 114.3	10.0025 4.0	4.600 116.8	1.250 31.70	1.880 47.70	0.440 11.20	5.750 146.0	8	0.880 22.30	7.880 200.1	9.55
5	5.563 141.3	11.00 279.4	5.690 114.5	1.380 35.00	2.000 50.80	0.440 11.20	7.000 177.8	8	0.880 22.30	9.250 234.9	12.2
6	6.625 168.3	12.80 317.5	6.750 171.5	1.440 36.50	2.060 52.30	0.500 12.70	8.120 206.2	12	0.880 22.30	10.62 269.7	15.5
8	8.625 219.1	15.00 381.0	8.750 222.3	1.620 41.10	2.440 61.90	0.500 12.70	10.25 260.3	12	1.000 25.40	13.00 330.2	24.1
10	10.75 273.0	17.50 444.5	10.92 277.4	1.880 47.70	3.750 95.20	0.500 12.70	12.62 320.5	16	1.120 28.40	15.25 387.3	34.4
12	12.75 323.8	20.50 520.7	12.92 328.2	2.000 50.80	4.000 101.6	0.500 12.70	14.75 374.6	16	1.250 31.70	17.75 450.8	50.4
14	14.00 355.6	23.00 584.2	14.18 360.2	2.120 53.80	4.380 111.2	0.500 12.70	16.75 425.4	20	1.250 31.70	20.25 514.3	70.9
16	16.00 406.4	25.50 647.7	16.19 411.2	2.250 57.15	4.50 120.6	0.500 12.70	19.00 482.6	20	1.380 35.00	22.50 571.5	89.5
18	18.00 457.2	28.00 711.2	18.20 462.3	2.380 60.45	5.120 130.0	0.500 12.70	21.00 533.4	24	1.380 35.00	24.75 628.6	111
20	20.00 508.0	30.50 774.7	20.25 514.4	2.500 63.50	5.500 139.7	0.500 12.70	23.12 587.2	24	1.380 35.0	27.00 685.8	137
24	24.00 609.6	36.00 914.4	24.25 616.0	2.750 69.8	6.000 152.4	0.500 12.70	27.62 701.5	24	1.620 41.10	32.00 812.8	204

Lap Joint Flanges -ANSI B16.5--Class400



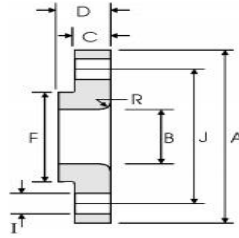
pipe		Flange Data				Lap	Hub	Drilling Data			Weight
Nominal pipe size		A	B	C	D	R	F	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Lap Radius	Hub Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.30	0.900 22.90	0.560 14.20	0.880 22.40	0.120 3.000	1.500 38.10	4	0.620 15.70	2.620 66.55	0.72
3/4	1.050 26.70	4.620 117.3	1.110 28.20	0.620 15.70	1.000 25.40	0.120 3.000	1.880 47.80	4	0.750 19.10	3.250 82.60	1.25
1	1.315 33.40	4.880 127.0	1.380 35.10	0.690 17.50	1.060 26.90	0.120 3.000	2.120 53.80	4	0.750 19.10	3.500 88.90	1.50
1 1/4	1.660 42.20	5.250 133.4	1.720 43.70	0.810 20.60	1.120 28.40	0.190 4.800	2.500 63.50	4	0.750 19.10	3.880 98.60	2.00
1 1/2	1.900 48.30	6.120 155.4	1.970 50.00	0.880 22.40	1.250 31.75	0.250 6.400	2.750 69.80	4	0.880 22.40	4.500 114.3	2.92
2	2.375 60.30	6.500 165.1	2.460 62.50	1.000 25.40	1.440 36.60	0.310 7.900	3.310 84.10	8	0.750 19.10	5.000 127.0	3.55
2 1/2	2.875 73.00	7.500 190.5	2.970 75.40	1.120 28.40	1.620 41.10	0.310 7.900	3.940 100.1	8	0.880 22.40	5.880 149.4	5.23
3	3.500 88.90	8.250 209.6	3.600 91.40	1.125 31.75	1.810 46.00	0.380 9.700	4.620 117.3	8	0.880 22.40	6.620 168.1	6.95
3 1/2	4.000 101.6	9.000 228.6	4.100 104.1	1.380 35.10	1.940 49.30	0.380 9.700	5.250 133.4	8	1.000 25.40	7.250 184.2	8.78
4	4.500 114.3	10.00 254.0	4.600 116.8	1.380 35.10	2.000 50.80	0.440 11.20	5.750 146.1	8	1.000 25.40	7.880 200.2	10.9
5	5.563 141.3	11.00 279.4	5.690 114.5	1.500 38.10	2.120 53.80	0.440 11.20	7.000 177.8	8	1.000 25.40	9.250 235.0	13.7
6	6.625 168.3	12.50 317.5	6.750 171.5	1.620 41.10	2.250 57.15	0.500 12.70	8.125 206.2	12	1.000 25.10	10.62 269.7	18.0
8	8.625 219.1	15.00 381.0	8.750 222.3	1.880 47.80	2.690 68.30	.500 12.70	10.25 260.4	12	1.120 28.40	13.00 330.2	28.3
10	10.75 273.0	17.50 444.5	10.92 277.4	2.120 53.80	4.000 101.6	0.500 12.70	12.60 320.5	16	1.250 31.75	15.25 387.4	38.8
12	12.75 323.8	20.50 520.7	12.92 328.2	2.250 57.15	4.250 108.0	0.500 12.70	14.75 374.7	16	1.380 35.10	17.75 450.9	56.6
14	14.00 355.6	23.00 584.2	14.18 360.2	2.380 60.45	4.620 117.3	0.500 12.70	16.75 425.5	20	1.380 35.70	20.25 514.4	78.6
16	16.00 406.4	25.50 647.7	16.19 411.2	2.500 63.50	5.000 127.0	0.500 12.70	19.00 482.6	20	1.500 38.10	22.50 571.5	100
18	18.00 457.2	28.00 711.2	18.20 462.3	2.620 66.55	5.380 136.7	0.500 12.70	21.00 533.4	24	1.500 38.10	24.75 628.7	122
20	20.00 508.0	30.50 774.7	20.25 514.4	2.750 69.85	5.750 146.1	0.500 12.70	23.12 587.2	24	1.620 41.10	27.00 685.8	145
24	24.00 209.6	36.00 914.4	24.25 616.0	3.000 76.20	6.250 158.8	0.500 12.70	27.62 701.5	24	1.880 47.80	32.00 812.8	217

Lap Joint Flanges -ANSI B16.5--Class600



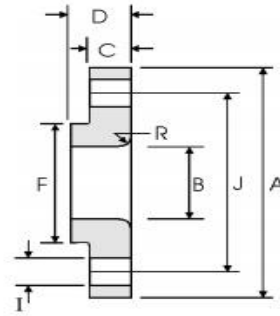
pipe		Flange Data				Lap	Hub	Drilling Data			Weight
Nominal pipe size		A	B	C	D	R	F	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Lap Radius	Hub Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.30	0.900 22.90	0.560 14.20	0.880 22.40	0.120 3.000	1.500 38.10	4	0.620 15.70	2.620 66.55	0.72
3/4	1.050 26.70	4.620 117.3	1.110 28.20	0.620 15.70	1.000 25.40	0.120 3.000	1.880 47.80	4	0.750 19.10	3.250 82.60	1.25
1	1.315 33.40	4.880 124.0	1.380 35.10	0.690 17.50	1.060 26.90	0.120 3.000	2.120 53.80	4	0.750 19.10	3.500 88.90	1.50
1 1/4	1.660 42.20	5.250 133.4	1.720 43.70	0.810 20.60	1.120 28.40	0.190 4.800	2.500 63.50	4	0.7501 19.10	3.880 98.60	2.00
1 1/2	1.900 48.30	6.120 155.4	1.970 50.00	0.880 22.40	1.250 31.75	0.250 6.400	2.750 69.85	4	0.880 22.40	4.500 114.3	2.92
2	2.375 60.30	6.500 165.1	2.460 62.50	1.000 25.40	1.440 36.60	0.310 7.900	3.310 84.10	8	0.750 19.10	5.000 127.0	3.55
2 1/2	2.875 73.00	7.500 190.5	2.970 75.40	1.120 28.40	1.620 41.10	0.310 7.900	3.940 100.1	8	0.880 22.40	5.880 149.4	5.23
3	3.500 88.90	8.250 209.6	3.600 91.40	1.125 31.75	1.810 46.00	0.380 9.700	4.620 117.3	8	0.880 22.40	6.620 168.1	6.95
3 1/2	4.000 101.6	9.000 228.6	4.100 104.1	1.380 35.10	1.940 49.30	0.380 9.700	5.250 133.4	8	1.000 25.40	7.250 184.2	8.78
4	4.500 114.3	10.75 273.1	4.600 116.8	1.500 38.10	2.120 53.80	0.440 11.20	6.000 152.4	8	1.000 25.40	8.500 215.9	14.4
5	5.563 141.3	13.00 330.2	5.690 114.5	1.750 44.50	2.380 60.45	0.440 11.20	7.440 189.0	8	1.120 28.40	10.50 266.7	24.3
6	6.625 168.3	14.00 355.6	6.750 171.5	1.880 47.80	2.620 66.55	0.500 12.70	8.750 222.3	12	1.120 28.40	11.50 292.1	28.5
8	8.625 219.1	16.50 419.1	8.750 222.3	2.190 55.60	3.000 76.20	0.500 12.70	10.75 273.1	12	1.250 31.75	13.75 349.3	43.1
10	10.75 273.0	2.00 508.0	10.92 277.4	2.500 63.50	4.380 111.3	0.500 13.70	13.50 342.9	16	1.380 35.10	17.00 431.8	70.5
12	12.75 323.8	22.00 558.8	12.92 328.2	2.620 66.55	4.620 117.3	0.500 12.70	15.75 400.1	20	1.380 35.10	19.25 489.0	86.1
14	14.00 355.6	23.75 603.3	14.18 360.2	2.750 69.85	5.000 127.0	0.500 12.70	17.00 431.8	20	1.500 38.10	20.75 527.1	100
16	16.00 406.4	27.00 685.8	16.19 411.2	3.000 76.20	5.500 139.7	0.500 12.70	19.50 495.3	20	1.620 41.10	23.75 603.3	145
18	18.00 457.2	29.25 743.0	18.20 462.3	3.250 82.60	6.000 152.4	0.500 12.70	21.50 546.1	20	1.750 44.50	25.75 654.1	177
20	20.00 508.0	32.00 812.8	20.25 514.4	3.500 88.90	6.500 165.1	0.500 12.70	24.00 609.6	24	1.750 44.50	28.50 723.9	225
24	24.00 609.6	37.00 939.8	24.25 616.0	4.000 101.6	7.250 184.2	0.500 12.70	28.25 717.6	24	2.000 50.80	33.00 838.2	318

Lap Joint Flanges -ANSI B16.5--Class900



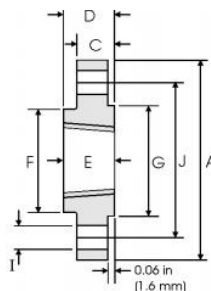
pipe		Flange Data				Lap	Hub	Drilling Data			Weight
Nominal pipe size		A	B	C	D	R	F	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Lap Radius	Hub Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	0.900 22.90	0.880 22.30	1.250 31.70	0.120 3.00	1.500 38.10	4	0.880 22.30	3.250 82.50	1.71
3/4	1.050 26.70	5.120 130.0	1.110 28.20	1.000 25.40	1.380 35.00	0.120 3.000	1.750 44.40	4	0.880 22.30	3.500 88.90	2.30
1	1.315 33.40	5.880 149.3	1.380 35.10	1.120 28.40	1.620 41.10	0.120 3.000	2.060 52.30	4	1.000 25.40	4.000 101.6	3.40
1 1/4	1.660 42.20	6.250 158.7	1.720 43.70	1.120 28.40	1.620 41.10	0.190 4.800	2.500 63.50	4	1.000 25.40	4.380 111.2	3.85
1 1/2	1.900 48.30	7.000 177.8	1.970 50.00	1.250 31.70	1.750 44.40	0.250 6.400	2.750 69.85	4	1.120 28.40	4.880 123.9	5.28
2	2.375 60.30	8.500 215.9	2.560 62.50	1.500 38.10	2.250 57.15	0.310 7.900	4.120 104.6	8	1.000 25.40	6.500 165.1	9.78
2 1/2	2.875 73.00	9.620 244.3	2.970 75.40	1.620 41.10	2.500 63.50	0.310 7.900	4.880 123.9	8	1.120 28.40	7.500 190.5	13.6
3	3.500 88.90	9.500 241.3	3.600 91.40	1.500 38.10	2.120 53.80	0.380 9.700	5.000 127.0	8	1.000 25.40	7.500 190.5	11.3
4	4.500 114.3	11.50 292.1	4.600 116.8	1.750 44.40	2.750 69.85	0.440 11.20	6.250 158.7	8	1.250 31.70	9.250 234.9	19.2
5	5.563 141.3	13.75 349.2	5.690 114.5	2.000 20.80	3.120 79.25	0.440 11.20	7.500 190.5	8	1.380 35.00	11.00279 .4	31.20
6	6.625 168.3	15.00 381.0	6.750 171.5	2.190 55.60	3.380 85.80	0.500 12.70	9.250 234.9	12	1.250 31.70	12.50 317.5	40.50
8	8.625 219.1	18.50 469.9	8.750 222.3	2.500 63.50	4.500 114.3	0.500 12.70	11.75 298.4	12	1.500 38.10	15.50 393.7	71.5
10	10.75 273.0	21.50 546.1	10.92 277.4	2.750 69.85	5.000 127.0	0.500 12.70	14.50 368.3	16	1.500 38.10	18.50 469.9	104
12	12.75 323.8	24.00 609.6	12.92 328.2	3.120 79.25	5.620 142.7	0.500 12.70	16.50 419.1	20	1.500 38.10	21.00 533.1	139
14	14.00 355.6	29.50 749.3	14.18 360.2	5.250 133.3	9.500 241.3	0.500 12.70	19.50 495.3	16	2.380 60.45	25.00 635.0	365
16	16.00 406.1	32.50 825.5	16.19 411.2	5.750 146.0	10.25 260.3	0.500 12.70	21.75 552.4	16	2.620 66.55	27.75 704.8	459
18	18.00 457.2	36.00 914.4	18.20 462.3	6.380 162.0	10.88 276.3	0.500 12.70	23.50 596.9	16	2.880 73.15	30.50 774.7	598
20	20.00 508.0	38.75 984.2	20.20 514.4	7.000 177.8	11.50 292.1	0.500 12.70	25.25 641.3	16	3.120 79.25	32.75 831.8	712
24	24.00 609.6	46.00 1168.4	24.25 616.0	8.000 203.2	13.00 330.2	0.500 12.70	30.00 762.0	16	3.620 91.90	39.00 990.6	1090

Lap Joint Flanges -ANSI B16.5--Class2500



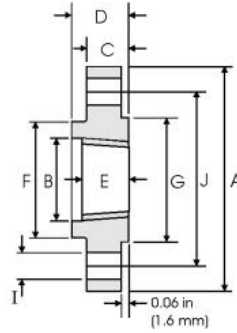
pipe		Flange Data				Lap	Hub	Drilling Data			Weight
Nominal pipe size		A	B	C	D	R	F	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Inside Diameter	Flange Thickness min	Overall Length	Lap Radius	Hub Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	5.255 133.4	0.900 22.90	1.190 30.20	1.560 39.60	0.120 3.000	1.690 42.90	4	0.880 22.40	3.500 88.90	2.92
3/4	1.050 26.70	5.500 139.7	1.110 28.20	1.250 31.75	1.690 42.90	0.120 3.000	2.000 50.80	4	0.880 22.40	3.750 95.30	3.40
1	1.315 33.40	6.250 158.8	1.380 35.10	1.380 35.10	1.880 47.80	0.120 3.000	2.250 57.15	4	1.000 25.40	4.250 108.0	4.77
1 1/4	1.660 42.20	7.250 184.2	1.720 43.70	1.500 38.10	2.060 52.30	0.190 4.800	2.880 73.15	4	1.120 28.40	5.120 130.0	7.08
1 1/2	1.900 48.30	8.000 203.2	1.970 50.00	1.750 44.50	2.3680 60.45	0.250 6.400	3.120 79.25	4	1.250 31.75	5.750 146.1	9.93
2	2.375 60.30	9.250 235.0	2.460 62.50	2.000 50.80	2.750 69.85	0.310 7.900	3.750 95.30	8	1.120 28.40	6.750 171.5	14.7
2 1/2	2.875 73.00	10.50 266.7	2.970 75.40	2.250 57.15	3.120 79.25	0.310 7.900	4.500 114.3	8	1.250 31.75	7.750 196.9	21.3
3	3.500 88.90	12.00 304.8	3.600 91.40	2.620 66.55	3.620 91.90	0.380 9.700	5.250 133.4	8	1.380 35.10	9.000 228.6	32.3
4	4.500 114.3	14.00 355.6	4.600 116.8	3.000 76.20	4.250 108.0	0.440 11.20	6.500 165.1	8	1.620 41.10	10.75 273.1	52.5
5	5.563 141.3	16.50 419.1	5.690 114.5	3.620 91.90	5.120 130.0	0.440 11.20	8.000 203.2	8	1.880 47.80	12.75 323.9	82.6
6	6.625 168.3	19.00 482.6	6.750 171.5	4.250 108.0	6.000 152.4	0.500 12.70	9.250 235.0	8	2.120 53.80	14.50 368.3	127
8	8.625 219.1	21.75 552.5	8.750 222.3	5.000 127.0	7.000 117.8	0.500 12.70	12.00 304.8	12	2.120 53.80	17.25 438.2	186
10	10.75 273.0	26.50 673.1	10.92 277.4	6.500 165.1	9.000 228.6	0.500 12.70	14.75 374.7	12	2.620 66.55	21.25 539.8	352
12	12.75 323.8	30.00 762.0	12.92 328.2	7.250 184.2	10.00 254.0	0.500 12.70	17.38 441.5	12	2.880 73.15	24.38 619.3	501

Threaded Flanges -ANSI B16.5--Class150



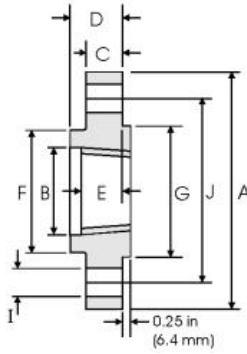
pipe		Flange Data				Hub	Raised Face	Drilling Data			Weight
Nominal pipe size	A	C	D	E	F	G	H	I	J	Kg/piece	
	Outside Diameter	Overall Diameter	Flange Thickness min	Overall Length	Threaded length min	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter		Diameter of Circle of Holes
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm		in mm
1/2	0.840 21.30	3.500 88.90	0.440 11.20	0.620 15.70	0.620 15.70	1.190 30.20	1.380 35.10	4	0.620 15.70	2.380 60.45	0.39
3/4	1.050 26.70	3.880 98.60	0.500 12.70	0.620 15.70	0.620 15.70	1.500 38.10	1.690 42.90	4	0.620 15.70	2.750 69.85	0.56
1	1.315 33.40	4.250 108.0	0.560 14.20	0.690 17.50	0.690 17.50	1.940 49.30	2.000 50.80	4	0.620 15.70	3.120 79.25	0.78
1 1/4	1.660 42.20	4.620 117.3	0.620 15.70	0.810 20.60	0.810 20.60	2.310 58.70	2.500 63.50	4	0.620 15.70	3.500 88.90	1.03
1 1/2	1.900 48.30	5.000 127.0	0.690 17.50	0.880 22.40	0.880 22.30	2.560 65.00	2.880 73.15	4	0.620 15.70	3.880 98.60	1.32
2	2.375 60.30	6.000 152.4	0.750 19.10	1.000 25.40	1.000 25.40	3.060 77.70	3.620 91.90	4	0.750 19.10	4.750 120.7	2.06
2 1/2	2.875 73.00	7.000 177.8	0.880 22.40	1.120 28.40	1.120 28.40	3.560 90.40	4.120 104.6	4	0.750 19.10	5.500 139.7	3.28
3	3.500 88.90	7.500 190.5	0.940 23.90	1.190 30.20	1.190 30.20	4.250 108.0	5.000 127.0	4	0.750 19.10	6.000 152.4	3.85
3 1/2	4.000 101.6	8.500 215.9	0.940 23.90	1.250 31.75	1.250 31.75	4.810 122.2	5.500 139.7	8	0.750 19.10	7.000 177.8	4.81
4	4.500 114.3	9.000 228.6	0.940 23.90	1.310 33.30	1.310 33.30	5.310 134.9	6.190 157.2	8	0.750 19.10	7.500 190.5	5.30
5	5.563 141.3	10.00 254.0	0.940 23.90	1.440 36.60	1.440 36.60	6.440 163.6	7.310 185.7	8	0.880 22.40	8.500 215.9	6.07
6	6.625 168.3	11.0 279.4	1.000 25.40	1.560 39.60	1.560 39.60	7.560 192.0	8.500 215.9	8	0.880 22.40	9.500 241.3	7.45
8	8.625 219.1	13.50 342.9	1.120 28.40	1.750 44.50	1.750 44.50	9.690 246.1	10.62 269.7	8	0.880 22.40	11.75 298.5	12.1
10	10.75 273.0	16.00 406.4	1.190 30.20	1.940 49.30	1.940 49.30	12.00 304.8	12.75 323.9	12	1.000 25.40	14.25 362.0	16.5
12	12.75 323.8	19.00 482.6	1.250 31.75	3.190 55.60	2.190 55.60	14.38 365.3	15.00 381.0	12	1.000 25.40	17.00 431.8	26.2
14	14.00 355.6	21.00 533.4	1.380 35.10	2.250 57.15	2.250 57.15	15.75 400.1	16.25 412.7	12	1.120 28.40	18.75 476.3	34.6
16	16.00 406.4	23.50 596.9	1.440 36.60	2.500 63.50	2.500 63.50	18.00 457.2	18.50 469.9	16	1.120 28.40	21.25 539.8	44.8
18	18.00 457.2	25.00 635.0	1.560 39.60	2.690 68.30	2.690 68.30	19.88 505.0	21.00 533.4	16	1.250 31.75	22.75 577.9	48.9
20	20.00 508.0	27.50 698.5	1.690 42.90	2.880 73.15	2.880 73.15	22.00 558.8	23.00 584.2	20	1.250 31.75	25.00 635.0	61.9
24	24.00 609.6	32.00 812.8	1.880 47.80	3.250 82.60	3.250 82.60	26.12 663.4	27.25 692.2	20	1.380 35.10	29.50 749.3	86.9

Threaded Flanges -ANSI B16.5--Class300



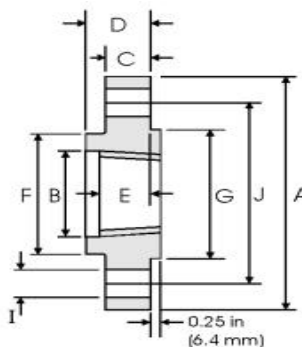
pipe		Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size		A	B	C	D	E	F	G	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Counter-bore min	Flange Thickness min	Overall Length	Threaded length min	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.20	0.930 23.60	0.560 14.20	0.880 22.30	0.620 15.70	1.500 38.10	1.380 35.00	4	0.620 15.70	2.620 66.55	0.64
3/4	1.050 26.70	4.620 117.3	1.140 29.00	0.620 15.70	1.000 25.40	0.620 15.70	1.880 47.70	1.690 42.90	4	0.750 19.00	3.250 82.50	1.12
1	1.315 33.40	4.880 123.9	1.410 35.80	0.690 17.50	1.060 26.90	0.690 17.50	2.120 53.80	2.000 50.80	4	0.750 19.00	3.500 88.90	1.36
1 1/4	1.660 42.20	5.250 133.3	1.750 44.40	0.750 19.00	1.060 26.90	0.810 20.60	2.500 63.50	2.500 63.50	44	0.750 19.00	3.880 98.50	1.68
1 1/2	1.900 48.30	6.120 155.4	1.980 50.50	0.810 20.60	1.190 30.20	0.880 22.30	2.750 69.85	2.880 73.15	4	0.880 22.30	4.500 114.3	2.49
2	2.375 60.30	6.500 165.1	2.500 63.50	0.880 22.30	1.310 33.20	1.120 28.40	3.310 84.00	3.620 91.90	8	0.750 19.00	5.000 127.0	2.87
2 1/2	2.875 73.00	7.500 190.5	3.000 76.20	1.000 25.40	1.500 38.10	1.250 31.70	3.940 100.0	4.120 104.6	8	0.880 22.30	5.880 149.3	4.32
3	3.500 88.90	8.250 209.5	3.630 92.20	1.120 28.40	1.690 42.90	1.250 31.70	4.620 117.3	5.000 127.0	8	0.880 22.30	6.620 168.1	5.85
3 1/2	4.000 101.6	9.000 228.6	4.130 104.9	1.190 30.20	1.750 44.40	1.440 36.50	5.250 133.3	5.500 139.7	8	0.880 22.30	7.250 184.1	7.34
4	4.500 114.3	10.00 254.0	4.630 117.6	1.250 31.70	1.880 47.70	1.440 36.50	5.750 146.0	6.190 157.2	8	0.880 22.30	7.880 200.1	9.61
5	5.563 141.3	11.00 279.4	5.690 144.5	1.380 35.00	2.000 50.80	1.690 42.90	7.200 177.8	7.310 185.7	8	0.880 22.30	9.250 234.9	12.3
6	6.625 168.3	12.50 317.5	6.750 171.4	1.440 36.50	2.060 52.30	1.810 45.90	8.120 206.2	8.500 215.9	12	0.880 22.30	10.62 269.7	15.6
8	8.625 219.1	15.00 381.0	8.750 222.2	1.620 41.10	2.440 61.90	2.000 50.80	10.25 260.3	10.62 269.7	12	1.000 25.40	13.00 330.2	24.2
10	10.75 273.0	17.50 444.5	10.88 276.3	1.880 47.70	2.620 66.55	2.190 55.60	12.62 320.5	12.75 323.9	16	1.120 28.40	15.25 387.3	34.1
12	12.75 323.8	20.50 520.7	12.94 328.7	2.000 50.80	2.880 73.15	2.380 60.45	14.75 374.6	15.00 381.0	16	1.250 31.70	17.75 450.8	49.8
14	14.00 355.6	23.00 584.2	14.19 360.4	2.120 53.80	3.000 76.20	2.500 63.50	16.75 425.4	16.25 412.7	20	1.250 31.70	20.25 514.3	69.9
16	16.00 406.4	25.50 647.7	16.19 411.2	2.250 57.15	3.250 82.50	2.690 68.30	19.00 482.6	18.50 469.9	20	1.380 35.00	22.50 571.5	88.1
18	18.00 457.2	28.00 711.2	18.19 462.0	2.380 60.45	3.500 88.90	2.750 69.85	21.00 533.1	21.00 533.4	24	1.380 35.00	24.75 628.6	109
20	20.00 508.0	30.50 774.7	20.19 512.8	2.500 63.50	3.750 95.2	2.880 73.15	23.12 587.2	23.00 584.2	24	1.380 35.00	27.00 685.8	134
24	24.00 609.6	36.00 914.4	24.19 614.4	2.750 69.85	4.190 106.4	3.250 82.50	27.62 701.5	27.25 692.2	24	1.620 41.10	32.00 812.8	201

Threaded Flanges -ANSI B16.5--Class400



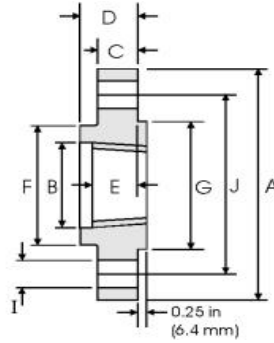
pipe		Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size		A	B	C	D	E	F	G	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Counter-bore min	Flange Thickness min	Overall Length	Threaded length min	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.30	0.930 23.60	0.560 14.20	0.880 22.40	0.620 15.70	1.500 38.10	1.380 35.10	4	0.620 15.70	2.620 66.55	0.74
3/4	1.050 26.70	4.620 117.3	1.140 29.00	.620 15.70	1.000 25.40	0.620 15.70	1.880 47.80	1.690 42.90	4	0.750 19.10	3.250 82.60	1.27
1	1.315 33.40	4.880 124.0	1.410 35.80	0.690 17.50	1.060 26.90	0.690 17.50	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.52
1 1/4	1.660 42.20	5.250 133.4	1.750 44.50	0.810 20.60	1.120 28.40	0.810 20.60	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	2.03
1 1/2	1.900 48.30	6.120 155.4	1.990 50.50	0.880 22.40	1.250 31.75	0.880 22.40	2.750 69.85	2.880 73.15	4	0.880 22.40	4.500 114.3	2.96
2	2.375 60.30	6.500 165.1	2.500 63.50	1.000 25.40	1.440 36.60	1.120 28.40	3.310 84.10	3.620 91.90	8	0.750 19.10	5.000 127.0	3.62
2 1/2	2.875 73.00	7.500 190.5	3.000 76.20	1.120 28.40	1.620 41.10	1.250 31.75	3.940 100.1	4.120 104.6	8	0.880 22.40	5.880 149.4	5.28
3	3.500 88.90	8.250 209.6	3.630 92.20	1.250 31.75	1.810 46.00	1.380 35.10	4.620 117.3	5.000 127.0	8	0.880 22.40	6.620 168.1	7.00
3 1/2	4.000 101.6	9.000 228.6	413.0 104.9	1.380 35.10	1.940 49.30	1.560 39.60	5.250 133.4	5.500 139.7	8	1.000 25.40	7.250 184.2	8.84
4	4.500 114.3	10.00 254.0	4.630 117.6	1.380 35.10	2.000 50.80	1.440 36.60	5.750 146.1	6.190 157.2	8	1.000 25.40	7.880 200.2	11.1
5	5.563 141.3	11.00 279.4	5.690 144.5	1.500 38.10	2.120 53.80	1.690 42.90	7.000 177.8	7.310 185.7	8	1.000 25.40	9.250 235.0	13.9
6	6.625 168.3	12.50 317.5	6.750 171.5	1.620 41.10	2.250 57.15	1.810 46.00	8.120 206.2	8.500 215.9	12	1.000 25.40	10.62 269.7	18.3
8	8.625 219.1	15.00 381.0	8.750 222.3	1.880 47.80	2.690 68.30	2.000 50.80	10.25 260.4	10.62 269.7	12	1.120 28.40	13.00 330.2	28.6
10	10.75 273.0	17.50 444.5	10.88 276.4	2.120 53.80	2.880 73.15	2.190 55.60	12.62 320.5	12.75 323.9	16	1.250 31.75	15.25 387.4	39.2
12	12.75 323.8	20.50 520.7	12.94 328.7	2.250 57.15	3.120 79.25	2.380 60.45	14.75 374.7	15.00 381.0	16	1.380 35.10	17.75 450.9	57.0
14	14.00 355.6	23.00 584.2	14.19 360.4	2.380 60.45	3.310 84.10	2.500 63.50	16.75 425.2	16.25 412.8	20	1.380 35.10	20.25 514.4	79.1
16	16.00 406.4	25.50 647.7	1619 411.2	2.500 63.50	3.690 93.70	2.690 68.30	19.00 482.6	18.50 469.9	20	1.500 38.10	22.50 571.5	101
18	18.00 457.2	28.00 711.2	18.19 462.0	2.620 66.55	3.880 98.60	2.750 69.85	21.00 533.4	21.00 533.4	24	1.500 38.10	24.75 628.7	123
20	20.00 508.0	30.50 774.7	20.19 512.8	2.750 69.85	4.000 101.6	2.880 73.15	23.12 587.2	23.00 584.2	24	1.620 41.10	27.00 685.8	146
24	24.00 609.6	36.00 914.4	24.19 614.4	3.000 76.20	4.500 114.3	3.250 82.60	27.62 701.5	27.25 692.2	24	1.880 47.80	32.00 812.8	219

Threaded Flanges -ANSI B16.5--Class600



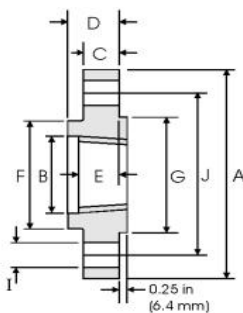
pipe		Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size		A	B	C	D	E	F	G	H	I	J	
	Outside Diameter	Overall Diameter	Counter-bore min	Flange Thickness min	Overall Length	Threaded length min	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm				
1/2	0.840 21.30	3.750 95.20	0.930 23.60	0.560 14.20	0.880 22.40	0.620 15.70	1.500 38.10	1.380 35.10	4	0.620 15.70	2.620 66.55	0.74
3/4	1.050 26.70	4.620 117.3	1.140 29.00	0.620 15.70	1.000 25.40	0.620 15.70	1.880 47.80	1.690 42.90	4	0.750 19.10	3.250 82.60	1.27
1	1.315 33.40	4.880 124.0	1.410 35.80	0.690 17.50	1.060 26.90	0.690 17.50	2.120 53.80	2.000 50.80	4	0.750 19.10	3.500 88.90	1.52
1 1/4	1.660 42.20	5.250 133.4	1.750 44.50	0.810 20.60	1.120 28.40	0.810 20.60	2.500 63.50	2.500 63.50	4	0.750 19.10	3.880 98.60	2.03
1 1/2	1.900 48.30	6.120 155.4	1.990 50.50	0.880 22.40	1.250 31.75	0.880 22.40	2.750 69.85	2.880 73.15	4	0.880 22.40	4.500 114.3	2.96
2	2.375 60.30	6.500 165.1	2.500 63.50	1.000 25.40	1.440 36.60	1.120 28.40	3.310 84.10	3.620 91.90	8	0.750 19.10	5.000 127.0	3.62
2 1/2	2.875 73.00	7.500 190.5	3.000 76.20	1.120 28.40	1.620 41.10	1.250 31.75	3.940 100.1	4.120 104.6	8	0.880 22.40	5.880 149.4	5.28
3	3.500 88.90	8.250 209.6	3.630 92.20	1.250 31.75	1.810 46.00	1.380 35.10	4.620 117.3	5.000 127.0	8	0.880 22.40	6.620 168.1	7.00
3 1/2	4.000 101.6	9.000 228.6	4.130 104.9	1.380 35.10	1.940 49.30	1.560 39.60	5.250 133.4	5.500 139.7	8	1.000 25.40	7.250 184.2	8.84
4	4.500 114.3	10.75 273.1	4.630 117.6	1.500 38.10	2.120 53.80	1.620 41.10	6.000 152.4	6.190 157.2	8	1.000 25.40	8.500 215.9	14.5
5	5.563 141.3	13.00 330.2	5.690 144.5	1.750 44.50	2.380 60.45	1.880 47.80	7.440 189.0	7.310 185.7	8	1.120 28.40	10.50 266.7	24.4
6	6.625 168.3	14.00 355.6	6.750 171.5	1.880 47.80	2.620 66.55	2.000 50.80	8.750 222.3	8.500 215.9	12	1.120 28.40	11.50 292.1	28.7
8	8.625 219.1	16.50 419.1	8.750 222.3	2.190 55.60	3.000 76.20	2.250 57.15	10.75 273.1	10.62 269.7	12	1.250 31.75	13.75 349.3	43.4
10	10.75 273.0	20.00 508.0	10.88 276.4	2.500 63.50	3.380 85.90	2.560 65.00	13.50 342.9	12.75 323.9	16	1.380 35.10	17.00 431.8	70.3
12	12.75 323.8	22.00 558.8	12.94 328.7	2.620 66.55	3.620 91.90	2.750 69.85	15.75 400.1	15.00 381.0	20	1.380 35.10	19.25 489.0	84.2
14	14.00 355.6	23.75 603.3	14.19 360.4	2.750 69.85	3.690 93.70	2.880 73.15	17.00 431.8	16.25 412.8	20	1.500 38.10	20.75 527.1	98.7
16	16.00 406.4	27.00 685.8	16.19 411.2	3.000 76.20	4.190 106.4	3.060 77.70	19.50 495.3	18.50 469.9	20	1.620 41.10	23.75 603.3	142
18	18.00 457.2	29.25 743.0	18.19 462.0	3.250 82.60	4.620 117.3	3.120 79.25	21.50 546.1	21.00 533.4	20	1.750 44.50	25.75 654.1	173
20	20.00 508.0	32.00 812.8	20.19 512.8	3.500 88.90	5.000 127.0	3.250 82.60	24.00 609.6	23.00 584.2	24	1.750 44.50	28.50 723.9	220
24	24.00 609.6	37.00 939.8	24.19 614.4	4.000 101.6	5.500 139.7	3.620 91.90	28.25 717.6	27.25 692.2	24	2.000 50.80	33.00 838.2	312

Threaded Flanges -ANSI B16.5--Class900



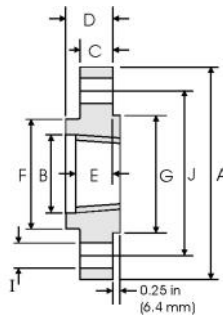
pipe		Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size		A	B	C	D	E	F	G	H	I	J	Kg/piece
	Outside Diameter	Overall Diameter	Counter-bore min	Flange Thickness min	Overall Length	Threaded length min	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	0.930 23.60	0.880 22.30	1.250 31.70	0.880 22.30	1.500 38.10	1.380 35.10	4	0.880 22.30	3.250 82.50	1.74
3/4	1.050 26.70	5.120 130.0	1.140 29.00	1.000 25.40	1.380 35.00	1.000 25.40	1.750 44.40	1.690 42.90	4	0.880 22.30	3.500 88.90	2.34
1	1.315 33.40	5.880 149.3	1.410 35.80	1.120 28.40	1.620 41.10	1.120 28.40	2.060 52.30	2.000 50.80	4	1.000 25.40	4.000 101.6	3.44
1 1/4	1.660 42.20	6.250 158.7	1.750 44.40	1.120 28.40	1.620 41.10	1.190 30.20	2.500 63.50	2.500 63.50	4	1.000 25.40	4.380 111.2	3.91
1 1/2	1.900 48.30	7.000 177.8	1.990 50.50	1.250 31.70	1.750 44.50	1.250 31.70	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.36
2	2.375 60.30	8.500 215.9	2.500 63.50	1.500 38.10	2.250 57.15	1.500 38.10	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	9.85
2 1/2	2.875 73.00	9.620 244.3	3.000 76.20	1.620 41.10	2.500 63.50	1.880 47.70	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	13.7
3	3.500 88.90	9.500 241.3	3.630 92.20	1.500 38.10	2.120 53.80	1.620 41.10	5.000 127.0	5.200 127.0	8	1.000 25.40	7.500 190.5	11.6
4	4.500 114.3	11.50 292.1	4.630 117.6	1.750 44.40	2.750 69.85	1.880 47.80	6.250 158.7	6.190 157.2	8	1.250 31.70	9.250 234.9	19.7
5	5.563 141.3	13.75 349.2	5.690 144.5	2.000 50.80	3.120 79.25	2.120 53.80	7.500 190.5	7.310 185.7	8	1.380 35.00	11.00 279.4	31.9
6	6.625 168.3	15.00 381.1	6.750 171.4	2.190 55.60	3.380 85.80	2.250 57.15	9.250 234.9	8.500 215.9	12	1.250 31.70	12.50 317.5	41.1
8	8.625 219.1	18.50 469.9	8.750 222.2	2.500 63.50	4.000 101.6	2.500 63.50	11.75 298.4	10.62 269.7	12	1.500 38.10	15.50 393.7	70.7
10	10.75 273.0	21.50 546.1	10.88 276.3	2.750 69.85	4.250 107.9	2.810 71.40	14.50 368.3	12.75 323.9	16	1.500 38.10	18.50 469.9	101
12	12.75 323.8	24.00 609.6	12.94 328.7	3.120 79.40	4.620 117.3	3.000 76.20	16.50 419.1	15.00 381.0	20	1.500 38.10	21.00 533.4	133
14	14.00 355.6	25.25 641.3	14.19 360.4	3.380 85.70	5.120 130.0	3.250 82.50	17.75 450.8	16.28 412.7	20	1.620 41.10	22.00 558.8	153
16	16.00 406.4	27.75 704.8	16.19 411.2	3.500 88.90	5.250 133.3	3.380 85.90	20.00 508.0	18.50 469.9	20	1.750 44.40	24.25 618.9	185
18	18.00 457.2	31.00 787.4	18.19 462.0	4.000 101.6	6.000 152.4	3.50 88.90	22.25 565.1	21.00 533.4	20	2.000 50.80	27.00 685.8	258
20	20.00 508.0	33.75 857.2	20.19 512.8	4.250 107.9	6.250 158.7	3.620 91.90	24.50 622.3	23.00 584.2	20	2.120 53.80	29.50 749.3	317
24	24.00 609.6	41.00 1041.4	24.19 614.4	5.500 139.7	8.000 203.2	4.000 101.6	29.50 749.3	27.25 692.2	20	2.620 66.55	35.50 90.17	606

Threaded Flanges -ANSI B16.5--Class1500



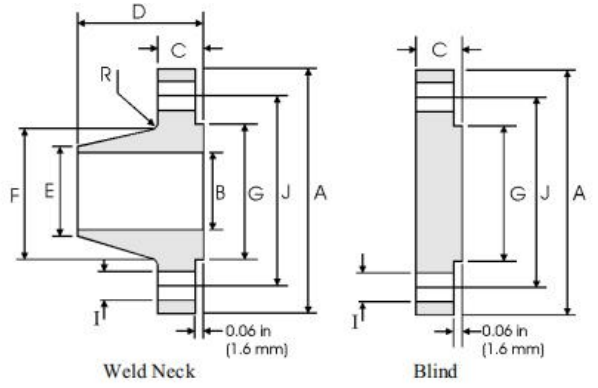
pipe		Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size		A	B	C	D	E	F	G	H	I	J	
	Outside Diameter	Overall Diameter	Counter-bore min	Flange Thickness min	Overall Length	Threaded length min	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	0.930 23.60	0.880 22.30	1.250 31.70	0.880 22.30	1.500 38.10	1.380 35.00	4	0.880 22.30	3.250 82.50	1.74
3/4	1.050 26.70	5.120 130.0	1.140 29.00	1.000 25.40	1.380 35.00	1.000 25.40	1.750 44.40	1.690 42.92	4	0.880 22.30	3.500 88.90	2.34
1	1.315 33.40	5.880 149.3	1.410 35.80	1.120 28.40	1.620 41.10	1.120 28.40	2.060 52.30	2.000 50.80	4	1.000 25.40	4.000 101.6	3.44
1 1/4	1.660 42.20	6.250 158.7	1.750 44.40	1.120 28.40	1.620 41.10	1.190 30.20	2.500 63.50	2.500 63.50	4	1.000 25.40	4.380 111.2	3.91
1 1/2	1.900 48.30	7.000 177.8	1.990 50.50	1.250 31.70	1.750 44.50	1.250 31.70	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.36
2	2.375 60.30	8.500 215.9	2.500 63.50	1.500 38.10	2.250 57.15	1.500 38.10	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	9.85
2 1/2	2.875 73.00	9.620 244.3	3.000 76.20	1.620 41.10	2.500 63.50	1.880 47.70	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	13.7

Threaded Flanges -ANSI B16.5--Class2500



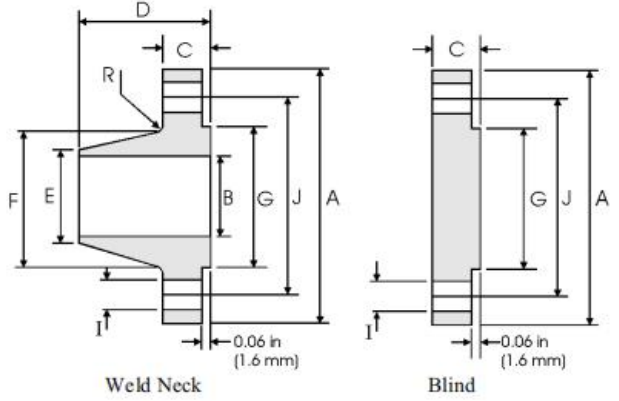
pipe		Flange Data					Hub	Raised Face	Drilling Data			Weight
Nominal pipe size		A	B	C	D	E	F	G	H	I	J	
	Outside Diameter	Overall Diameter	Counter-bore min	Flange Thickness min	Overall Length	Threaded length min	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	4.750 120.6	0.930 23.60	0.880 22.30	1.250 31.70	0.880 22.30	1.500 38.10	1.380 35.00	4	0.880 22.30	3.250 82.50	1.74
3/4	1.050 26.70	5.120 130.0	1.140 29.00	1.000 25.40	1.380 35.00	1.000 25.40	1.750 44.40	1.690 42.92	4	0.880 22.30	3.500 88.90	2.34
1	1.315 33.40	5.880 149.3	1.410 35.80	1.120 28.40	1.620 41.10	1.120 28.40	2.060 52.30	2.000 50.80	4	1.000 25.40	4.000 101.6	3.44
1 1/4	1.660 42.20	6.250 158.7	1.750 44.40	1.120 28.40	1.620 41.10	1.190 30.20	2.500 63.50	2.500 63.50	4	1.000 25.40	4.380 111.2	3.91
1 1/2	1.900 48.30	7.000 177.8	1.990 50.50	1.250 31.70	1.750 44.50	1.250 31.70	2.750 69.85	2.880 73.15	4	1.120 28.40	4.880 123.9	5.36
2	2.375 60.30	8.500 215.9	2.500 63.50	1.500 38.10	2.250 57.15	1.500 38.10	4.120 104.6	3.620 91.90	8	1.000 25.40	6.500 165.1	9.85
2 1/2	2.875 73.00	9.620 244.3	3.000 76.20	1.620 41.10	2.500 63.50	1.880 47.70	4.880 123.9	4.120 104.6	8	1.120 28.40	7.500 190.5	13.7

ASME B16.47 Series A (MSS SP-44) Flanges--Class150



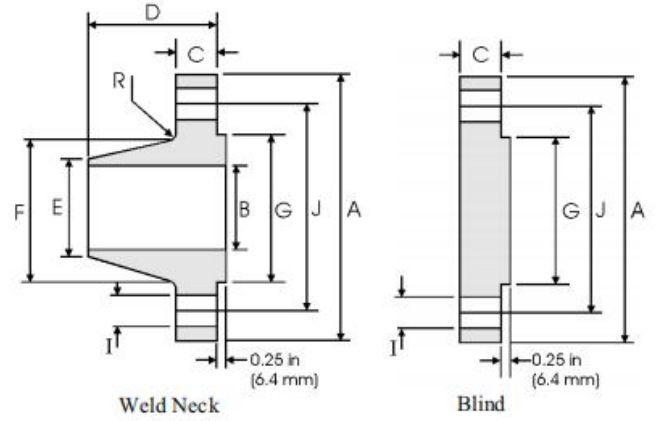
pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C	D	E	F	G	H	I	J	R	
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
22	29.50 749.30	1.81 45.97	1.81 45.97	5.88 149.35	22.00 558.80	24.00 609.60	24.25 641.35	20	1.38 35.05	27.25 692.15	0.38 9.65
26	34.25 869.95	2.69 68.33	2.69 68.33	4.75 120.65	26.00 660.40	26.62 676.15	29.50 749.30	24	1.38 35.05	31.75 806.45	0.38 9.65
28	36.50 927.10	2.81 71.37	2.81 71.37	4.94 125.48	28.00 711.20	28.62 726.95	31.50 800.10	28	1.38 35.05	34.00 863.60	0.44 11.18
30	38.75 984.25	2.94 74.68	2.94 74.68	5.38 136.65	30.00 762.00	30.75 781.05	33.75 857.25	28	1.38 35.05	36.00 914.40	0.44 11.18
32	41.75 1060.5	3.19 81.03	3.19 81.03	5.69 144.53	32.00 812.80	32.75 931.85	36.00 914.40	28	1.62 41.15	38.50 977.90	0.44 11.18
34	43.75 1111.3	3.25 82.55	3.25 82.55	5.88 149.35	34.00 863.60	34.75 882.65	38.00 965.20	32	1.62 41.15	40.50 1028.7	0.50 12.70
36	46.00 1168.4	3.56 90.42	3.56 90.42	6.19 157.23	36.00 914.40	36.75 933.45	40.25 1022.4	32	1.62 41.15	42.75 1085.9	0.50 12.70
38	48.75 1238.3	3.44 87.38	3.44 87.38	6.19 157.23	38.00 965.20	39.00 990.60	42.25 1073.2	32	1.62 41.15	45.25 1149.4	0.50 12.70
40	50.75 1289.1	3.56 90.42	3.56 90.42	6.44 163.58	40.00 1016.0	41.00 1041.4	44.25 1124.0	36	1.62 41.15	47.25 1200.2	0.50 12.70
42	53.00 1346.2	3.81 96.77	3.81 96.77	6.75 171.45	42.00 1066.8	43.00 1092.2	47.00 1193.8	36	1.62 41.15	49.50 1257.3	0.50 12.70
44	55.25 1403.4	4.00 101.60	4.00 101.60	7.00 177.80	44.00 1117.6	45.00 1143.0	49.00 1244.6	40	1.62 41.15	51.75 1314.5	0.50 12.70
46	57.25 1454.2	4.06 103.12	4.06 103.12	7.31 185.67	46.00 1168.4	47.12 1196.9	51.00 1295.4	40	1.62 41.15	53.75 1365.3	0.50 12.70
48	59.50 1511.3	4.25 107.95	4.25 107.95	7.56 192.02	48.00 1219.2	49.12 1247.7	53.50 1358.9	44	1.62 41.15	56.00 1422.4	0.50 12.70

ASME B16.47 Series A (MSS SP-44) Flanges--Class300



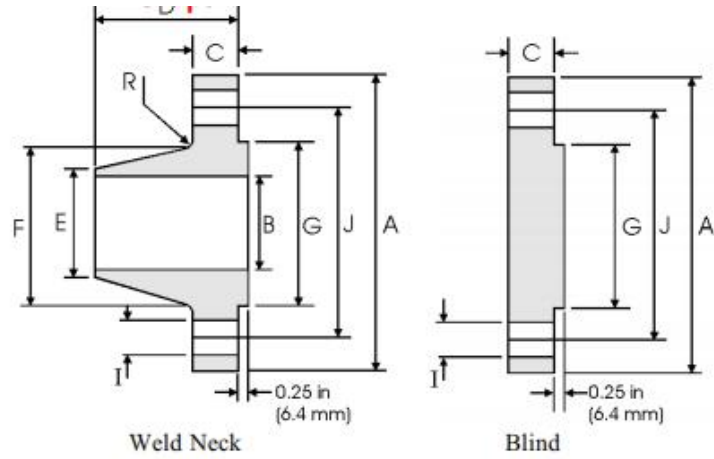
pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C		D	E	F	G	H	I	J	R
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm
22	33.00 838.20	2.62 66.55	2.62 66.55	6.50 165.10	22.00 558.80	25.25 641.35	25.25 641.35	24	1.62 41.15	29.25 742.95	0.28 9.65
26	38.25 971.55	3.12 79.25	3.31 84.07	7.25 184.15	26.00 660.40	28.38 720.85	29.50 749.30	28	1.75 44.45	34.50 876.30	0.38 9.65
28	40.75 1035.1	3.38 85.85	3.56 90.42	7.75 196.85	28.00 711.20	30.50 774.70	31.50 800.10	28	1.75 44.45	37.00 939.80	0.44 11.18
30	43.00 1092.2	3.62 91.95	3.75 95.25	8.25 209.55	30.00 762.00	32.56 827.02	33.75 857.25	28	1.88 47.75	39.25 996.95	0.44 11.18
32	45.25 1149.4	3.88 98.55	3.94 100.08	8.75 222.25	32.00 812.80	34.69 881.13	36.00 914.40	28	2.00 50.80	41.50 1054.1	0.44 11.18
34	47.50 120.5	4.00 101.60	4.12 104.65	9.12 231.65	34.00 863.60	36.88 936.75	38.00 965.20	28	2.00 50.80	43.50 1104.9	0.50 12.70
36	50.00 1270.0	4.12 104.65	4.38 111.25	9.50 241.30	36.00 914.40	39.00 990.60	40.25 1022.4	32	2.12 53.85	46.00 1168.4	0.50 12.70
38	46.00 1168.4	4.25 107.95	4.25 104.95	7.12 180.85	38.00 965.20	39.12 993.65	40.50 1028.7	32	1.62 41.15	43.00 1092.2	0.50 12.70
40	48.75 1238.3	4.50 114.30	4.50 114.30	7.62 193.55	40.00 1016.0	41.25 1047.8	42.75 1085.9	32	1.75 44.45	45.50 1155.7	0.50 12.70
42	50.75 1289.1	4.69 119.13	4.69 119.13	7.88 200.15	42.00 1066.8	43.25 1098.6	44.75 1136.7	32	1.75 44.45	47.50 1206.6	0.50 12.70
44	53.25 1352.6	4.88 123.95	4.88 123.95	8.12 206.25	44.00 1117.6	46.25 1149.4	47.00 1193.8	32	1.88 47.75	49.75 1263.7	0.50 12.70
46	55.75 1416.1	5.06 128.52	5.06 128.52	8.50 215.90	46.00 1168.4	47.38 1203.5	49.00 1244.0	28	2.00 50.80	52.00 1320.8	0.50 12.70
48	57.75 1466.9	5.25 133.35	5.25 133.35	8.81 223.77	48.00 1219.2	49.38 1254.3	51.25 1301.8	32	2.00 50.80	54.00 1371.6	0.50 12.70

ASME B16.47 Series A (MSS SP-44) Flanges--Class400



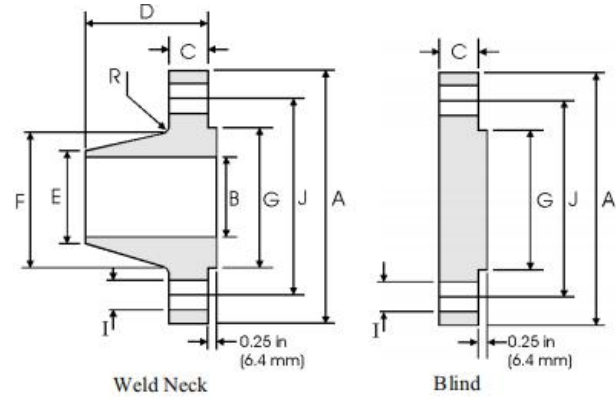
Nominal pipe size	Flange Data			Hub Data		Radius	Drilling Data			Radius	
	A	C		D	E	F	G	H	I	J	R
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm				
22	33.00 838.20	2.88 73.15	2.88 73.15	6.75 171.45	22.00 558.80	25.25 641.35	25.25 641.35	24	1.75 44.45	29.25 742.95	0.44 11.18
26	38.25 971.55	3.50 88.90	3.88 98.55	7.62 193.55	26.00 660.40	28.62 726.95	29.50 749.30				
28	40.75 1035.1	3.75 95.25	4.12 104.65	8.12 206.25	28.00 711.20	30.81 782.57	31.50 800.10	28	2.00 50.80	37.00 939.80	0.50 12.70
30	43.00 1092.2	4.00 101.60	4.38 111.25	8.62 218.95	30.00 762.00	32.94 836.68	33.75 857.25				
32	45.25 1149.4	4.25 107.95	4.56 115.82	9.12 231.65	32.00 812.80	35.00 889.00	36.00 914.40	28	2.12 53.85	41.50 1054.1	0.50 12.70
34	47.50 1206.5	4.38 111.25	4.81 122.17	9.50 241.30	34.00 863.60	37.19 944.63	38.00 965.20				
36	50.00 1270.0	4.50 114.30	5.06 128.52	9.88 250.95	36.00 914.40	39.38 1000.3	40.25 1022.4	32	2.12 53.85	46.00 1168.4	0.56 14.22
38	47.50 1206.5	4.88 123.95	4.88 123.95	8.12 206.25	48.00 1219.2	39.50 1003.3	40.75 1035.1				
40	50.00 1270.0	5.12 130.05	5.12 130.05	8.50 215.90	40.00 1016.0	41.50 1054.1	43.00 1092.2	32	2.00 50.80	46.25 1174.8	0.56 14.22
42	52.00 1320.8	5.25 133.35	5.25 133.35	8.81 223.77	42.00 1066.8	43.62 1107.9	45.00 1143.0				
44	54.50 1384.3	5.50 139.70	5.50 139.70	9.18 233.17	44.00 1117.6	45.62 1158.7	47.25 1200.2	32	2.12 53.85	50.50 1282.7	0.56 14.22
46	56.75 1441.5	5.75 146.05	5.75 146.05	9.62 244.35	46.00 1168.4	47.75 1212.9	49.50 1257.3				
48	59.50 1511.3	6.00 152.40	6.00 152.40	10.12 257.05	48.00 1219.2	49.88 1267.0	51.50 1308.1	28	2.38 60.45	55.25 1403.4	0.56 14.22

ASME B16.47 Series A (MSS SP-44) Flanges--Class600



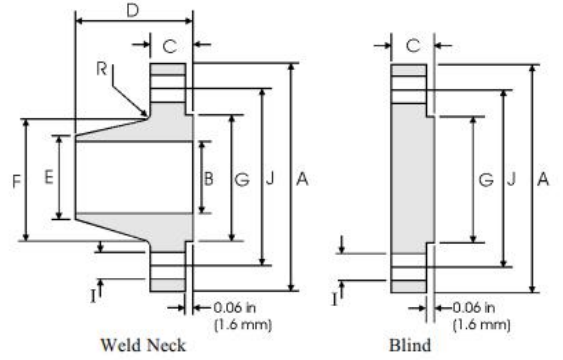
pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C		D	E	F	G	H	I	J	R
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm
22	34.25 869.95	3.75 95.25	3.75 95.25	7.75 196.85	22.00 558.80	26.25 666.75	25.25 641.35	24	1.88 47.75	30.62 777.75	0.44 11.18
26	40.00 1016.0	4.25 107.95	4.94 125.48	8.75 222.25	26.00 660.40	29.44 747.78	29.50 749.30	28	2.00 50.80	36.00 914.40	0.50 12.70
28	42.25 1073.2	4.38 111.25	5.19 131.83	9.25 234.95	28.00 711.20	31.62 803.15	31.50 800.10	28	2.12 53.85	38.00 965.20	0.50 12.70
30	44.50 1130.3	4.50 114.30	5.50 139.70	9.75 247.65	30.00 762.00	33.94 862.08	33.75 857.25	28	2.12 53.85	40.25 1022.4	0.50 12.70
32	47.00 1193.8	4.62 117.35	5.81 147.57	10.25 260.35	32.00 812.80	36.12 917.45	36.00 914.40	28	2.38 60.45	42.50 1079.5	0.50 12.70
34	49.00 1244.6	4.75 120.65	6.06 153.92	10.62 269.75	34.00 863.60	38.31 973.07	38.00 965.20	28	2.38 60.45	44.50 1130.3	0.56 14.22
36	51.75 1314.5	4.88 123.95	6.38 162.05	11.12 282.45	36.00 914.40	40.62 1031.75	40.25 1022.35	28	2.62 66.55	47.00 1193.0	0.56 14.22
38	50.00 1270.0	6.00 152.40	6.12 155.45	10.00 254.00	38.00 965.20	40.25 1022.35	41.50 1054.10	28	2.38 60.45	45.75 1162.1	0.56 14.22
40	52.00 1320.8	6.25 158.75	6.38 162.05	10.38 263.65	40.00 1016.0	42.25 1073.2	43.75 1111.3	32	2.38 60.45	47.75 1212.9	0.56 14.22
42	55.25 1403.4	6.62 168.15	6.75 171.45	11.00 279.40	42.00 1066.8	44.38 1127.3	46.00 1168.4	28	2.62 66.55	50.50 1282.7	0.56 14.22
44	57.25 1454.2	6.81 172.97	7.00 177.80	11.38 289.05	44.00 1117.6	46.50 1181.1	48.25 1225.6	32	2.62 66.55	52.50 1333.5	0.56 14.22
46	59.50 1511.3	7.06 179.32	7.31 185.67	11.81 299.97	46.00 1168.4	48.62 1235.0	50.25 1276.4	32	2.62 66.55	54.75 1390.7	0.56 14.22
48	62.75 1593.9	7.44 188.98	7.69 195.33	12.44 315.98	48.00 1219.2	50.75 1289.1	52.50 1333.5	32	2.88 73.15	57.50 1460.5	0.56 14.22

ASME B16.47 Series A (MSS SP-44) Flanges--Class900



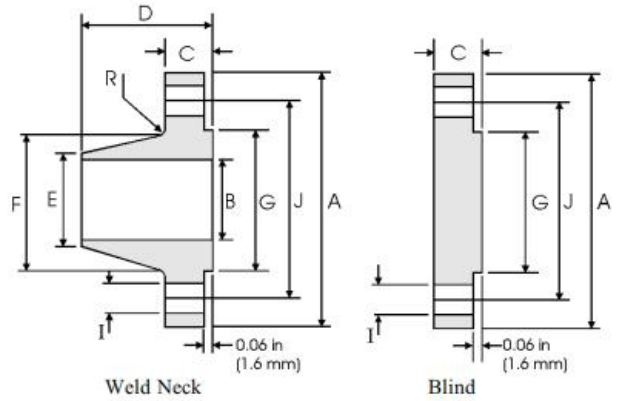
pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C	D	E	F	G	H	I	J	R	
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	
26	42.75 1085.9	5.50 139.70	6.31 160.27	11.25 285.75	26.00 660.40	30.50 774.70	29.50 749.30	20	2.88 73.15	37.50 952.50	0.44 11.18
28	46.00 1168.4	5.62 142.75	6.75 171.45	11.75 298.45	28.00 711.20	32.75 831.85	31.50 800.10	20	3.12 79.25	40.25 1022.4	0.50 12.70
30	48.50 1231.9	5.88 149.35	7.18 182.37	12.25 311.15	30.00 762.00	35.00 889.00	33.75 857.25	20	3.12 79.25	42.75 1085.9	0.50 12.70
32	51.75 1314.5	6.25 158.75	7.62 193.55	13.00 330.20	32.00 812.80	37.25 946.15	36.00 914.40	20	3.38 85.85	45.50 1155.7	0.50 12.70
34	55.00 1397.0	6.50 165.40	8.06 204.72	13.75 349.25	34.00 863.60	39.60 1006.4	38.00 965.20	20	3.62 91.95	48.25 122.5	0.56 14.22
36	57.50 1460.5	6.75 171.45	8.44 214.38	14.25 361.95	36.00 914.40	41.88 1063.8	40.25 1022.4	20	3.62 91.95	50.75 1289.1	0.56 14.22
38	57.50 1460.5	7.50 190.50	8.50 215.90	13.88 352.55	38.00 965.20	42.25 1073.2	43.25 1098.6	20	3.62 91.95	50.75 1289.1	0.75 19.05
40	59.50 1511.3	7.75 196.85	8.81 223.77	14.31 363.47	40.00 1016.0	44.38 1127.3	45.75 1162.1	24	3.62 91.95	52.75 1339.9	0.81 20.57
42	61.50 1562.1	8.12 206.25	9.12 231.65	14.62 371.35	42.00 1066.8	46.31 11876.3	47.75 1212.9	24	3.62 91.95	54.75 1390.7	0.81 20.57
44	64.88 1648.0	8.44 214.38	9.56 242.82	15.38 390.65	44.00 1117.6	48.62 1235.0	50.00 1270.0	24	3.88 98.55	57.62 1463.6	0.88 22.35
46	68.25 1733.6	8.88 225.55	10.06 255.52	16.18 410.97	46.00 1168.4	50.88 1292.4	52.50 1333.5	24	4.12 104.65	60.50 1536.7	0.88 22.35
48	70.25 1784.4	9.19 233.43	10.38 263.65	16.50 419.10	48.00 1219.2	52.88 1343.2	54.50 1384.3	24	4.12 104.65	62.50 1587.5	0.94 23.88

ASME B16.47 Series B (API 605) Flanges--Class75



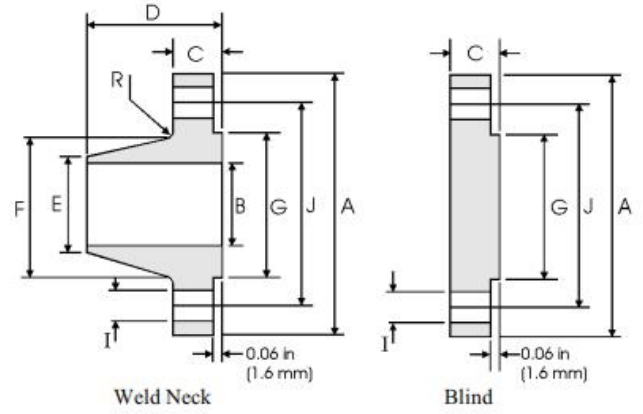
pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C		D	E	F	G	H	I	J	R
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm				
26	30.00 762.00	1.31 33.27	1.31 33.27	2.31 58.67	26.06 661.92	26.62 676.15	27.75 704.85	36	0.75 19.05	28.50 723.90	0.31 7.87
28	32.00 812.80	1.31 33.27	1.31 33.27	2.44 61.98	28.06 712.72	28.62 726.95	29.75 755.65				
30	34.00 863.60	1.31 33.27	1.31 33.27	2.56 65.02	30.06 763.52	30.62 777.75	31.75 806.45	44	0.75 19.05	32.50 825.50	0.31 7.87
32	36.00 914.40	1.38 35.05	1.44 36.58	2.75 69.85	32.06 814.32	32.62 828.55	33.75 857.25	48	0.75 19.05	34.50 876.30	0.31 7.87
34	38.00 965.20	1.38 35.05	1.50 38.10	2.88 73.15	34.06 865.12	34.62 879.35	35.75 908.05	52	0.75 19.05	36.50 927.10	0.31 7.87
36	40.69 1033.5	1.44 36.58	1.67 42.42	3.38 85.85	36.06 915.92	36.81 934.97	38.00 965.20	40	0.88 22.35	39.06 992.12	0.38 9.65
38	42.69 1084.3	1.50 38.10	1.75 44.45	3.50 88.90	38.06 966.72	38.81 985.77	40.00 1016.0	40	0.88 22.35	41.06 1042.9	0.38 9.65
40	44.69 1135.1	1.50 38.10	1.75 44.45	3.62 91.95	40.06 1017.5	40.81 1036.57	42.0 1066.8	44	0.88 22.35	43.06 1093.7	0.38 9.65
42	46.69 1185.9	1.56 39.62	1.88 47.75	3.75 95.25	42.06 1068.3	42.81 1087.37	44.00 1117.6	48	.88 22.35	45.06 1144.5	0.38 9.65
44	49.25 1251.0	1.69 42.93	1.94 49.28	4.12 104.65	44.06 1119.1	44.88 1139.95	46.25 1174.8	36	1.00 25.40	47.38 1203.5	0.38 9.65
46	51.25 1301.8	1.75 44.45	2.00 50.80	4.25 107.95	46.06 1169.9	46.88 1190.75	48.25 1225.6	40	1.00 25.40	49.38 1254.3	0.38 9.65
48	53.25 1352.6	1.81 45.97	2.12 53.85	4.38 111.25	48.06 1220.7	48.88 1241.55	50.25 1276.4	44	1.00 25.40	51.38 1305.1	0.38 9.65

ASME B16.47 Series B (API 605) Flanges--Class150



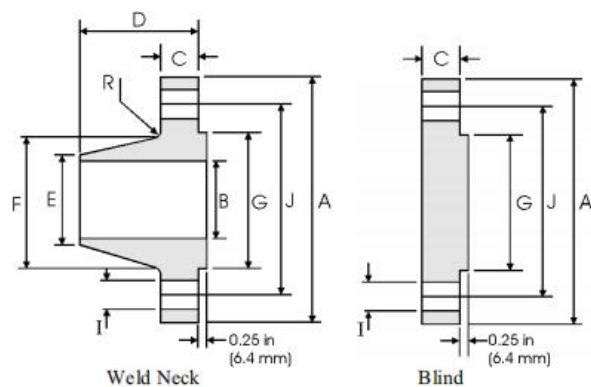
pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C		D	E	F	G	H	I	J	R
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm
26	30.94 785.88	1.62 41.15	1.75 44.45	3.50 88.90	26.06 661.92	26.94 684.28	28.00 711.20	36	0.88 22.35	29.31 744.47	0.38 9.65
28	32.94 836.68	1.75 44.45	1.88 47.75	3.75 95.25	28.06 712.72	28.94 735.08	30.00 762.00		40	0.88 22.35	31.31 795.27
30	34.94 887.48	1.75 44.45	2.00 50.80	3.94 100.08	30.06 763.52	31.00 787.40	32.00 812.80	44	0.88 22.35	33.31 846.07	0.38 9.65
32	37.06 941.32	1.81 45.97	2.12 53.85	4.25 107.95	32.06 814.32	33.06 839.72	34.00 863.60	48	0.88 22.35	35.44 900.18	0.38 9.65
34	39.56 1004.8	1.94 49.28	2.25 57.15	4.34 110.24	34.06 865.12	35.12 892.05	36.25 920.75	40	1.00 25.40	37.69 957.33	0.38 9.65
36	41.62 1057.1	2.06 52.32	2.31 58.67	4.62 117.35	36.06 915.92	37.19 944.63	38.25 971.55	44	1.00 25.40	39.75 1009.7	0.38 9.65
38	44.25 1124.0	2.12 53.85	2.50 63.50	4.88 123.95	38.12 968.25	39.25 996.95	40.25 1022.4	40	1.12 28.45	42.42 1069.8	0.38 9.65
40	46.25 1174.8	2.19 55.63	2.62 66.55	5.06 128.52	40.12 1019.0	41.31 1049.3	42.50 1079.5	44	1.12 28.45	44.12 1120.6	0.38 9.65
42	48.25 1225.6	2.34 58.67	2.69 68.33	5.25 133.35	42.12 1069.8	43.38 1101.9	44.50 1130.3	48	1.12 28.45	46.12 1171.4	0.44 11.18
44	50.25 1276.4	2.38 60.45	2.81 71.37	5.38 136.65	44.12 1120.6	45.38 1152.7	46.50 1181.1	52	1.12 28.45	48.12 1222.2	0.44 11.18
46	52.81 1341.4	2.44 61.95	2.94 74.68	5.69 144.53	46.12 1171.4	47.44 1205.0	48.62 1234.9	40	1.25 31.75	50.56 1284.2	0.44 11.18
48	54.81 1392.2	2.56 65.02	3.06 77.72	5.88 149.35	48.12 1222.2	49.50 1257.3	50.75 1289.1	44	1.25 31.75	52.56 1335.0	0.44 11.18

ASME B16.47 Series B (API 605) Flanges--Class300



pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C		D	E	F	G	H	I	J	R
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm
26	34.12 866.65	3.50 88.90	3.50 88.90	5.69 144.53	26.19 665.23	27.62 701.55	29.00 736.60	32	1.38 35.05	31.62 803.15	0.56 14.22
28	36.25 920.75	3.50 88.90	3.50 88.90	5.88 149.35	28.19 716.03	29.75 788.65	31.00 787.40	36	1.38 36.05	33.75 857.25	0.56 14.22
30	39.00 990.60	3.69 93.73	3.69 93.73	6.22 157.99	30.25 768.35	32.00 812.80	33.25 844.55	36	1.50 38.10	36.25 920.75	0.56 14.22
32	41.50 1054.1	4.06 103.12	4.06 103.12	6.62 168.15	32.25 819.15	34.00 863.60	35.50 901.70	32	1.62 41.15	38.50 977.90	0.62 15.75
34	43.62 11073.9	4.06 103.12	4.06 103.12	6.81 172.97	34.25 869.95	36.12 917.45	37.50 952.50	36	1.62 41.15	40.62 1031.7	0.62 15.75
36	46.12 1171.4	4.06 103.12	4.6 103.12	7.12 180.85	36.25 920.75	38.00 965.20	39.75 1009.7	32	1.75 44.45	42.88 1089.2	0.62 15.75
38	48.12 1222.2	4.38 111.25	4.38 111.25	7.56 192.02	38.25 971.55	40.00 1016.0	41.75 1060.5	36	1.75 44.45	44.88 1140.0	0.62 15.75
40	50.12 1273.0	4.56 115.82	4.56 115.82	7.81 198.37	40.25 1022.4	42.00 1066.8	43.88 1114.6	40	1.75 44.45	46.88 1190.8	0.62 15.75
42	52.50 1333.5	4.69 119.13	4.69 119.13	8.06 204.72	42.31 1074.7	44.00 1117.6	46.00 1168.4	36	1.88 47.75	49.00 1244.6	0.62 15.75
44	54.50 1384.3	5.00 127.00	5.00 127.00	8.44 214.38	44.31 1125.5	46.19 1173.2	48.00 1219.2	40	1.88 47.75	51.00 1295.4	0.62 15.75
46	57.50 1460.5	5.06 128.52	5.12 130.05	8.75 222.25	46.31 1176.3	48.38 1228.9	50.00 1270.0	36	2.00 50.80	53.75 1365.3	0.62 15.75
48	59.50 1511.3	5.06 128.52	5.31 134.87	8.81 223.77	48.31 1227.1	50.31 1277.9	52.25 1327.2	40	2.00 50.80	55.75 1416.1	0.62 15.75

ASME B16.47 Series B (API 605) Flanges--Class400、 600、 900



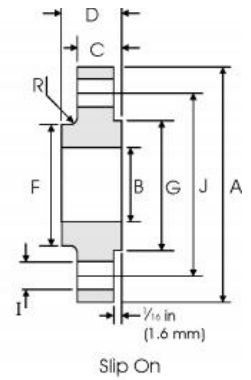
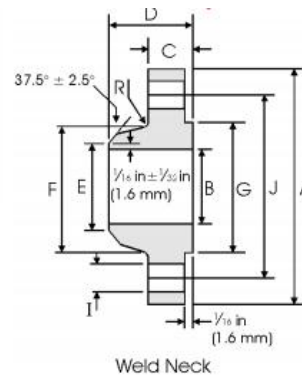
pipe	Flange Data			Hub Data		Raised Face	Drilling Data			Radius	
	A	C		D	E	F	G	H	I	J	R
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Threaded at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Flillet
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm
Class 400											
26	33.50 850.90	3.50 88.90	3.50 88.90	5.88 149.35	26.00 660.40	27.12 688.85	28.00 711.20	28	1.50 38.10	30.75 781.05	0.44 11.18
28	36.00 914.40	3.75 95.25	3.75 95.25	6.25 158.90	28.00 711.20	29.12 739.65	30.00 762.00	24	1.62 41.15	33.00 838.20	0.50 12.70
30	38.25 971.55	4.00 101.60	4.00 101.60	6.69 169.93	30.00 762.00	31.25 793.75	32.25 590.55	28	1.62 41.15	35.25 895.35	0.50 12.70
32	40.75 1035.1	4.25 107.95	4.25 107.95	7.06 179.32	32.0 812.80	33.25 844.55	34.38 873.25	28	1.75 44.45	37.50 952.50	0.50 12.70
34	42.75 1085.9	4.38 111.25	4.38 111.25	7.38 187.45	34.00 863.60	35.38 898.65	36.50 927.10	32	1.75 44.45	39.50 1003.3	0.56 14.22
36	45.50 1155.7	4.69 119.13	4.69 119.13	7.88 200.15	36.00 914.40	37.50 952.50	38.62 980.95	28	1.88 47.75	42.00 1066.8	0.56 14.22

Class 600											
26	35.00 889.00	4.38 111.25	4.38 111.25	7.12 .85	26.00 660.40	27.50 698.50	28.62 726.95	28	1.75 44.45	31.75 806.45	0.50 12.70
28	37.50 952.50	4.56 115.82	4.56 115.82	7.50 190.50	28.00 711.20	29.62 752.35	30.88 784.35	28	1.88 47.75	34.00 863.60	0.50 12.70
30	40.25 1022.4	4.94 125.48	5.00 127.00	8.06 204.72	30.00 762.00	31.75 806.45	33.12 841.25	28	2.00 50.80	36.50 927.10	0.50 12.70
32	42.75 1085.9	5.12 130.05	5.31 134.87	8.50 215.90	32.00 812.80	33.88 860.55	35.35 895.35	28	2.12 53.85	38.75 984.25	0.50 12.70
34	45.75 1162.1	5.56 141.22	5.68 144.27	9.19 233.43	34.00 863.60	36.00 914.40	37.50 952.50	24	2.38 60.45	41.50 1054.1	0.56 14.22
36	47.75 1212.9	5.75 146.05	5.94 150.88	9.56 242.82	36.00 914.40	38.12 968.25	39.75 1009.7	28	2.38 60.45	43.50 1104.9	0.56 14.22

Class 900

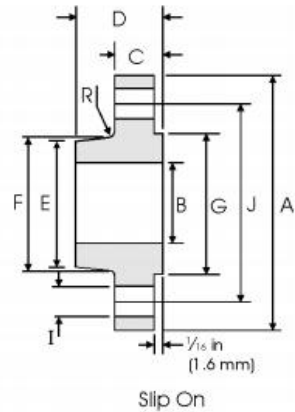
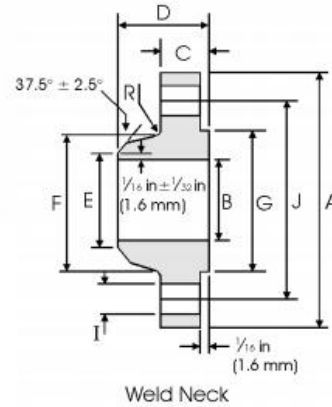
26	40.25 1022.4	5.31 134.87	6.06 153.92	10.19 258.83	26.00 660.40	29.25 742.95	30.00 762.00	20	2.62 66.55	35.50 901.70	0.44 11.18
28	43.50 1104.9	5.81 147.57	6.56 166.62	10.88 276.35	28.00 711.20	31.38 797.05	32.25 819.15	20	2.88 73.15	38.25 971.55	0.50 12.70
30	46.50 1181.1	6.12 155.45	6.93 176.0	11.38 289.05	30.00 762.00	33.50 850.90	34.50 876.30	20	3.12 79.25	40.75 1035.1	0.50 12.70
32	48.75 1238.3	6.31 160.27	7.31 185.67	11.94 303.28	32.00 812.80	35.75 908.05	36.50 927.10	20	3.12 79.25	43.00 1092.2	0.50 12.70
34	51.75 1314.5	6.75 171.45	7.68 195.07	12.56 319.02	34.00 863.60	37.88 962.15	39.00 990.60	20	3.38 85.85	45.50 1155.7	0.56 14.22
36	53.00 1346.2	6.81 172.97	7.94 201.68	12.81 325.37	36.00 914.40	40.00 1016.0	40.50 1028.7	24	3.12 79.25	47.25 1200.2	0.56 14.22

Weld Neck and Slip On Flanges - BS 3293--Class150



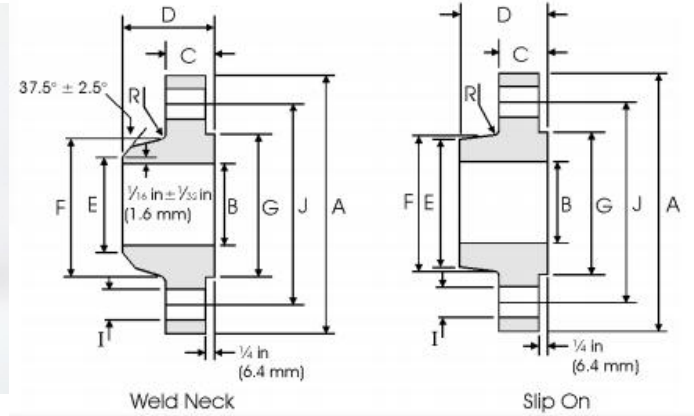
pipe	Flange Data				Hub Data		Raised Face	Drilling Data			Radius	Weight	
	A	B	C	D		E	F	G	H	I	J	R	
	Overall Diameter	Slip on Inside Diameter	Flange Thickness	WNF Overall Length	Slip on Overall Length	WNF Diameter at Weld Bevel	WNF/Slip on Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet	Kg/piece
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm	WNF Slip On
26	34 1/4 869.9	26 1/4 666.7	2 50.8	5 127.0	3 3/8 85.7	26 660.4	28 1/2 723.9	29 1/4 742.9	24	1 3/8 34.9	31 3/4 806.4	1/4 6.35	118 107
28	36 1/2 927.1	28 1/4 717.6	2 1/16 52.4	5 1/16 128.6	3 7/16 87.3	28 711.2	30 3/4 781.0	31 1/4 793.7	28	1 3/8 34.9	34 863.6	1/4 6.35	134 122
30	38 3/4 984.2	30 1/4 768.3	2 1/8 54.0	5 1/8 130.2	3 1/2 88.9	30 762.0	32 3/4 831.8	33 3/4 857.2	28	1 3/8 34.9	36 914.4	1/4 6.35	153 138
32	41 3/4 1060.4	32 1/4 819.1	2 1/4 57.1	5 1/4 133.3	3 5/8 92.1	32 812.8	35 889.0	35 3/4 908.0	28	1 5/8 41.3	38 1/2 977.9	5/16 7.94	190 170
34	43 3/4 1111.2	34 1/4 869.9	2 5/16 58.7	5 5/16 134.9	3 11/16 93.7	34 863.6	37 939.8	37 3/4 958.8	32	1 5/8 41.3	40 1/2 1028.7	5/16 7.94	212 184
36	46 1168.4	36 1/4 920.7	2 3/8 60.3	5 3/8 136.5	3 3/4 95.2	36 914.4	39 1/4 996.9	40 1/4 1022.3	32	1 5/8 41.3	42 3/4 1085.8	5/16 7.94	242 211
38	48 3/4 1238.2	38 1/4 971.5	2 3/8 60.3	5 3/8 136.5	3 3/4 95.2	38 965.2	41 3/4 1060.4	42 1/4 1073.1	32	1 5/8 41.3	45 1/4 1149.3	3/8 9.53	284 249
40	50 3/4 1289.0	40 1/4 1022.3	2 1/2 63.5	5 1/2 139.7	3 7/8 98.4	40 1016.0	43 3/4 1111.2	44 1/4 1123.9	36	1 5/8 41.3	47 1/4 1200.1	3/8 9.53	311 272
42	53 1346.2	42 1/4 1073.2	2 5/8 66.7	5 5/8 142.9	4 101.6	42 1066.8	46 1168.4	47 1193.8	36	1 5/8 41.3	49 1/2 1257.3	3/8 9.53	358 313
44	55 1/4 1403.3	44 1/4 1123.9	2 5/8 66.7	5 5/8 142.9	4 101.6	44 1117.6	48 1219.2	49 1244.6	40	1 5/8 41.3	51 3/4 1314.4	7/16 11.11	376 331
46	57 1/4 1454.2	46 1/4 1174.7	2 11/16 68.3	5 11/16 144.5	4 1/16 103.2	46 1168.4	50 1270.0	51 1295.4	40	1 5/8 41.3	53 3/4 1365.2	7/16 11.11	399 349
48	59 1/2 1511.1	48 1/4 1225.5	2 3/4 69.9	5 3/4 146.1	4 1/8 104.8	48 104.8	52 1/4 1327.2	53 1/2 1358.9	44	1 5/8 41.3	56 1422.4	7/16 11.11	440 381

Weld Neck and Slip On Flanges - BS 3293--Class300



pipe	Flange Data				Hub Data			Raised Face	Drilling Data			Radius	Weight
	A	B	C	D	E		F	G	H	I	J	R	
	Overall Diameter	Slip on Inside Diameter	Flange Thickness	WNF /Slip on Overall Length	WNF Diameter at Weld Bevel	Slip on Hub Diameter at Small End	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm	WNF Slip On
26	38 1/4 971.5	26 1/4 666.7	3 1/8 79.4	7 1/4 184.1	26 1/4 666.7	27 1/16 687.4	28 3/8 720.7	29 1/2 749.3	28	1 3/4 44.4	34 1/2 876.3	3/8 9.53	29 251
28	40 3/4 1035.0	28 1/4 717.6	3 3/8 85.7	7 3/4 196.8	28 1/4 717.5	29 1/8 739.7	30 1/2 774.7	31 1/2 800.1	28	1 3/4 44.4	37 939.8	7/16 11.11	340 313
30	43 1092.2	30 1/4 768.3	3 5/8 92.1	8 1/4 209.5	30 1/4 768.3	31 3/16 792.2	32 9/16 827.2	33 3/4 857.2	28	1 7/8 47.6	39 1/4 996.9	7/16 11.11	390 354
32	45 1/4 1149.3	32 1/4 819.1	3 7/8 98.4	8 3/4 222.2	32 1/4 819.31	33 1/4 844.6	34 11/16 881.1	36 914.4	28	2 50.8	41 1/2 1054.1	7/16 11.11	435 395
34	47 1/2 1206.5	34 1/4 869.9	4 101.6	9 1/8 231.8	34 5/16 871.5	35 5/16 896.9	36 7/8 936.6	38 965.2	28	2 50.8	43 1/2 1104.9	1/2 12.7	504 460
36	50 1270.0	36 1/4 920.7	4 1/8 104.8	9 1/2 241.3	36 5/16 922.3	34 3/8 949.3	39 990.6	40 1/4 1022.3	32	2 1/8 54.0	46 1168.4	1/2 12.7	560 513

Weld Neck and Slip On Flanges - BS 3293--Class400



pipe	Flange Data				Hub Data			Raised Face	Drilling Data			Radius	Weight
	A	B	C	D	E		F	G	H	I	J	R	
	Overall Diameter	Slip on Inside Diameter	Flange Thickness	WNF /Slip on Overall Length	WNF Diameter at Weld Bevel	Slip on Hub Diameter at Small End	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet	Kg/piece
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm	WNF Slip On
26	38 1/4 971.5	26 1/4 666.7	3 1/2 88.9	7 5/8 193.7	26 5/16 668.3	27 5/16 693.7	28 5/8 727.1	29 1/2 749.3	28	1 7/8 47.6	34 1/2 876.3	7/16 11.11	340 295
28	40 3/4 1035.0	28 1/4 717.6	3 3/4 95.2	8 1/8 206.4	28 5/16 719.1	29 3/8 746.1	30 13/16 782.6	31 1/2 800.1	28	2 50.8	37 939.8	1/2 12.7	399 354
30	43 1092.2	30 1/4 768.3	4 101.6	8 5/8 219.1	30 5/16 769.6	31 1/2 800.1	32 15/16 836.6	33 3/4 857.2	28	2 1/8 54.0	39 1/4 996.9	1/2 12.7	454 408
32	45 1/4 1149.3	32 1/4 819.1	4 1/4 107.9	9 1/8 231.8	32 3/8 822.3	33 9/16 852.5	35 889.0	36 914.4	28	2 1/8 54.0	41 1/2 1054.1	1/2 12.7	522 465
34	47 1/2 1206.5	34 1/4 869.9	4 3/8 111.1	9 1/2 241.3	34 3/8 873.1	35 5/8 904.9	37 3/16 944.6	38 965.2	28	2 1/8 54.0	43 1/2 1104.9	9/16 14.29	590 522
36	50 1270.0	36 1/4 920.8	4 1/2 114.3	9 7/8 250.8	36 7/16 925.5	37 3/4 58.8	39 7/8 1012.9	40 1/4 1022.3	32	2 1/8 54.0	46 1168.4	9/16 14.29	669 601

Thank you

--C.Z.IT DEVELOPMENT CO.,LTD