

OKI

Brochure

OKI[®]



FLANGES WE OFFER

OKI®



SLIP-ON



THREADED



BLIND



**SOCKET
WELD**



**WELDING
NECK**

STANDARDS:

ASTM A105 , API, ASME, AND ANSI B16.5

- size: 1/4" - 48"
- Thickness: Class 150 -2,500
- All Items will have an accompanying Mill Test Certificate upon request

APPLICATIONS:

- Industrial
- Residential
- Petrochemical Plants
- Oil & Gas
- Refineries
- Sugar Mills
- Energy

- Construction & Infrastructure
- Chemicals
- Machineries
- Boilers
- Food & Beverage
- Shipping
- Desalination Plant
- Power Plants

- Automotive & Transport
- High-Pressure Vessel

WHY CHOOSE US?

1 RELIABLE

Since 1961, We have been a trusted vendor for some of the Philippines' biggest companies across sectors in Oil Refinery, Petroleum, Geothermal, LNG, LPG, Power/Energy, Chemical, Sugar Mill, Food/Beverage, Distillery & International Sub-Contractors.

2 COMPETITIVE PRICING

As a Direct Importer, Wholesaler, Retailer, Stockist, and Exclusive Agent, we can offer our clients the most competitive of prices in an ever changing market.

3 QUALITY PRODUCTS

We carry a wide range of materials that conforms to various International Standards such as ASME, ANSI, WRAS, BSI, and ULFM.



+63-939-913-0553
+63-917-8504-147
Fax#: 244-1234
Tel#: 244-7061-68

For Inquiries: sales10@upcc.com.ph
For Concerns: tiugregian@upcc1.com

7th floor, Banawe Lifestyle Center
Building, 86 Banawe St., Brgy., Sto.
Domingo, Quezon City, Philippines

PIPE DIMENSIONS AND WEIGHTS

NOMINAL PIPE SIZE	OD	SCHEDULE DESIGNATIONS		WALL THICKNESS		WEIGHT		ID	
INCH MM	INCH MM	ASME		INCH	MM	LBS/ FOOT	KG/ METER	INCH	MM
1/8 6	0.405 10.3	STD XS	40 80	0.068 0.095	1.73 2.41	0.24 0.31	0.37 0.47	0.269 0.215	6.84 5.84
1/4 8	0.540 13.7	STD XS	40 80	0.065 0.088	1.65 2.24	0.33 0.43	0.49 0.63	0.410 0.364	10.40 9.22
3/8 10	0.675 17.1	STD XS	40 80	0.091 0.126	2.31 3.20	0.57 0.74	0.84 1.10	0.493 0.423	12.48 10.70
1/2 15	0.840 21.3	STD XS 160 XX	40 80	0.083 0.109 0.147 0.188 0.294	2.11 2.77 3.73 4.78 7.47	0.67 0.85 1.09 1.31 1.72	1.00 1.27 1.62 1.95 2.55	0.674 0.622 0.546 0.464 0.252	17.08 15.76 13.84 11.74 6.36
3/4 20	1.050 26.7	STD XS 160 XX	40 80	0.083 0.113 0.154 0.219 0.308	2.11 2.87 3.91 5.56 7.82	0.86 1.13 1.48 1.95 2.44	1.28 1.69 2.20 2.90 3.64	0.884 0.824 0.742 0.612 0.434	22.48 20.96 18.88 15.58 11.06
1 25	1.315 33.4	STD XS 160 XX	40 80	0.109 0.133 0.179 0.250 0.358	2.77 3.38 4.55 6.35 9.09	1.41 1.68 2.17 2.85 3.66	2.09 2.50 3.24 4.24 5.45	1.097 1.049 0.957 0.815 0.599	27.88 26.64 24.30 20.70 15.22
1-1/4 32	1.660 42.2	STD XS 160 XX	40 80	0.109 0.133 0.191 0.250 0.382	2.77 3.56 4.85 6.35 9.70	1.81 2.27 3.00 3.77 5.22	2.89 3.39 4.47 5.61 7.77	1.442 1.380 1.278 1.160 0.896	36.86 35.08 32.50 29.50 22.80
1-1/2 40	1.900 48.3	STD XS 160 XX	40 80	0.109 0.145 0.200 0.291 0.400	2.77 3.68 5.08 7.14 10.15	2.09 2.72 3.63 4.96 6.41	3.11 4.05 5.41 7.25 9.55	1.682 1.610 1.500 1.338 1.100	42.76 40.94 38.14 34.02 28.00
2 50	2.375 60.3	STD XS 160 XX	40 80	0.109 0.154 0.218 0.344 0.436	2.77 3.91 5.54 8.74 11.07	2.64 3.66 5.03 7.47 9.04	3.93 5.44 7.48 11.11 13.44	2.157 2.067 1.939 1.687 1.503	54.76 52.48 49.22 42.82 38.16
2-1/2 65	2.875 73.0	STD XS 160 XX	40 80	0.120 0.203 0.276 0.375 0.552	3.05 5.16 7.01 9.53 14.02	3.53 5.80 7.67 10.02 13.71	5.26 8.63 11.41 14.92 20.39	2.635 2.469 2.323 2.125 1.771	66.90 62.68 58.98 53.94 44.86
3 80	3.500 88.9	STD XS 160 XX	40 80	0.120 0.216 0.300 0.438 0.600	3.05 5.49 7.62 11.13 15.24	4.34 7.58 10.26 14.34 18.60	6.46 11.29 15.27 21.35 27.68	3.260 3.068 2.900 2.624 2.300	82.80 77.92 73.66 66.64 58.42
4 100	4.500 114.3	STD XS 160 XX	40 80	0.120 0.237 0.337 0.438 0.531 0.674	3.05 6.02 8.56 11.13 13.49 17.12	5.62 10.80 15.00 19.02 22.53 27.57	8.37 16.08 22.32 28.32 33.54 41.03	4.260 4.026 3.826 3.624 3.438 3.152	108.20 102.26 97.18 92.04 87.32 80.06
5 125	5.563 141.3	STD XS 120 160 XX	40 80	0.134 0.258 0.375 0.500 0.625 0.750	3.40 6.55 9.53 12.70 15.88 19.05	7.78 14.63 20.80 27.06 32.99 38.59	11.56 21.77 30.97 40.28 49.12 57.43	5.295 5.047 4.813 4.563 4.313 4.063	134.50 128.20 122.24 115.90 109.54 103.20
6 150	6.625 168.3	STD XS 120 160 XX	40 80	0.134 0.188 0.280 0.432 0.562 0.719 0.864	3.40 4.78 7.11 10.97 14.27 18.26 21.95	9.30 12.94 18.99 28.60 36.43 45.39 53.21	13.83 19.28 28.26 42.56 54.21 67.57 79.22	6.357 6.249 6.065 5.761 5.501 5.187 4.897	161.50 158.74 154.08 146.36 139.76 131.78 124.40

NOMINAL PIPE SIZE	OD	SCHEDULE DESIGNATIONS		WALL THICKNESS		WEIGHT		ID	
INCH MM	INCH MM	ASME		INCH	MM	LBS/ FOOT	KG/ METER	INCH	MM
8 200	8.625 219.1	10 20 30 STD 60 XS 80 100 120 140 XX 160	40	0.148 0.250 0.277 0.322 0.406 0.500 0.594 0.719 0.812 0.875 0.906	3.76 6.35 7.04 8.18 10.31 12.70 15.09 18.26 20.62 22.23 23.01	13.41 22.38 24.72 28.58 35.67 43.43 51.00 60.77 67.82 72.49 74.76	19.97 33.32 36.82 42.55 53.09 64.64 75.92 90.44 100.93 107.93 111.27	8.329 8.125 8.071 7.981 7.813 7.625 7.437 7.187 7.001 6.875 6.813	211.58 206.40 205.02 202.74 198.48 193.70 188.92 182.58 177.86 174.64 173.08
10 250	10.750 273.0	20 30 STD XS 80 100 120 140 160	40 60 XX	0.188 0.250 0.307 0.365 0.500 0.594 0.719 0.844 1.000 1.125	4.78 6.35 7.80 9.27 12.70 15.09 18.26 21.44 25.40 28.58	21.23 28.06 34.27 40.52 49.79 59.98 77.10 89.38 104.23 115.75	31.62 41.76 51.01 60.29 74.79 85.98 114.71 133.01 155.10 172.27	10.374 10.250 10.136 10.020 9.750 9.562 9.312 9.062 8.750 8.500	263.44 260.30 257.40 254.46 247.60 242.82 236.48 230.12 222.20 215.84
12 300	12.750 323.8	20 30 STD 40 XS 60 80 100 120 140 160	XX	0.188 0.250 0.330 0.375 0.406 0.500 0.562 0.668 0.844 1.000 1.125 1.312	4.78 6.35 8.38 9.53 10.31 12.70 14.27 17.48 21.44 25.40 28.58 33.32	25.25 33.41 43.81 49.61 53.57 65.48 73.22 88.71 107.42 125.61 138.81 160.42	37.61 49.71 65.19 73.86 79.71 97.44 108.93 132.05 159.87 186.92 208.08 238.69	12.374 12.250 12.090 12.000 11.938 11.750 11.626 11.374 11.062 10.750 10.500 10.261	314.24 311.10 307.04 304.74 303.18 298.40 295.26 288.64 280.92 273.00 266.64 257.16
14 350	14.000 355.6	10 20 STD 40 XS 60 80 100 120 140 160	30 40	0.250 0.312 0.375 0.438 0.500 0.594 0.750 0.938 1.094 1.250 1.406	6.35 7.92 9.53 11.13 12.70 15.09 19.05 23.83 27.79 31.75 35.71	36.75 45.65 54.62 63.50 72.16 85.13 106.23 130.98 150.93 170.37 189.29	54.69 67.91 81.33 94.55 107.40 126.72 158.11 194.98 224.66 253.58 281.72	13.500 13.376 13.250 13.124 13.000 12.812 12.500 12.124 11.812 11.500 11.188	342.90 339.76 336.54 333.34 330.20 325.42 317.50 307.94 300.02 292.10 284.18
16 400	16.000 406.4	10 20 STD XS 60 80 120 160	30 40	0.250 0.312 0.375 0.438 0.500 0.656 0.844 1.219 1.594	6.35 7.92 9.53 11.13 12.70 16.66 21.44 30.96 40.49	42.09 52.32 62.64 72.85 82.85 107.60 136.74 192.61 245.48	62.65 77.83 93.27 107.40 123.31 160.13 203.54 286.66 365.38	15.500 15.376 15.250 15.000 14.688 14.312 13.562 12.812	393.70 390.56 387.34 381.00 373.08 363.52 344.48 325.42
18 450	18.000 457	10 20 STD 30 XS 40 60 80 120 160		0.250 0.312 0.375 0.438 0.500 0.562 0.750 0.938 1.375 1.781	6.35 7.92 9.53 11.13 12.70 14.27 19.05 23.83 34.93 45.24	47.44 58.99 70.65 82.23 93.54 104.76 138.30 171.08 244.37 308.79	70.57 87.71 105.17 122.38 139.16 155.81 205.75 254.57 363.58 459.39	17.500 17.376 17.250 17.124 17.000 16.876 16.500 16.124 15.250 14.438	444.30 441.16 437.94 434.74 431.60 428.46 418.90 409.34 387.14 366.52
20 500	20.000 508	10 STD XS 40 60 80 120 160	20 30	0.250 0.375 0.500 0.594 0.812 1.031 1.500 1.969	6.35 9.53 12.70 15.09 20.62 26.19 38.10 50.01	52.78 78.67 104.23 123.23 166.56 209.06 296.65 379.53	78.56 117.15 155.13 183.43 247.84 311.19 441.52 564.85	59.500 19.250 19.000 18.812 18.376 17.938 17.000 16.062	495.30 488.94 482.60 477.82 466.76 455.62 431.80 407.98

*PLEASE NOTE AS PER ASME ALL PIPES HAVE A TOLERANCE OF $\pm 12.5\%$

SPECIFICATIONS:

STANDARDS:

ASTM A53/A106 GRADE B, ASME, API, AND ANSI B 36.10

- Wall Thickness: $\pm 12.5\%$
- Size: 1/4" - 48"
- Thickness: Schedule: 10 - 160
- All Items will have an accompanying Mill Test Certificate upon request

APPLICATIONS:

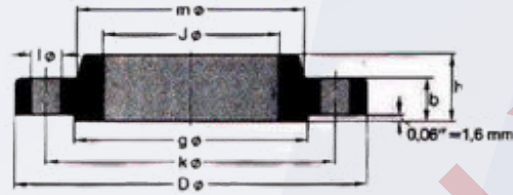
- Industrial
- Residential
- Petrochemical Plants
- Oil & Gas
- Refineries
- Sugar Mills
- Energy
- Construction & Infrastructure
- Chemicals
- Machineries
- Boilers
- Food & Beverage
- Shipping
- Desalination Plant
- Automotive & Transport
- High-Pressure Vessel
- Power Plants

CLASS 150 SLIP-ON FLANGES

150 lb/sq.in.

Slip-on Flanges

ANSI B16.5



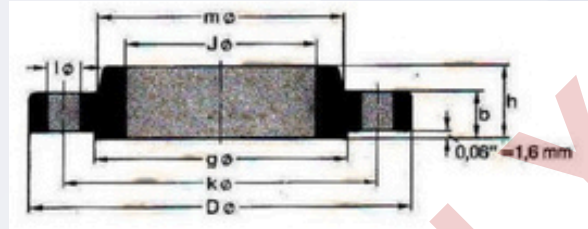
Pipe		Flange				Hub	Raised Face	Drilling Template			
Nomina l Size	O.D	D	J	b	h	g	H	No.	L	K	Approx. Weight
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		in / mm	in / mm	lbs / kg
½"	0.84 / 21.3	3.50 / 88.9	0.88 / 22.4	0.44 / 11.2	0.62 / 15.7	1.19 / 30.2	1.38 / 35.1	4	0.62 / 15.7	2.38 / 60.5	0.9 / 0.39
¾"	1.05 / 26.7	3.88 / 98.6	1.09 / 27.7	0.50 / 12.7	0.62 / 15.7	1.50 / 38.1	1.69 / 42.9	4	0.62 / 15.7	2.75 / 69.9	1.2 / 0.56
1"	1.315 / 33.4	4.25 / 108.0	1.36 / 34.5	0.56 / 14.2	0.69 / 17.5	1.94 / 49.3	2.00 / 50.8	4	0.62 / 15.7	3.12 / 79.2	1.7 / 0.78
1¼"	1.66 / 42.2	4.62 / 117.3	1.70 / 43.2	0.62 / 15.7	0.81 / 20.6	2.31 / 58.7	2.50 / 63.5	4	0.62 / 15.7	3.50 / 88.9	2.3 / 1.03
1½"	1.90 / 48.3	5.00 / 127.0	1.95 / 49.5	0.69 / 17.5	0.88 / 23.4	2.56 / 65.0	2.88 / 73.2	4	0.75 / 19.2	3.88 / 98.6	2.9 / 1.32
2"	2.375 / 60.3	6.00 / 152.4	2.44 / 62.0	0.75 / 19.1	1.00 / 25.4	3.06 / 77.7	3.62 / 91.9	4	0.75 / 19.2	4.75 / 120.7	4.5 / 2.06
2½"	2.875 / 73.0	7.00 / 177.8	2.94 / 74.7	0.88 / 22.4	1.12 / 28.4	3.56 / 90.4	4.12 / 104.6	4	0.75 / 19.2	5.50 / 139.7	7.2 / 3.28
3"	3.50 / 88.9	7.50 / 190.5	3.57 / 90.7	0.94 / 23.9	1.19 / 30.2	4.25 / 108.0	5.00 / 127.0	4	0.75 / 19.2	6.00 / 152.4	8.5 / 3.85
3½"	4.00 / 101.6	8.50 / 215.9	4.07 / 103.4	0.94 / 23.9	1.25 / 31.8	4.81 / 122.2	5.50 / 139.7	8	0.75 / 19.2	7.00 / 177.8	10.6 / 4.81
4"	4.50 / 114.3	9.00 / 228.6	4.57 / 116.1	0.94 / 23.9	1.31 / 33.3	5.31 / 134.9	6.19 / 157.2	8	0.75 / 19.2	7.50 / 190.5	11.7 / 5.30
5"	5.563 / 141.3	10.00 / 254.0	5.66 / 143.8	0.94 / 23.9	1.44 / 36.6	6.44 / 163.6	7.31 / 185.7	8	0.88 / 22.2	8.50 / 215.9	13.4 / 6.07
6"	6.625 / 168.3	11.00 / 279.4	6.72 / 170.7	1.00 / 25.4	1.56 / 39.6	7.56 / 192.0	8.50 / 215.9	8	0.88 / 22.2	9.50 / 241.3	16.4 / 7.45
8"	8.625 / 219.1	13.50 / 342.9	8.72 / 221.5	1.12 / 28.4	1.75 / 44.5	9.69 / 246.1	10.62 / 269.7	8	0.88 / 22.2	11.75 / 298.5	26.7 / 12.1
10"	10.75 / 273.0	16.00 / 406.4	10.88 / 276.4	1.19 / 30.2	1.94 / 49.3	12.00 / 304.8	12.75 / 323.9	12	1.00 / 25.4	14.25 / 362.0	36.3 / 16.5
12"	12.75 / 323.8	19.00 / 482.6	12.88 / 327.2	1.25 / 31.8	2.19 / 55.6	14.38 / 365.3	15.00 / 381	12	1.00 / 25.4	17.00 / 431.8	57.7 / 26.2
14"	14.00 / 355.6	21.00 / 533.4	14.14 / 359.2	1.38 / 35.1	2.25 / 57.2	15.75 / 400.1	16.25 / 412.8	12	1.12 / 28.4	18.75 / 476.3	76.2 / 34.6
16"	16.00 / 406.4	23.50 / 596.9	16.16 / 410.5	1.44 / 36.6	2.50 / 63.5	18.00 / 457.2	18.50 / 469.9	16	1.12 / 28.4	21.25 / 539.8	98.7 / 44.8
18"	18.00 / 457.2	25.00 / 635.0	18.18 / 461.8	1.56 / 39.6	2.69 / 68.3	19.88 / 505.0	23.00 / 584.2	16	1.25 / 31.8	22.75 / 539.8	108 / 48.9
20"	20.00 / 508.0	27.50 / 698.5	20.20 / 513.1	1.69 / 42.9	2.88 / 73.2	22.00 / 558.8	23.00 / 584.2	20	1.25 / 31.8	25.00 / 635.0	136. / 61.9
24"	24.0 / 609.6	32.00 / 812.8	24.25 / 616.0	1.88 / 47.8	3.25 / 82.6	26.12 / 663.4	27.25 / 692.2	20	1.38 / 35.1	29.50 / 749.3	191.5 / 86.9

CLASS 300 SLIP-ON FLANGES

300 lb/sq.in.

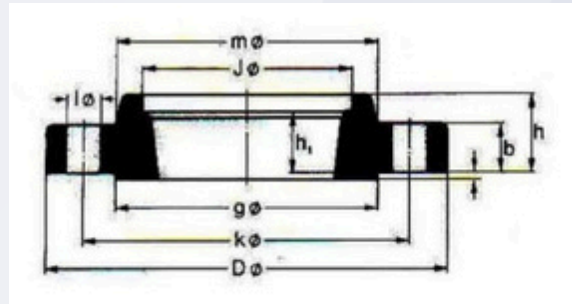
Slip-on Flanges

ANSI B16.5



Pipe		Flange				Hub	Raised Face	Drilling Template			Approx. Weight
Nominal Size	O.D.	D	J	b	h	g	H	No.	L	K	
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		in / mm	in / mm	lbs / kg
1/2"	0.84 / 21.3	3.75 / 95.2	0.88 / 22.3	0.56 / 14.2	0.88 / 22.3	1.38 / 35.0	1.38 / 35.1	4	0.62 / 15.7	2.62 / 66.5	1.4 / 0.64
3/4"	1.05 / 26.7	4.62 / 117.3	1.09 / 27.7	0.62 / 15.7	1.00 / 25.4	1.69 / 42.9	1.69 / 42.9	4	0.75 / 19.0	3.25 / 82.5	2.5 / 1.12
1"	1.315 / 33.4	4.88 / 123.9	1.36 / 34.5	0.69 / 17.5	1.06 / 26.9	2.00 / 50.8	2.00 / 50.8	4	0.75 / 19.0	3.50 / 88.9	3.0 / 1.36
1 1/4"	1.66 / 42.2	5.25 / 133.3	1.70 / 43.2	0.75 / 19.0	1.06 / 26.9	2.50 / 63.5	2.50 / 63.5	4	0.75 / 19.0	3.88 / 98.5	3.7 / 1.68
1 1/2"	1.90 / 48.3	6.12 / 155.4	1.95 / 49.5	0.81 / 20.6	1.19 / 30.2	2.88 / 73.1	2.88 / 73.2	4	0.88 / 22.3	4.50 / 114.3	5.5 / 2.49
2"	2.375 / 60.3	6.50 / 165.1	2.44 / 62.0	0.88 / 22.3	1.31 / 33.2	3.62 / 91.9	3.62 / 91.9	8	0.75 / 19.0	5.00 / 127.0	6.3 / 2.87
2 1/2"	2.875 / 73.0	7.50 / 190.5	2.94 / 74.7	1.00 / 25.4	1.50 / 38.1	4.12 / 104.6	4.12 / 104.6	8	0.88 / 22.3	5.88 / 149.3	9.5 / 4.32
3"	3.50 / 88.9	8.25 / 209.5	3.57 / 90.7	1.12 / 28.4	1.69 / 42.9	5.00 / 127.0	5.00 / 127.0	8	0.88 / 22.3	6.62 / 168.1	12.9 / 5.85
3 1/2"	4.00 / 101.6	9.00 / 228.6	4.07 / 103.4	1.19 / 30.2	1.75 / 44.4	5.50 / 139.7	5.50 / 139.7	8	0.88 / 22.3	7.25 / 184.1	16.2 / 7.34
4"	4.50 / 114.3	10.00 / 254.0	4.57 / 116.1	1.25 / 31.7	1.88 / 47.7	6.19 / 157.2	6.19 / 157.2	8	0.88 / 22.3	7.88 / 200.1	21.2 / 9.61
5"	5.563 / 141.3	11.00 / 279.4	5.66 / 143.8	1.38 / 35.0	2.00 / 50.8	7.31 / 185.3	7.31 / 185.6	8	0.88 / 22.3	9.25 / 234.9	27.1 / 12.3
6"	6.625 / 168.3	12.50 / 317.5	6.72 / 170.7	1.44 / 36.5	2.06 / 52.3	8.50 / 215.9	8.50 / 215.9	12	0.88 / 22.3	10.62 / 269.7	34.4 / 15.6
8"	8.625 / 219.1	15.00 / 381.0	8.72 / 221.5	1.62 / 41.1	2.44 / 61.9	10.62 / 269.7	10.62 / 269.7	12	1.00 / 25.4	13.00 / 330.2	53.5 / 24.2
10"	10.75 / 273	17.50 / 444.5	10.88 / 276.4	1.88 / 47.7	2.62 / 66.5	12.62 / 320.5	12.75 / 323.8	16	1.12 / 28.4	15.25 / 387.3	75.1 / 34.1
12"	12.75 / 323.8	20.50 / 520.7	12.88 / 327.1	2.00 / 50.8	2.88 / 73.1	14.75 / 374.6	15.00 / 381.0	16	1.25 / 31.7	17.75 / 450.8	110 / 49.8
14"	14.00 / 355.6	23.00 / 584.2	14.14 / 359.1	2.12 / 53.8	3.00 / 76.2	16.75 / 425.4	16.25 / 412.7	20	1.25 / 31.7	20.25 / 514.3	154 / 69.9
16"	16.00 / 406.4	25.50 / 647.7	16.16 / 410.5	2.25 / 57.1	3.25 / 82.5	19.00 / 482.6	18.50 / 469.9	20	1.38 / 35.0	22.50 / 571.5	194 / 88.1
18"	18.00 / 457.2	28.00 / 711.2	18.18 / 461.8	2.38 / 60.4	3.50 / 88.9	21.00 / 533.4	21.00 / 533.4	24	1.38 / 35.0	24.75 / 628.6	240 / 109
20"	20.00 / 508	30.50 / 774.7	20.20 / 513.1	2.50 / 63.5	3.75 / 95.4	23.13 / 587.2	23.00 / 584.2	24	1.38 / 35.0	27.00 / 685.8	295 / 134
24"	24.0 / 609.6	36.00 / 914.4	24.25 / 615.9	2.75 / 69.8	4.19 / 106.4	27.62 / 701.5	27.25 / 692.2	24	1.38 / 41.1	32.00 / 812.8	443 / 201

ANSI B16.5



D	Outside Diameter ¹⁾	When OD is 24" or less When OD is over 24"	± 0.06" ±0.12"	±1.6mm ±3.22mm
J	Inside Diameter	Slip-on and Lap Joint 10" and smaller 12" and larger Threaded	±0.03" ±0.06"	±0.8 mm ±1.6mm
			Within Limits on boring gauge	
	Diameter of Counterbore	Same for Inside Diameter		
g	Diameter of Contact Face	0.03" Raised Face 0.25" Raised face Tongue and Groove, Male and Female	±0.03" ±0.02" ±0.02"	±0.8 mm ±0.5 mm ±0.5 mm
			not for flanges with ring joint	
m	Outside Diameter of Hub	-12" and smaller 14" and larger	±0.09" ±0.12" ±2.4 mm ±3.2 mm	— 0.06" — 1.6 mm
I	Drilling and Facing	Bolt Circle Diameter k Center-to-center of adjacent bolt holes Max. eccentricity between bolt circle dia. k and machined facing diameters: size 2 ½" and smaller sizes 3" and larger	± 0.06" ±0.03" 0.03" 0.06"	±1.6 mm ±0.8mm 0.8mm 1.6mm
h	Overall Length of Hub	18" and smaller 20" and larger	±0.12" ± 0.19" ±3.2 mm ±4.8mm	— 0.03" —0.03" — 0.8mm — 1.6mm
b	Thickness	18" and smaller 20" and larger	±0.12" ±0.19"	±3.2mm ±4.8mm

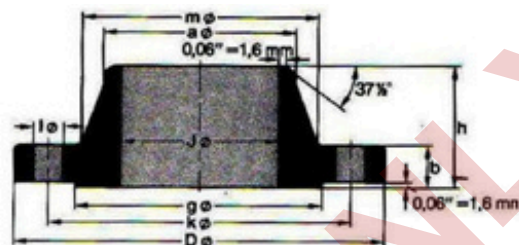
1) This tolerance is not covered by ANSI B 16.5

CLASS 150 WELDING NECK FLANGES

150 lb/sq.in.

Welding Neck Flanges

ANSI B16.5



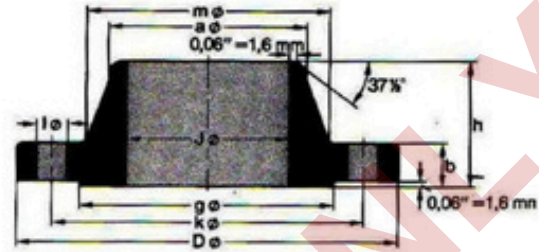
Pipe		Flange				Hub		Raised Face	Drilling Template			Approx. Weight
Nominal Size	O.D. (in/mm)	D (in/mm)	J (in/mm)	b (in/mm)	h (in/mm)	a (in/mm)	m (in/mm)	g (in/mm)	No.	l (in/mm)	k (in/mm)	Pounds /Kilo
½"	0.84 / 21.3	3.50 / 88.9	0.62 / 15.7	0.44 / 11.2	1.88 / 47.8	0.84 / 21.3	1.19 / 30.2	1.38 / 35.1	4	0.62 / 15.7	2.38 / 60.5	1.1 / 0.48
¾"	1.05 / 26.7	3.88 / 98.6	0.82 / 20.8	0.50 / 12.7	2.06 / 52.3	1.05 / 26.7	1.50 / 38.1	1.69 / 42.9	4	0.62 / 15.7	2.75 / 69.9	1.6 / 0.71
1"	1.315 / 33.4	4.25 / 108.0	1.05 / 26.7	0.56 / 14.2	2.19 / 55.6	1.32 / 33.5	1.94 / 49.2	2.00 / 50.8	4	0.62 / 15.7	3.12 / 79.2	2.9 / 1.33
1¼"	1.66 / 42.2	4.62 / 117.3	1.38 / 35.1	0.62 / 15.7	2.25 / 57.2	1.66 / 42.2	2.31 / 58.7	2.50 / 63.5	4	0.62 / 15.7	3.50 / 88.9	3.8 / 1.72
1½"	1.90 / 48.3	5.00 / 127.0	1.61 / 40.9	0.69 / 17.5	2.44 / 62.0	1.90 / 48.3	2.56 / 65.0	2.88 / 73.2	4	0.62 / 15.7	3.88 / 98.6	5.7 / 2.58
2"	2.375 / 60.3	6.00 / 152.4	2.07 / 52.6	0.75 / 19.1	2.50 / 63.5	2.38 / 60.5	3.06 / 77.7	3.62 / 91.9	4	0.75 / 19.1	4.75 / 120.7	9.1 / 4.11
2½"	2.875 / 73.0	7.00 / 177.8	2.47 / 62.7	0.88 / 22.4	2.75 / 69.9	2.88 / 73.2	3.56 / 90.4	4.12 / 104.6	4	0.75 / 19.1	5.50 / 139.7	10.8 / 492
3"	3.50 / 88.9	7.50 / 190.5	3.07 / 78.0	0.94 / 23.9	2.75 / 69.6	3.50 / 88.9	4.25 / 108.0	5.00 / 127.0	4	0.75 / 19.1	6.00 / 152.4	13.4 / 6.08
3½"	4.00 / 101.6	8.50 / 215.9	3.55 / 90.2	0.94 / 23.9	2.81 / 71.4	4.00 / 101.6	4.81 / 122.2	5.50 / 139.7	8	0.75 / 19.1	7.00 / 177.8	5.7 / 2.58
4"	4.50 / 114.3	9.00 / 228.6	4.03 / 102.4	0.94 / 23.9	3.00 / 76.2	4.50 / 114.3	5.31 / 134.9	6.19 / 157.2	8	0.75 / 19.1	7.50 / 190.5	15.1 / 6.84
5"	5.563 / 141.3	10.00 / 254.0	5.05 / 128.3	0.94 / 23.9	3.00 / 76.2	5.63 / 141.2	6.44 / 163.6	7.31 / 185.7	8	0.88 / 22.4	8.50 / 215.9	18.9 / 8.56
6"	6.625 / 168.3	11.00 / 279.4	6.07 / 154.2	1.00 / 25.4	4.00 / 101.6	6.63 / 168.4	7.56 / 192.0	8.50 / 215.9	8	0.88 / 22.4	9.50 / 241.3	23.3 / 10.6
8"	8.625 / 219.1	13.50 / 342.9	7.98 / 202.7	1.12 / 28.4	4.00 / 101.6	8.63 / 219.2	9.69 / 246.1	10.62 / 269.7	8	0.88 / 22.4	11.75 / 298.5	38.08 / 17.6
10"	10.75 / 273.0	16.00 / 406.4	10.02 / 254.5	1.19 / 30.2	4.50 / 114.3	10.75 / 273.1	12.00 / 304.8	12.75 / 323.9	12	1.00 / 25.4	14.25 / 362.0	53.0 / 24.0
12"	12.75 / 323.9	19.00 / 482.6	12.00 / 304.8	1.25 / 31.8	5.00 / 127.0	12.75 / 323.9	14.38 / 362.3	15.00 / 381.0	12	1.00 / 25.4	17.00 / 431.8	80.4 / 36.5
14"	14.00 / 355.6	21.00 / 533.4	To Be specified by purchaser	1.38 / 35.1	5.00 / 127.0	14.00 / 355.6	15.75 / 400.1	16.25 / 412.8	12	1.12 / 28.4	18.75 / 476.3	107 / 48.8
16"	16.00 / 406.4	23.50 / 596.9		1.44 / 36.6	5.50 / 127.0	16.00 / 406.4	18.00 / 457.2	18.50 / 469.9	16	1.12 / 28.4	21.25 / 539.8	134 / 60.6
18"	18.00 / 457.2	25.00 / 635.0		1.56 / 39.6	5.50 / 139.7	18.00 / 457.2	19.88 / 505.0	21.00 / 533.4	16	1.25 / 31.8	22.75 / 577.9	151 / 68.3
20"	20.00 / 508.0	27.50 / 698.5		1.69 / 42.9	5.69 / 144.5	20.00 / 508.0	22.00 / 508.8	23.00 / 584.2	20	1.25 / 31.8	25.00 / 635.0	186 / 84.5
24"	24.00 / 609.6	32.00 / 812.8		1.88 / 47.8	6.00 / 152.4	24.00 / 609.6	24.00 / 609.6	27.25 / 692.2	20	1.38 / 35.1	29.50 / 749.3	253 / 115

CLASS 300 WELDING NECK FLANGES

300 lb/sq.in.

Welding Neck Flanges

ANSI B16.5

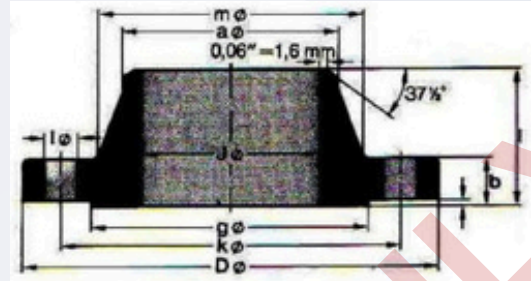


Pipe		Flange				Hub		Raised Face	Drilling Template			Approx. Weight
Nominal Size	O.D. (in/mm)	D (in/mm)	J (in/mm)	b (in/mm)	h (in/mm)	a (in/mm)	m (in/mm)	g (in/mm)	No.	l (in/mm)	k (in/mm)	Pounds /Kilo
½"	0.84 / 21.3	3.75 / 95.2	0.62 / 15.7	0.56 / 14.2	2.06 / 52.3	0.84 / 21.3	1.50 / 38.1	1.38 / 35.0	4	0.62 / 15.7	2.62 / 66.5	1.7 / 0.75
¾"	1.05 / 26.7	4.12 / 117.3	0.82 / 20.8	0.62 / 15.7	2.25 / 57.1	1.05 / 26.7	1.88 / 47.7	1.69 / 42.9	4	0.75 / 19.0	3.25 / 82.5	2.8 / 1.26
1"	1.315 / 33.4	4.88 / 123.9	1.05 / 26.7	0.69 / 17.5	2.44 / 62.0	1.32 / 33.5	2.12 / 53.8	2.00 / 50.8	4	0.75 / 19.0	3.50 / 88.9	3.5 / 1.52
1¼"	1.66 / 42.2	5.25 / 133.3	1.38 / 35.1	0.75 / 19.0	2.56 / 65.0	1.66 / 42.2	2.50 / 63.5	2.50 / 63.5	4	0.75 / 19.0	3.88 / 98.6	4.5 / 2.03
1½"	1.90 / 48.3	6.12 / 155.4	1.61 / 40.9	0.81 / 20.6	2.69 / 68.3	1.90 / 48.3	2.75 / 69.8	2.88 / 73.1	4	0.88 / 22.3	4.50 / 114.3	6.4 / 2.89
2"	2.375 / 60.3	6.50 / 165.1	2.07 / 52.6	0.88 / 22.3	2.75 / 69.8	2.38 / 60.4	3.31 / 84.0	3.62 / 91.9	8	0.75 / 19.0	5.00 / 127.0	7.5 / 3.40
2½"	2.875 / 73.0	7.50 / 190.5	2.47 / 62.7	1.00 / 25.4	3.00 / 79.2	2.88 / 73.1	3.94 / 100.0	4.12 / 104.6	8	0.88 / 22.3	5.88 / 149.4	11.4 / 5.17
3"	3.50 / 88.9	8.25 / 209.5	3.07 / 78.0	1.12 / 28.4	3.12 / 79.2	3.50 / 88.9	4.62 / 117.3	5.50 / 139.7	8	0.88 / 22.3	6.62 / 168.1	15.3 / 6.93
3½"	4.00 / 101.6	9.00 / 228.6	3.55 / 90.2	1.19 / 30.2	3.19 / 81.0	4.00 / 101.6	5.25 / 133.3	6.19 / 157.2	8	0.88 / 22.3	7.25 / 184.1	19.1 / 8.67
4"	4.50 / 114.3	10.00 / 254.0	4.03 / 102.4	1.25 / 31.7	3.19 / 81.0	4.50 / 114.3	5.75 / 146.0	6.19 / 157.2	8	0.88 / 22.3	8.00 / 203.2	24.7 / 11.2
5"	5.563 / 141.3	11.00 / 279.4	5.02 / 128.3	1.38 / 35.0	3.38 / 85.8	5.56 / 141.2	7.00 / 177.8	7.31 / 185.6	8	0.88 / 22.3	9.50 / 241.3	33.3 / 15.1
6"	6.625 / 168.3	12.50 / 317.5	6.037 / 154.2	1.44 / 36.4	3.88 / 98.5	6.63 / 168.4	8.50 / 215.9	8.50 / 215.9	12	0.88 / 22.3	11.00 / 279.4	42.4 / 19.1
8"	8.625 / 219.1	15.00 / 381.0	7.98 / 202.7	1.62 / 41.1	3.88 / 98.5	8.63 / 219.2	10.62 / 269.7	10.62 / 269.7	12	1.00 / 25.4	13.50 / 342.9	65.9 / 29.9
10"	10.75 / 273.0	17.50 / 444.5	10.02 / 254.5	1.88 / 47.7	4.62 / 111.2	10.75 / 273	12.75 / 323.8	12.75 / 323.8	16	1.12 / 28.4	17.00 / 431.8	94.1 / 42.7
12"	12.75 / 323.8	20.50 / 520.7	12.00 / 304.8	2.00 / 50.8	5.12 / 130.0	12.75 / 323.8	15.00 / 381.0	15.00 / 381.0	16	1.25 / 31.7	19.00 / 482.6	136 / 61.8
14"	14.00 / 355.6	23.00 / 584.2	To Be Specified by purchaser	2.12 / 53.8	5.62 / 142.7	14.00 / 355.6	16.75 / 412.7	16.25 / 412.7	20	1.25 / 31.7	22.00 / 558.8	189 / 85.8
16"	16.00 / 406.4	25.50 / 647.7		2.25 / 57.1	5.75 / 146.0	16.00 / 406.4	18.50 / 469.9	21.00 / 533.4	20	1.38 / 35.0	25.00 / 635.0	234 / 106
18"	18.00 / 457.2	28.00 / 711.2		2.38 / 60.4	6.25 / 158.7	18.00 / 457.2	21.00 / 533.4	23.00 / 584.2	24	1.38 / 35.0	26.75 / 679.4	289 / 131
20"	20.00 / 508.0	30.50 / 774.7		2.50 / 63.5	6.38 / 162.0	20.00 / 508	23.00 / 584.2	23.00 / 584.2	24	1.38 / 35.0	28.50 / 723.9	348 / 158
24"	24.00 / 609.6	36.00 / 914.4		2.75 / 69.8	6.62 / 168.1	24.00 / 609.6	27.62 / 701.5	27.25 / 692.1	24	1.62 / 41.1	32.00 / 812.8	507 / 230

DIMENSIONAL TOLERANCES

Welding Neck Flanges

ANSI B16.5



D	Outside Diameter ¹⁾	When OD is 24" or less When OD is over 24"	$\pm 0.06"$ $\pm 0.12"$	$\pm 1.6\text{ mm}$ $\pm 3.22\text{ mm}$
J	Inside Diameter	10" and smaller 12" to 18" 20" and larger	$\pm 0.03"$ $\pm 0.06"$ $\pm 0.12"$ $\pm 0.8\text{ mm}$ $\pm 1.6\text{ mm}$ $\pm 3.2\text{ mm}$	$- 0.06"$ $- 1.6\text{ mm}$
g	Diameter of Contact Face	0.03" Raised Face 0.25" Raised face Tongue and Groove, Male and Female	$\pm 0.03"$ $\pm 0.02"$ $\pm 0.02"$	$\pm 0.8\text{ mm}$ $\pm 0.5\text{ mm}$ $\pm 0.5\text{ mm}$
a	Diameter of Hub at Point of Welding	5" and smaller 6" and larger	$\pm 0.09"$ $\pm 0.16"$ $\pm 2.4\text{ mm}$ $\pm 4.0\text{ mm}$	$- 0.03"$ $- 0.03"$ $- 0.8\text{ mm}$ $- 0.8\text{ mm}$
m	Diameter of Hub at Base ¹⁾	When Hub Base is 24" or less When hub Base is over 24"	$\pm 0.06"$ $\pm 0.12"$	$\pm 1.6\text{ mm}$ $\pm 3.2\text{ mm}$
I	Drilling and Facing	Bolt Circle Diameter k Center-to-center of adjacent bolt holes Max. eccentricity between bolt circle dia. k and machined facing diameters: size 2 1/2" and smaller sizes 3" and larger	$\pm 0.06"$ $\pm 0.03"$ $0.03"$ $0.06"$	$\pm 1.6\text{ mm}$ $\pm 0.8\text{ mm}$ 0.8 mm 1.6 mm
h	Overall Length of Hub	10" and smaller 12" and larger	$\pm 0.06"$ $\pm 0.12"$	$\pm 1.6\text{ mm}$ $\pm 3.2\text{ mm}$
b	Thickness	18" and smaller 20" and larger	$\pm 0.12"$ $\pm 0.19"$	$\pm 3.2\text{ mm}$ $\pm 4.8\text{ mm}$

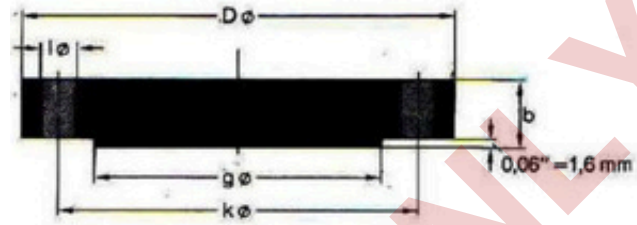
1) This tolerance is not covered by ANSI B 16.5

CLASS 150 BLIND FLANGES

150 lb/sq.in.

Blind Flanges

ANSI B16.5



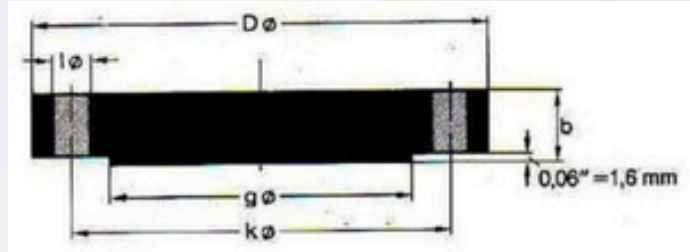
Pipe		Flange		Raised Face	Drilling Template			Approx. Weight
Nominal Size	O.D. (in./mm)	D (in./mm)	b (in./mm)	g (in./mm)	Number of Holes	l (in./mm)	k (in./mm)	Pounds / Kilo
½"	0.84 / 21.3	3.50 / 88.9	0.44 / 11.2	1.38 / 35.1	4	0.62 / 15.7	2.38 / 60.5	0.9 / 0.42
¾"	1.05 / 26.7	3.88 / 98.6	0.50 / 12.7	1.62 / 42.9	4	0.62 / 15.7	2.75 / 69.9	1.9 / 0.86
1"	1.315 / 33.4	4.25 / 108.0	0.56 / 14.2	2.00 / 50.8	4	0.62 / 15.7	3.12 / 79.2	1.9 / 0.86
1¼"	1.66 / 42.2	4.62 / 117.3	0.62 / 15.7	2.50 / 63.5	4	0.62 / 15.7	3.50 / 88.9	2.6 / 1.17
1½"	1.90 / 48.3	5.00 / 127.0	0.69 / 17.5	2.88 / 73.2	4	0.62 / 15.7	3.88 / 98.6	3.4 / 1.53
2"	2.375 / 60.3	6.00 / 152.4	0.75 / 19.1	3.62 / 91.9	4	0.75 / 19.1	4.75 / 120.7	5.3 / 2.42
2½"	2.875 / 73.0	7.00 / 177.8	0.88 / 22.4	4.12 / 104.6	4	0.75 / 19.1	5.50 / 139.7	8.7 / 3.94
3"	3.50 / 88.9	7.50 / 190.5	0.94 / 23.9	5.00 / 127.0	4	0.75 / 19.1	6.00 / 152.4	10.9 / 4.93
3½"	4.00 / 101.6	8.50 / 215.9	0.94 / 23.9	5.50 / 139.3	8	0.75 / 19.1	7.00 / 177.8	13.6 / 6.17
4"	4.50 / 114.3	9.00 / 228.6	0.94 / 23.9	6.19 / 157.2	8	0.75 / 19.1	7.50 / 190.5	15.4 / 7.00
5"	5.563 / 141.3	10.00 / 254.0	0.94 / 23.9	7.31 / 185.7	8	0.88 / 22.4	8.50 / 215.9	19.0 / 8.63
6"	6.625 / 168.3	11.00 / 279.4	1.00 / 25.4	8.50 / 215.9	8	0.88 / 22.4	9.50 / 241.3	24.9 / 11.3
8"	8.625 / 219.1	13.50 / 342.9	1.12 / 28.4	10.62 / 269.7	8	0.88 / 22.4	11.75 / 298.5	43.2 / 19.6
10"	10.75 / 273	16.00 / 406.4	1.19 / 30.2	12.75 / 323.9	12	1.00 / 25.4	14.25 / 362.0	63.4 / 28.8
12"	12.75 / 323.8	19.00 / 482.6	1.25 / 31.8	15.00 / 381.0	12	1.00 / 25.4	17.00 / 431.8	95.2 / 43.2
14"	14.0 / 355.6	21.00 / 533.4	1.38 / 35.1	16.25 / 412.8	12	1.12 / 28.4	18.75 / 476.3	128 / 58.1
16"	16.0 / 406.4	23.50 / 596.9	1.44 / 36.6	18.50 / 469.9	16	1.12 / 28.4	21.25 / 539.8	167 / 76.0
18"	18.0 / 457.2	25.00 / 635.0	1.56 / 39.6	21.00 / 533.4	16	1.25 / 31.8	22.75 / 577.9	206 / 93.7
20"	20.0 / 508.0	27.50 / 698.5	1.69 / 42.9	23.00 / 584.0	20	1.25 / 31.8	25.00 / 635.0	269 / 122
24"	24.0 / 609.6	32.00 / 812.8	1.88 / 47.8	27.25 / 692.2	20	1.38 / 35.1	29.50 / 749.3	408 / 185

CLASS 300 BLIND FLANGES

300 lb/sq.in.

Blind Flanges

ANSI B16.5



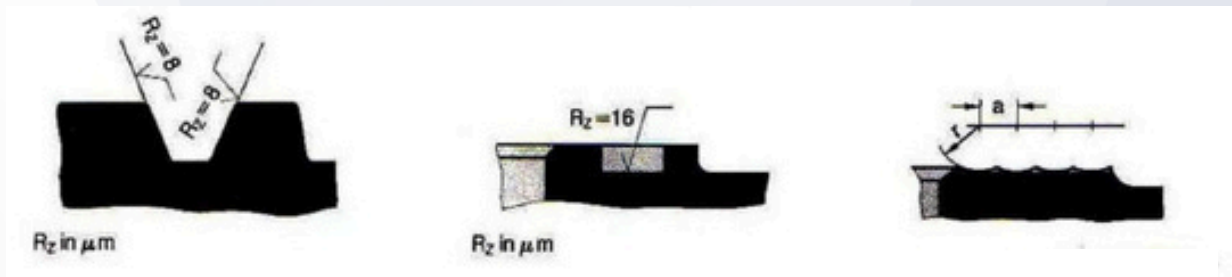
Pipe		Flange		Raised Face	Drilling Template			Approx. Weight
Nominal Size	O.D. (in./mm)	D (in./mm)	b (in./mm)	g (in./mm)	Number	l (in./mm)	k (in./mm)	Pounds / Kilo
½"	0.84 / 21.3	3.75 / 95.2	0.56 / 14.2	1.38 / 35.0	4	0.62 / 15.7	2.62 / 66.5	1.4 / 0.64
¾"	1.05 / 26.7	4.62 / 117.3	0.62 / 15.7	1.69 / 42.9	4	0.75 / 19.0	3.25 / 82.5	2.4 / 1.11
1"	1.315 / 33.4	4.88 / 123.9	0.69 / 17.5	2.00 / 50.8	4	0.75 / 19.0	3.50 / 88.9	3.1 / 1.39
1¼"	1.66 / 42.4	5.25 / 133.3	0.75 / 19.0	2.50 / 63.5	4	0.75 / 19.0	3.88 / 98.5	3.9 / 1.79
1½"	1.90 / 48.3	6.12 / 155.4	0.81 / 20.6	2.88 / 73.1	4	0.88 / 22.3	4.50 / 114.3	5.9 / 2.66
2"	2.375 / 60.3	6.50 / 165.1	0.88 / 22.3	3.62 / 91.9	8	0.75 / 19.0	5.00 / 127.0	7.0 / 3.18
2½"	2.875 / 73.0	7.50 / 190.5	1.00 / 25.4	4.12 / 104.6	8	0.88 / 22.3	5.88 / 149.3	10.7 / 4.85
3"	3.50 / 88.9	8.25 / 209.5	1.12 / 28.4	5.00 / 127.0	8	0.88 / 22.3	6.62 / 168.1	15.0 / 6.81
3½"	4.00 / 101.6	9.00 / 228.6	1.19 / 30.2	5.50 / 139.7	8	0.88 / 22.3	7.25 / 118.4	19.2 / 8.71
4"	4.50 / 114.3	10.00 / 254.0	1.25 / 31.7	6.19 / 157.2	8	0.88 / 22.3	7.88 / 200.1	25.3 / 11.5
5"	5.563 / 141.3	11.00 / 279.4	1.38 / 35.0	7.31 / 185.6	8	0.88 / 22.3	9.25 / 234.9	34.4 / 15.6
6"	6.625 / 168.3	12.50 / 317.5	1.44 / 36.5	8.50 / 215.9	12	0.88 / 22.3	10.62 / 269.7	46.0 / 20.9
8"	8.625 / 219.1	15.00 / 381.0	1.62 / 41.1	10.62 / 269.7	12	1.00 / 25.4	13.00 / 330.1	75.6 / 34.3
10"	10.75 / 273	17.50 / 444.5	1.88 / 47.7	12.75 / 323.8	16	1.12 / 28.4	15.25 / 387.3	117 / 53.3
12"	12.75 / 323.8	20.50 / 520.7	2.00 / 50.8	15.00 / 381.0	16	1.25 / 31.7	17.75 / 450.8	174 / 78.8
14"	14.00 / 355.6	23.00 / 584.2	2.00 / 53.8	16.25 / 412.7	20	1.25 / 31.7	20.25 / 514.3	231 / 105
16"	16.00 / 406.4	25.50 / 647.7	2.25 / 57.1	18.50 / 469.9	20	1.38 / 35.0	22.50 / 571.5	302 / 137
18"	18.00 / 457.2	28.00 / 711.2	2.38 / 60.4	21.00 / 533.4	24	1.38 / 35.0	24.75 / 628.6	386 / 175
20"	20.00 / 508	30.50 / 774.7	2.50 / 63.5	23.00 / 584.2	24	1.38 / 35.0	27.00 / 685.8	487 / 227
24"	24.00 / 609.6	36.00 / 914.4	2.75 / 69.8	27.25 / 692.1	24	1.62 / 41.1	32.00 / 812.8	747 / 339

FACING

Ring Joint Facings

Tongue / Groove
Small Male / Female Facings

Stock Finish
Large Male / Female Facings



Facings in other design on enquiry.

Nominal Size

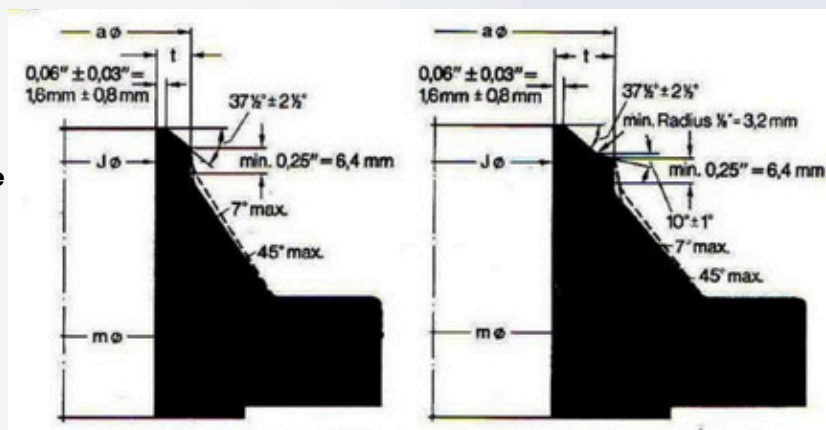
Welding Ends ANSI B16.5

	$\leq 12"$ ≤ 300 mm	$> 12"$ > 300 mm
r (mm)	1.2 - 1.6	1.6 - 3.2
a (mm/U)	0.75 - 0.9	0.8 - 1.0

a = Outside diameter of pipe

J = Inside diameter of pipe

t = Wall thickness of pipe



Bevel for Wall Thicknesses (t) 0.19" to 0.88" inclusive

Bevel for Wall Thicknesses (t) greater than 0.88"

OKI®