



PIPE FITTINGS

CATALOG

BALING STEEL



HUNAN BALING STEEL CO.,LTD.

ADDRESS : NO.18 YIJIA GROUP,MULI MANAGEMNET
OFFICE ECONOMIC DEVELOPMENT
ZONE,YUEYANG,HUNAN PROVINCE,P.R.CHINA.
TEL:0086-730-8299430
CELL: 0086-182-16341633
EMAIL: Info@balingsteel.com
WEB : www.balingsteel.com



INTRODUCTION

Hunan Baling Steel Co.,Ltd.specializing in the production of steel pipes and fittings cater to a range of international standards: GB,DIN,API,ASTM/ASME,GOST,EN,and JIS etc,committed to provide high-quality steel products and services to the world.Our products include seamless steel pipes,welded steel pipes,stainless steel pipes,and various pipe fittings.Meanwhile,we provide customization services to meet the different requirements of customers.Baling steel has unique geographical advantages,located China (Hunan) Pilot Free Trade Zone,totally connected the world,providing customers with a one-stop solution.

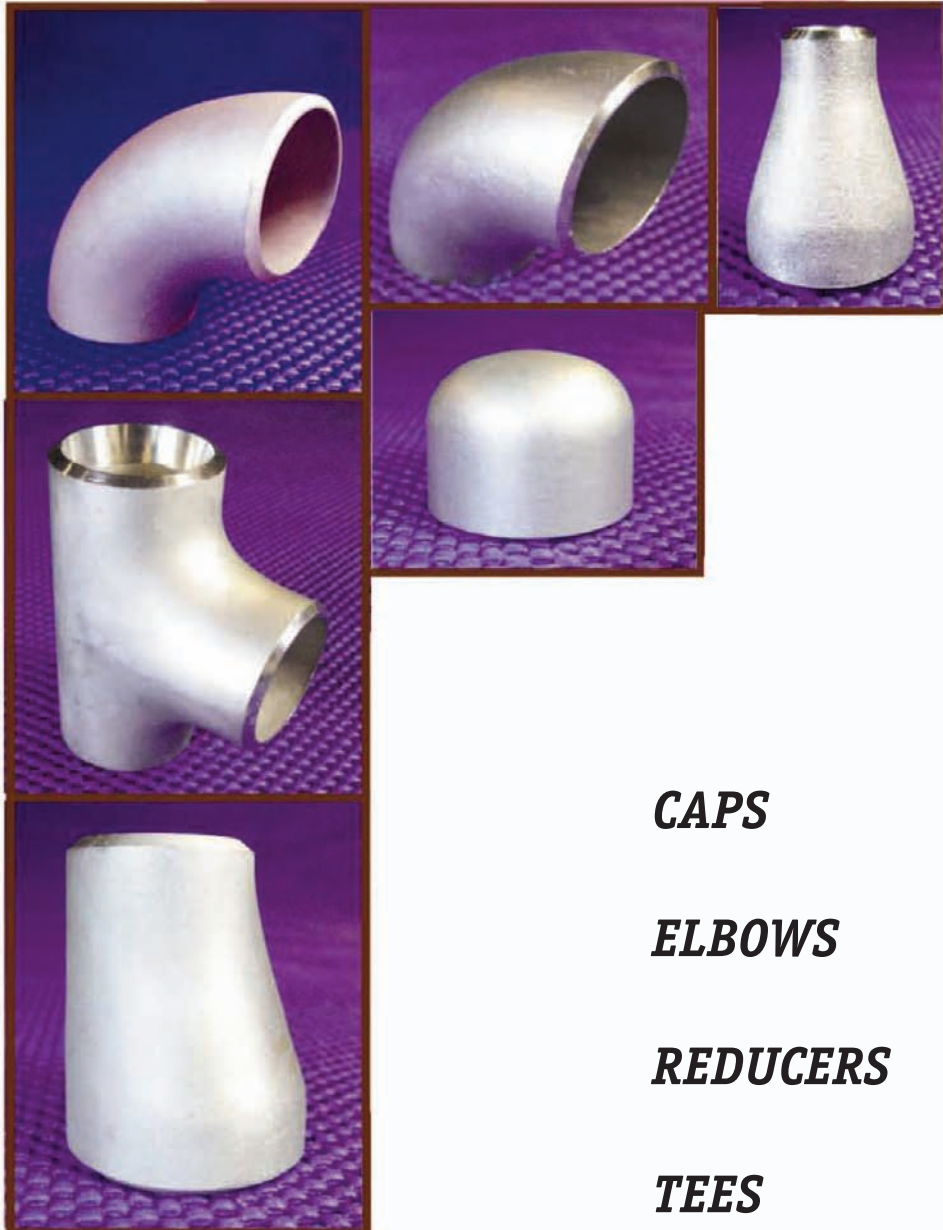
Hunan Baling Steel Co.,Ltd has a capacity to produce full range and a wide variety of quality seamless steel pipes including structure tubes, liquid pipes, boiler tubes, hydraulic pillar tubes, casing, line pipe, drill pipes, petroleum cracking tubes, and owns 3 sets of cold drawn seamless steel pipe production line, which can product pipes with diameter from 10.29mm to 114.3mm, and 2 sets of hot-rolledseamless steel pipe production line, which can product pipes with diameter from 114.3mm to 457.20mm,and 3 sets of hot-expanded seamless steel pipe production line, which can product pipes with diameter from 219.08mm to 914.40mm, besides, we have 4 continuous rolling equipments, which can product pipes with diameter from 60.3mm to 406.40mm. The steel products are widely used in aviation, aerospace, national defense equipment, oil exploration, engineering machinery, automobiles, railway rolling stock, new energy and other industries and fields. Its exporting markets cover over 100 global main regions and countries with ten million tons Iron and steel capability.

So far, Hunan Baling Steel Co.,Ltd is the predecessor of branch of China's oil pipeline and gas pipeline science research institute, as the most authoritative pipeline engineering research institute, consists of eight backbone institute and line pipe bureau postdoctoral research stations, oil and gas pipe is "safe" the main body of the national engineering laboratory on units, is China technology center and plumbing contractor as well as steel products supplier branch of China welding association director branch pipe welding unit, and a large number of sophisticated equipment and high-end talent in pipeline engineering materials, pipe welding technology, piping, special tools and pipeline construction technology, pipeline corrosion protection technology, piping nondestructive testing technology, pipeline safety evaluation, pipe information standard eight fields a leading domestic level, undertake and fulfill the country and provincial key technology research projects more than 200 items, has a number of national patent results at home and abroad, and key pipeline engineering application widely.

INDEX

DESCRIPTION	PAGE
BUTTWELD FITTING & DIMENSIONS ANSI B16.9 / B16.28	5-11
WALL THICKNESS PIPE SCHEDULES	12
FITTING WEIGHT LISTS ANSI B16.9 / B16.28	13 - 22
FLANGE DIMENSIONS 150 TO 2500 CLASS ANSI B16.5	23 - 41
RING JOINT FACE DIMENSIONS	42
BORE DIAMETRE FOR FLANGES ANSI B16.5	43

BUTT WELDING FITTINGS



CAPS

ELBOWS

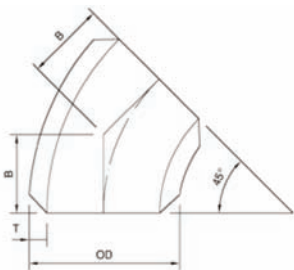
REDUCERS

TEES

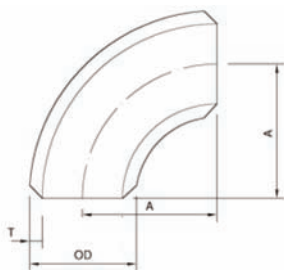
All Bevelled to ANSI B16.25



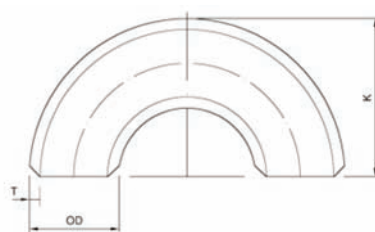
LONG AND SHORT RADIUS ELBOWS DIMENSIONS



45D Elbow
ANSI B16.9 / B16.28



90D Elbow
ANSI B16.9 / B16.28

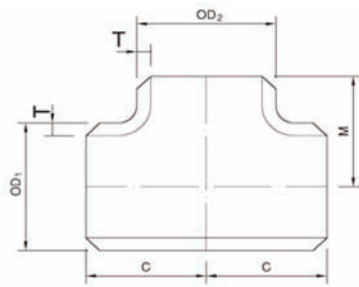


180D Elbow
ANSI B16.9 / B16.28

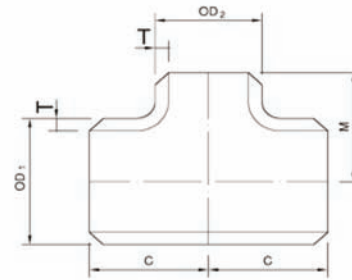
SIZE		OUTSIDE DIAMETER OD	LONG RADIUS (ANSI B16.9)			SHORT RADIUS (ANSI B16.28)		
			45D	90D	180D	45D	90D	180D
			Centre to End B	Centre to End A	Back to Face K	Centre to End B	Centre to End A	Back to Face K
mm	inch	mm	mm					
15	½	21.30	16.00	38.00	48.00	---	---	---
20	¾	26.70	19.00	38.00	51.00	---	---	---
25	1	33.40	22.00	38.00	56.00	---	25.40	41.10
32	1¼	42.40	25.00	48.00	70.00	---	31.80	52.30
40	1½	48.30	29.00	57.00	83.00	---	38.10	62.00
50	2	60.30	35.00	76.00	106.00	---	50.80	81.00
65	2½	73.00	44.00	95.00	132.00	---	63.50	100.10
80	3	88.90	51.00	114.00	159.00	31.60	76.20	120.70
90	3½	101.60	57.00	133.00	184.00	36.80	88.90	139.70
100	4	114.30	64.00	152.00	210.00	42.10	101.60	158.80
125	5	141.30	79.00	190.00	262.00	52.60	127.00	196.90
150	6	168.30	95.00	229.00	313.00	63.40	152.40	236.50
200	8	219.10	127.00	305.00	414.00	84.20	203.20	312.70
250	10	273.00	159.00	381.00	518.00	105.20	254.00	390.70
300	12	323.80	190.00	457.00	619.00	126.30	304.80	466.90
350	14	355.60	222.00	533.00	711.00	147.30	355.60	533.40
400	16	406.40	254.00	610.00	813.00	168.30	406.40	609.60
450	18	457.00	286.00	686.00	914.00	189.40	457.20	685.80
500	20	508.00	318.00	762.00	1016.00	210.40	508.00	732.00
550	22	559.00	343.00	838.00	1118.00	231.50	558.80	838.20
600	24	610.00	381.00	914.00	1219.00	252.50	609.60	914.40
650	26	660.40	406.00	991.00	---	273.50	660.00	---
700	28	711.00	438.00	1067.00	---	294.60	711.20	---
750	30	762.00	470.00	1143.00	---	315.60	762.00	---
800	32	813.00	502.00	1219.00	---	378.10	812.80	---
850	34	864.00	533.00	1295.00	---	357.70	863.60	---
900	36	914.00	565.00	1372.00	---	378.80	914.40	---
950	38	965.00	600.00	1448.00	---	---	965.00	---
1000	40	1016.00	632.00	1524.00	---	420.80	1016.00	---
1050	42	1067.00	660.00	1600.00	---	441.90	1066.80	---
1100	44	1117.60	695.00	1676.00	---	462.90	1117.60	---
1150	46	1168.40	727.00	1753.00	---	---	1168.00	---
1200	48	1219.20	759.00	1829.00	---	505.00	1219.00	---



STRAIGHT AND REDUCING TEES DIMENSIONS



Straight



Reducing

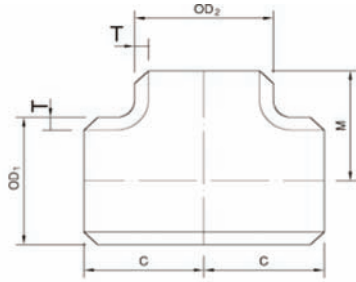
ANSI B16.9

SIZE		OUTSIDE DIAMETER		RUN	OUT-LET
mm	inch	OD1	OD2	C	M
15	½	21.30	21.30	25.00	25.00
20	¾	26.70	26.70	29.00	29.00
20 x 20 x 15	¾ x ¾ x ½	26.70	21.30	29.00	29.00
25	1	33.40	33.40	38.00	38.00
25 x 25 x 20	1 x 1 x ¾	33.40	26.70	38.00	38.00
25 x 25 x 15	1 x 1 x ½	33.40	21.30	38.00	38.00
32	1¼	42.20	42.20	48.00	48.00
32 x 32 x 25	1¼ x 1¼ x 1	42.20	33.40	48.00	48.00
32 x 32 x 20	1¼ x 1¼ x ¾	42.20	26.70	48.00	48.00
32 x 32 x 15	1¼ x 1¼ x ½	42.20	21.30	48.00	48.00
40	1½	48.30	48.30	57.00	57.00
40 x 40 x 32	1½ x 1½ x 1¼	48.30	42.20	57.00	57.00
40 x 40 x 25	1½ x 1½ x 1	48.30	33.40	57.00	57.00
40 x 40 x 20	1½ x 1½ x ¾	48.30	26.70	57.00	57.00
40 x 40 x 15	1½ x 1½ x ½	48.30	21.30	57.00	57.00
50	2	60.30	60.30	64.00	64.00
50 x 50 x 40	2 x 2 x 1½	60.30	48.30	64.00	60.00
50 x 50 x 32	2 x 2 x 1¼	60.30	42.20	64.00	57.00
50 x 50 x 25	2 x 2 x 1	60.30	33.40	64.00	51.00
50 x 50 x 20	2 x 2 x ¾	60.30	26.70	64.00	44.00
60	2½	73.00	73.00	76.00	76.00
60 x 60 x 50	2½ x 2½ x 2	73.00	60.30	76.00	70.00
60 x 60 x 40	2½ x 2½ x 1½	73.00	48.30	76.00	67.00
60 x 60 x 32	2½ x 2½ x 1¼	73.00	42.20	76.00	64.00
60 x 60 x 25	2½ x 2½ x 1	73.00	33.40	76.00	57.00
80	3	88.90	88.90	86.00	86.00
80 x 80 x 65	3 x 3 x 2½	88.90	73.00	86.00	83.00
80 x 80 x 50	3 x 3 x 2	88.90	60.30	86.00	76.00
80 x 80 x 40	3 x 3 x 1½	88.90	48.30	86.00	73.00
80 x 80 x 32	3 x 3 x 1¼	88.90	42.20	86.00	70.00
90	3½	101.60	101.60	95.00	95.00
90 x 90 x 80	3½ x 3½ x 3	101.60	88.90	95.00	92.00
90 x 90 x 65	3½ x 3½ x 2½	101.60	73.00	95.00	89.00
90 x 90 x 50	3½ x 3½ x 2	101.60	60.30	95.00	83.00
90 x 90 x 40	3½ x 3½ x 1½	101.60	48.30	95.00	79.00
100	4	114.30	114.30	105.00	105.00
100 x 100 x 90	4 x 4 x 3½	114.30	101.60	105.00	102.00
100 x 100 x 80	4 x 4 x 3	114.30	88.90	105.00	98.00
100 x 100 x 65	4 x 4 x 2½	114.30	73.00	105.00	95.00
100 x 100 x 50	4 x 4 x 2	114.30	60.30	105.00	89.00
100 x 100 x 40	4 x 4 x 1½	114.30	48.30	105.00	86.00

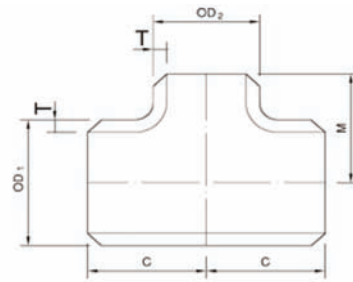
SIZE		OUTSIDE DIAMETER		RUN	OUT-LET
mm	inch	OD1	OD2	C	M
125	5	141.30	141.30	124.00	124.00
125 x 125 x 100	5 x 5 x 4	141.30	114.30	124.00	117.00
125 x 125 x 90	5 x 5 x 3½	141.30	101.60	124.00	114.00
125 x 125 x 80	5 x 5 x 3	141.30	88.90	124.00	111.00
125 x 125 x 65	5 x 5 x 2½	141.30	73.00	124.00	108.00
125 x 125 x 50	5 x 5 x 2	141.30	60.30	124.00	105.00
150	6	168.30	168.30	143.00	143.00
150 x 150 x 125	6 x 6 x 5	168.30	141.30	143.00	137.00
150 x 150 x 100	6 x 6 x 4	168.30	114.30	143.00	130.00
150 x 150 x 90	6 x 6 x 3½	168.30	101.60	143.00	127.00
150 x 150 x 80	6 x 6 x 3	168.30	88.90	143.00	124.00
150 x 150 x 65	6 x 6 x 2½	168.30	73.00	143.00	121.00
200	8	219.10	219.10	178.00	178.00
200 x 200 x 150	8 x 8 x 6	219.10	168.30	178.00	168.00
200 x 200 x 125	8 x 8 x 5	219.10	141.30	178.00	162.00
200 x 200 x 100	8 x 8 x 4	219.10	114.30	178.00	156.00
200 x 200 x 90	8 x 8 x 3½	219.10	101.60	178.00	152.00
250	10	273.10	273.10	216.00	216.00
250 x 250 x 200	10 x 10 x 8	273.10	219.10	216.00	203.00
250 x 250 x 150	10 x 10 x 6	273.10	168.30	216.00	194.00
250 x 250 x 125	10 x 10 x 5	273.10	141.30	216.00	191.00
250 x 250 x 100	10 x 10 x 4	273.10	114.30	216.00	184.00
300	12	323.90	323.90	254.00	254.00
300 x 300 x 250	12 x 12 x 10	323.90	273.10	254.00	241.00
300 x 300 x 200	12 x 12 x 8	323.90	219.10	254.00	229.00
300 x 300 x 150	12 x 12 x 6	323.90	168.30	254.00	219.00
300 x 300 x 125	12 x 12 x 5	323.90	141.30	254.00	216.00
350	14	355.60	355.60	279.00	279.00
350 x 350 x 300	14 x 14 x 12	355.60	323.90	279.00	270.00
350 x 350 x 250	14 x 14 x 10	355.60	273.10	279.00	257.00
350 x 350 x 200	14 x 14 x 8	355.60	219.10	279.00	248.00
350 x 350 x 150	14 x 14 x 6	355.60	168.30	279.00	238.00
400	16	406.40	406.40	305.00	305.00
400 x 400 x 350	16 x 16 x 14	406.40	355.60	305.00	305.00
400 x 400 x 300	16 x 16 x 12	406.40	323.90	305.00	295.00
400 x 400 x 250	16 x 16 x 10	406.40	273.10	305.00	283.00
400 x 400 x 200	16 x 16 x 8	406.40	219.10	305.00	273.00
400 x 400 x 150	16 x 16 x 6	406.40	168.30	305.00	264.00



STRAIGHT AND REDUCING TEES DIMENSIONS



Straight



Reducing

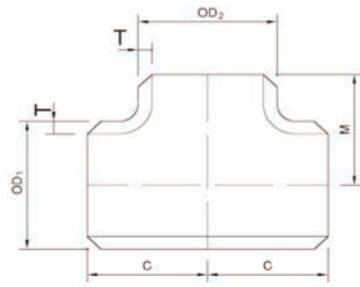
ANSI B16.9

SIZE		OUTSIDE DIAMETER		RUN	OUT-LET
mm	inch	OD1	OD2	C	M
450	18	457.20	457.20	343.00	343.00
450 x 450 x 400	18 x 18 x 16	457.20	406.40	343.00	330.00
450 x 450 x 350	18 x 18 x 14	457.20	355.60	343.00	330.00
450 x 450 x 300	18 x 18 x 12	457.20	323.90	343.00	321.00
450 x 450 x 250	18 x 18 x 10	457.20	273.10	343.00	308.00
450 x 450 x 200	18 x 18 x 8	457.20	219.10	343.00	298.00
500	20	508.00	508.00	381.00	381.00
500 x 500 x 450	20 x 20 x 18	508.00	457.20	381.00	368.00
500 x 500 x 400	20 x 20 x 16	508.00	406.40	381.00	356.00
500 x 500 x 350	20 x 20 x 14	508.00	355.60	381.00	356.00
500 x 500 x 300	20 x 20 x 12	508.00	323.90	381.00	346.00
500 x 500 x 250	20 x 20 x 10	508.00	273.00	381.00	333.00
500 x 500 x 200	20 x 20 x 8	508.00	219.10	381.00	324.00
600	24	609.40	609.40	432.00	432.00
600 x 600 x 500	24 x 24 x 20	609.40	508.00	432.00	432.00
600 x 600 x 450	24 x 24 x 18	609.40	457.20	432.00	419.00
600 x 600 x 400	24 x 24 x 16	609.40	406.40	432.00	406.00
600 x 600 x 350	24 x 24 x 14	609.40	355.60	432.00	406.00
600 x 600 x 300	24 x 24 x 12	609.40	323.90	432.00	397.00
600 x 600 x 200	24 x 24 x 10	609.40	273.10	432.00	384.00
650	26	660.40	660.40	495.00	495.00
650 x 650 x 600	26 x 26 x 24	660.40	609.40	495.00	483.00
650 x 650 x 500	26 x 26 x 20	660.40	508.00	495.00	457.00
650 x 650 x 450	26 x 26 x 18	660.40	457.20	495.00	444.00
650 x 650 x 400	26 x 26 x 16	660.40	406.40	495.00	432.00
650 x 650 x 350	26 x 26 x 14	660.40	355.60	495.00	432.00
650 x 650 x 300	26 x 26 x 12	660.40	323.90	495.00	422.00
700	28	711.20	711.20	521.00	521.00
700 x 700 x 650	28 x 28 x 26	711.20	660.40	521.00	521.00
700 x 700 x 600	28 x 28 x 24	711.20	609.40	521.00	508.00
700 x 700 x 500	28 x 28 x 20	711.20	508.00	521.00	483.00
700 x 700 x 450	28 x 28 x 18	711.20	457.20	521.00	470.00
700 x 700 x 400	28 x 28 x 16	711.20	406.40	521.00	457.00
700 x 700 x 350	28 x 28 x 14	711.20	355.60	521.00	457.00
700 x 700 x 300	28 x 28 x 12	711.20	323.90	521.00	448.00
750	30	762.00	762.00	559.00	559.00
750 x 750 x 700	30 x 30 x 28	762.00	711.20	559.00	546.00
750 x 750 x 650	30 x 30 x 26	762.00	660.40	559.00	546.00
750 x 750 x 600	30 x 30 x 24	762.00	609.40	559.00	533.00
750 x 750 x 500	30 x 30 x 20	762.00	508.00	559.00	508.00
750 x 750 x 450	30 x 30 x 18	762.00	457.20	559.00	495.00
750 x 750 x 400	30 x 30 x 16	762.00	406.40	559.00	483.00
750 x 750 x 350	30 x 30 x 14	762.00	355.60	559.00	483.00
750 x 750 x 300	30 x 30 x 12	762.00	323.90	559.00	473.00

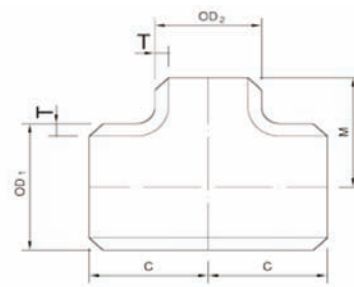
SIZE		OUTSIDE DIAMETER		RUN	OUT-LET
mm	inch	OD1	OD2	C	M
800	32	812.80	812.80	597.00	597.00
800 x 800 x 750	32 x 32 x 30	812.80	762.00	597.00	584.00
800 x 800 x 700	32 x 32 x 28	812.80	711.20	597.00	572.00
800 x 800 x 650	32 x 32 x 26	812.80	660.40	597.00	572.00
800 x 800 x 600	32 x 32 x 24	812.80	609.40	597.00	559.00
800 x 800 x 500	32 x 32 x 20	812.80	508.00	597.00	533.00
800 x 800 x 450	32 x 32 x 18	812.80	457.20	597.00	521.00
800 x 800 x 400	32 x 32 x 16	812.80	406.40	597.00	508.00
800 x 800 x 350	32 x 32 x 14	812.80	355.60	597.00	508.00
850	34	863.60	863.60	635.00	635.00
850 x 850 x 800	34 x 34 x 32	863.60	812.80	635.00	622.00
850 x 850 x 750	34 x 34 x 30	863.60	762.00	635.00	610.00
850 x 850 x 700	34 x 34 x 28	863.60	711.20	635.00	597.00
850 x 850 x 650	34 x 34 x 26	863.60	660.40	635.00	597.00
850 x 850 x 600	34 x 34 x 24	863.60	609.40	635.00	584.00
850 x 850 x 500	34 x 34 x 22	863.60	508.00	635.00	559.00
850 x 850 x 450	34 x 34 x 20	863.60	457.20	635.00	546.00
850 x 850 x 400	34 x 34 x 18	863.60	406.40	635.00	533.00
900	36	914.40	914.40	673.00	673.00
900 x 900 x 850	36 x 36 x 34	914.40	863.60	673.00	660.00
900 x 900 x 800	36 x 36 x 32	914.40	812.80	673.00	648.00
900 x 900 x 750	36 x 36 x 30	914.40	762.00	673.00	635.00
900 x 900 x 700	36 x 36 x 28	914.40	711.20	673.00	622.00
900 x 900 x 650	36 x 36 x 26	914.40	660.40	673.00	622.00
900 x 900 x 600	36 x 36 x 24	914.40	609.40	673.00	610.00
900 x 900 x 500	36 x 36 x 20	914.40	508.00	673.00	584.00
900 x 900 x 450	36 x 36 x 18	914.40	457.20	673.00	572.00
900 x 900 x 400	36 x 36 x 16	914.40	406.40	673.00	559.00
950	38	965.20	965.20	711.00	711.00
950 x 950 x 900	38 x 38 x 36	965.20	914.40	711.00	711.00
950 x 950 x 850	38 x 38 x 34	965.20	863.60	711.00	698.00
950 x 950 x 800	38 x 38 x 32	965.20	812.80	711.00	686.00
950 x 950 x 750	38 x 38 x 30	965.20	762.00	711.00	673.00
950 x 950 x 700	38 x 38 x 28	965.20	711.20	711.00	648.00
950 x 950 x 650	38 x 38 x 26	965.20	660.40	711.00	648.00
950 x 950 x 600	38 x 38 x 24	965.20	609.40	711.00	635.00
950 x 950 x 500	38 x 38 x 20	965.20	508.00	711.00	610.00
950 x 950 x 450	38 x 38 x 18	965.20	457.20	711.00	597.00



STRAIGHT AND REDUCING TEES DIMENSIONS



Straight



Reducing

ANSI B16.9

SIZE		OUTSIDE DIAMETER		RUN	OUT-LET
mm	inch	OD1	OD2	C	M
1000	40	1016.00	1016.00	749.00	749.00
1000 x 1000 x 950	40 x 40 x 38	1016.00	965.20	749.00	749.00
1000 x 1000 x 900	40 x 40 x 36	1016.00	914.40	749.00	737.00
1000 x 1000 x 850	40 x 40 x 34	1016.00	863.60	749.00	724.00
1000 x 1000 x 800	40 x 40 x 32	1016.00	812.80	749.00	711.00
1000 x 1000 x 750	40 x 40 x 30	1016.00	762.00	749.00	698.00
1000 x 1000 x 700	40 x 40 x 28	1016.00	711.20	749.00	673.00
1000 x 1000 x 600	40 x 40 x 26	1016.00	660.40	749.00	673.00
1000 x 1000 x 600	40 x 40 x 24	1016.00	609.40	749.00	660.00
1000 x 1000 x 500	40 x 40 x 20	1016.00	508.00	749.00	635.00
1000 x 1000 x 450	40 x 40 x 18	1016.00	457.20	749.00	622.00
1050	42	1066.80	1066.80	762.00	711.00
1050 x 1050 x 1000	42 x 42 x 40	1066.80	1016.00	762.00	711.00
1050 x 1050 x 950	42 x 42 x 38	1066.80	965.20	762.00	711.00
1050 x 1050 x 900	42 x 42 x 36	1066.80	914.40	762.00	711.00
1050 x 1050 x 850	42 x 42 x 34	1066.80	863.60	762.00	711.00
1050 x 1050 x 800	42 x 42 x 32	1066.80	812.80	762.00	711.00
1050 x 1050 x 750	42 x 42 x 30	1066.80	762.00	762.00	711.00
1050 x 1050 x 700	42 x 42 x 28	1066.80	711.20	762.00	698.00
1050 x 1050 x 650	42 x 42 x 26	1066.80	660.40	762.00	698.00
1050 x 1050 x 600	42 x 42 x 24	1066.80	609.40	762.00	660.00
1050 x 1050 x 500	42 x 42 x 20	1066.80	508.00	762.00	660.00
1050 x 1050 x 450	42 x 42 x 18	1066.80	457.20	762.00	648.00
1050 x 1050 x 400	42 x 42 x 16	1066.80	406.40	762.00	635.00
1100	44	1117.60	1117.60	813.00	762.00
1100 x 1100 x 1050	44 x 44 x 42	1117.60	1066.80	813.00	762.00
1100 x 1100 x 1000	44 x 44 x 40	1117.60	1016.00	813.00	749.00
1100 x 1100 x 950	44 x 44 x 38	1117.60	965.20	813.00	737.00
1100 x 1100 x 900	44 x 44 x 36	1117.60	914.40	813.00	724.00
1100 x 1100 x 850	44 x 44 x 34	1117.60	863.60	813.00	724.00
1100 x 1100 x 800	44 x 44 x 32	1117.60	812.80	813.00	711.00
1100 x 1100 x 750	44 x 44 x 30	1117.60	762.00	813.00	711.00
1100 x 1100 x 700	44 x 44 x 28	1117.60	711.20	813.00	698.00
1100 x 1100 x 650	44 x 44 x 26	1117.60	660.40	813.00	698.00
1100 x 1100 x 600	44 x 44 x 24	1117.60	609.40	813.00	698.00
1100 x 1100 x 500	44 x 44 x 20	1117.60	508.00	813.00	686.00

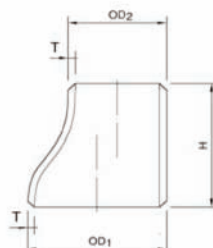
SIZE		OUTSIDE DIAMETER		RUN	OUT-LET
mm	inch	OD1	OD2	C	M
1150	46	1168.40	1168.40	851.00	800.00
1150 x 1150 x 1100	46 x 46 x 44	1168.40	1117.60	851.00	800.00
1150 x 1150 x 1050	46 x 46 x 42	1168.40	1066.80	851.00	787.00
1150 x 1150 x 1000	46 x 46 x 40	1168.40	1016.00	851.00	775.00
1150 x 1150 x 950	46 x 46 x 38	1168.40	965.20	851.00	762.00
1150 x 1150 x 900	46 x 46 x 36	1168.40	914.40	851.00	762.00
1150 x 1150 x 850	46 x 46 x 34	1168.40	863.60	851.00	749.00
1150 x 1150 x 800	46 x 46 x 32	1168.40	812.80	851.00	749.00
1150 x 1150 x 750	46 x 46 x 30	1168.40	762.00	851.00	737.00
1150 x 1150 x 700	46 x 46 x 28	1168.40	711.20	851.00	737.00
1150 x 1150 x 650	46 x 46 x 26	1168.40	660.40	851.00	737.00
1150 x 1150 x 600	46 x 46 x 24	1168.40	609.40	851.00	724.00
1200	48	1219.20	1219.20	889.00	838.00
1200 x 1200 x 1150	48 x 48 x 46	1219.20	1168.40	889.00	838.00
1200 x 1200 x 1100	48 x 48 x 44	1219.20	1117.60	889.00	838.00
1200 x 1200 x 1050	48 x 48 x 42	1219.20	1066.80	889.00	813.00
1200 x 1200 x 1000	48 x 48 x 40	1219.20	1016.00	889.00	813.00
1200 x 1200 x 950	48 x 48 x 38	1219.20	965.20	889.00	813.00
1200 x 1200 x 900	48 x 48 x 36	1219.20	914.40	889.00	787.00
1200 x 1200 x 850	48 x 48 x 34	1219.20	863.60	889.00	787.00
1200 x 1200 x 800	48 x 48 x 32	1219.20	812.80	889.00	787.00
1200 x 1200 x 750	48 x 48 x 30	1219.20	762.00	889.00	762.00
1200 x 1200 x 700	48 x 48 x 28	1219.20	711.20	889.00	762.00
1200 x 1200 x 650	48 x 48 x 26	1219.20	660.40	889.00	762.00
1200 x 1200 x 600	48 x 48 x 24	1219.20	609.40	889.00	737.00



CONCENTRIC AND ECCENTRIC REDUCERS DIMENSIONS



Concentric



Eccentric

ANSI B16.9

SIZE		OUTSIDE DIAMETER		HEIGHT
mm	inch	OD1	OD2	H
20 x 8	¾ x ¼	26.70	13.70	38.00
20 x 15	¾ x ½	26.70	21.30	38.00
25 x 20	1 x ¾	33.40	26.70	51.00
25 x 15	1 x ½	33.40	21.30	51.00
32 x 25	1¼ x 1	42.20	33.40	51.00
32 x 20	1¼ x ¾	42.20	26.70	51.00
32 x 15	1¼ x ½	42.20	21.30	51.00
40 x 32	1½ x 1¼	48.30	42.20	64.00
40 x 25	1½ x 1	48.30	33.40	64.00
40 x 20	1½ x ¾	48.30	26.70	64.00
40 x 15	1½ x ½	48.30	21.30	64.00
50 x 40	2 x 1½	60.30	48.30	76.00
50 x 32	2 x 1¼	60.30	42.20	76.00
50 x 25	2 x 1	60.30	33.40	76.00
50 x 20	2 x ¾	60.30	26.70	76.00
50 x 15	2 x ½	60.30	21.30	76.00
65 x 50	2½ x 2	73.00	60.30	89.00
65 x 40	2½ x 1½	73.00	48.30	89.00
65 x 32	2½ x 1¼	73.00	42.20	89.00
65 x 25	2½ x 1	73.00	33.40	89.00
80 x 65	3 x 2½	88.90	73.00	89.00
80 x 50	3 x 2	88.90	60.30	89.00
80 x 40	3 x 1½	88.90	48.30	89.00
80 x 32	3 x 1¼	88.90	42.20	89.00
80 x 25	3 x 1	88.90	33.40	89.00
90 x 80	3½ x 3	101.60	88.90	102.00
90 x 65	3½ x 2½	101.60	73.00	102.00
90 x 50	3½ x 2	101.60	60.30	102.00
90 x 45	3½ x 1½	101.60	48.30	102.00
90 x 32	3½ x 1¼	101.60	42.40	102.00
100 x 90	4 x 3½	114.30	101.60	102.00
100 x 80	4 x 3	114.30	88.90	102.00
100 x 65	4 x 2½	114.30	73.00	102.00
100 x 50	4 x 2	114.30	60.30	102.00
100 x 40	4 x 1½	114.30	48.30	102.00

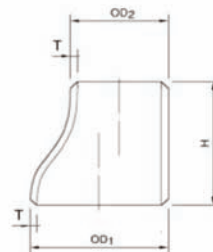
SIZE		OUTSIDE DIAMETER		HEIGHT
mm	inch	OD1	OD2	H
125 x 100	5 x 4	141.30	114.30	127.00
125 x 90	50 x 3½	141.30	101.60	127.00
125 x 80	5 x 3	141.30	88.90	127.00
125 x 65	5 x 2½	141.30	73.00	127.00
125 x 50	5 x 2	141.30	60.30	127.00
150 x 125	6 x 5	168.30	141.30	140.00
150 x 100	6 x 4	168.30	114.30	140.00
150 x 90	6 x 3½	168.30	101.60	140.00
150 x 80	6 x 3	168.30	88.90	140.00
150 x 65	6 x 2½	168.30	73.00	140.00
150 x 50	6 x 2	168.30	60.30	140.00
200 x 150	8 x 6	219.10	168.30	152.00
200 x 125	8 x 5	219.10	141.30	152.00
200 x 100	8 x 4	219.10	114.30	152.00
200 x 90	8 x 3½	219.10	101.60	152.00
200 x 80	8 x 3	219.10	88.90	152.00
250 x 200	10 x 8	273.10	219.10	178.00
250 x 150	10 x 6	273.10	168.30	178.00
250 x 125	10 x 5	273.10	141.30	178.00
250 x 100	10 x 4	273.10	114.30	178.00
300 x 250	12 x 10	323.90	273.10	203.00
300 x 200	12 x 8	323.90	219.10	203.00
300 x 150	12 x 6	323.90	168.30	203.00
300 x 125	12 x 5	323.90	141.30	203.00
350 x 300	14 x 12	355.60	323.90	330.00
350 x 250	14 x 10	355.60	273.10	330.00
350 x 200	14 x 8	355.60	219.10	330.00
350 x 150	14 x 6	355.60	168.30	330.00
400 x 350	16 x 14	406.40	355.60	356.00
400 x 300	16 x 12	406.40	323.90	356.00
400 x 250	16 x 10	406.40	273.10	356.00
400 x 200	16 x 8	406.40	219.10	356.00



CONCENTRIC AND ECCENTRIC REDUCERS DIMENSIONS



Concentric



Eccentric

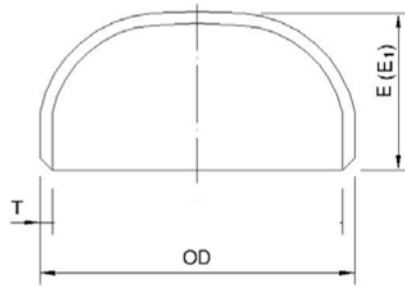
ANSI B16.9

SIZE		OUTSIDE DIAMETER		HEIGHT
mm	inch	OD1	OD2	H
450 x 400	18 x 16	457.20	406.40	381.00
450 x 350	18 x 14	457.20	355.60	381.00
450 x 300	18 x 12	457.20	323.90	381.00
450 x 250	18 x 10	457.20	273.10	381.00
500 x 450	20 x 18	508.00	457.20	508.00
500 x 400	20 x 16	508.00	406.40	508.00
500 x 350	20 x 14	508.00	355.60	508.00
500 x 300	20 x 12	508.00	323.90	508.00
600 x 500	24 x 20	609.40	508.00	508.00
600 x 450	24 x 18	609.40	457.20	508.00
600 x 400	24 x 16	609.40	406.40	508.00
600 x 350	24 x 14	609.40	355.60	508.00
650 x 600	26 x 24	660.40	609.40	610.00
650 x 500	26 x 20	660.40	508.00	610.00
650 x 450	26 x 18	660.40	457.20	610.00
650 x 400	26 x 16	660.40	406.40	610.00
700 x 650	28 x 26	711.20	660.40	610.00
700 x 600	28 x 24	711.20	609.40	610.00
700 x 500	28 x 20	711.20	508.00	610.00
700 x 450	28 x 18	711.20	457.20	610.00
750 x 700	30 x 28	762.00	711.20	610.00
750 x 650	30 x 26	762.00	660.40	610.00
750 x 600	30 x 24	762.00	609.40	610.00
750 x 500	30 x 20	762.00	508.00	610.00
800 x 750	32 x 30	812.80	762.00	610.00
800 x 700	32 x 28	812.80	711.20	610.00
800 x 650	32 x 26	812.80	660.40	610.00
800 x 600	32 x 24	812.80	609.40	610.00
850 x 800	34 x 32	863.60	812.80	610.00
850 x 750	34 x 30	863.60	762.00	610.00
850 x 700	34 x 28	863.60	711.20	610.00
850 x 650	34 x 26	863.60	660.40	610.00
900 x 850	36 x 34	914.40	863.60	610.00
900 x 800	36 x 32	914.40	812.80	610.00
900 x 750	36 x 30	914.40	762.00	610.00
900 x 700	36 x 28	914.40	711.20	610.00

SIZE		OUTSIDE DIAMETER		HEIGHT
mm	inch	OD1	OD2	H
950 x 900	38 x 36	965.20	914.40	610.00
950 x 850	38 x 34	965.20	863.60	610.00
950 x 800	38 x 32	965.20	812.80	610.00
950 x 750	38 x 30	965.20	762.00	610.00
1000 x 950	40 x 38	1016.00	965.20	610.00
1000 x 900	40 x 36	1016.00	914.40	610.00
1000 x 850	40 x 34	1016.00	863.60	610.00
1000 x 800	40 x 32	1016.00	812.80	610.00
1050 x 1000	42 x 40	1066.80	1016.00	610.00
1050 x 950	42 x 38	1066.80	965.20	610.00
1050 x 900	42 x 36	1066.80	914.40	610.00
1050 x 850	42 x 34	1066.80	863.60	610.00
1100 x 1050	44 x 42	1117.60	1066.80	610.00
1100 x 1000	44 x 40	1117.60	1016.00	610.00
1100 x 950	44 x 38	1117.60	965.20	610.00
1100 x 900	44 x 36	1117.60	914.40	610.00
1150 x 1100	46 x 44	1168.40	1117.60	711.00
1150 x 1050	46 x 42	1168.40	1066.80	711.00
1150 x 1000	46 x 40	1168.40	1016.00	711.00
1150 x 950	46 x 38	1168.40	965.20	711.00
1200 x 1150	48 x 46	1219.20	1168.40	711.00
1200 x 1100	48 x 44	1219.20	1117.60	711.00
1200 x 1050	48 x 42	1219.20	1066.80	711.00
1200 x 1000	48 x 40	1219.20	1016.00	711.00

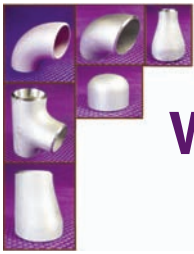


CAPS DIMENSIONS



ANSI B16.9

SIZE		OD	HEIGHT	
mm	inch	mm	E	E1
15	½	21.30	25.40	25.40
20	¾	26.90	25.40	25.40
25	1	33.70	38.10	38.10
32	1¼	42.40	38.10	38.10
40	1½	48.30	38.10	38.10
50	2	60.30	38.10	44.40
65	2½	73.00	38.10	50.80
80	3	88.90	50.80	63.50
90	3½	101.60	63.50	76.20
100	4	114.30	63.50	76.20
125	5	139.70	76.20	88.90
150	6	168.30	88.90	101.60
200	8	219.10	101.60	127.00
250	10	273.00	127.00	152.40
300	12	323.90	152.40	177.80
350	14	355.60	165.10	190.50
400	16	406.40	177.80	203.20
450	18	457.00	203.20	228.60
500	20	508.00	228.60	254.00
550	22	558.80	254.00	254.00
600	24	610.00	266.70	304.80
650	26	660.40	266.70	---
700	28	711.00	266.70	---
750	30	762.00	266.70	---
800	32	813.00	266.70	---
850	34	863.60	266.70	---
900	36	914.00	266.70	---
950	38	965.20	304.80	---
1000	40	1016.00	304.80	---
1050	42	1067.00	304.80	---
1100	44	1117.60	342.90	---
1150	46	1168.40	342.90	---
1200	48	1219.20	342.90	---



WALL THICKNESS PIPE SCHEDULES

ANSI B16.9 / B16.28

SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	mm															
15	½	1.65	2.10	2.50	---	---	---	2.80	2.80	3.20	3.70	3.70	---	---	---	4.78	7.50
20	¾	1.65	2.10	2.50	---	---	---	2.90	2.90	3.40	3.90	3.90	---	---	---	5.50	7.80
25	1	1.65	2.80	3.00	---	---	---	3.40	3.40	3.90	4.55	4.55	---	---	---	6.40	9.10
32	1¼	1.65	2.80	3.00	---	---	---	3.60	3.60	4.50	4.90	4.90	---	---	---	6.40	9.70
40	1½	1.65	2.80	3.00	---	---	---	3.70	3.70	4.50	5.10	5.10	---	---	---	7.14	10.20
50	2	1.85	2.80	3.50	---	---	---	3.90	3.90	4.90	5.54	5.54	---	---	---	8.70	11.10
65	2½	2.10	3.00	3.50	---	---	---	5.50	5.50	6.00	7.00	7.00	---	---	---	9.53	14.00
80	3	2.10	3.00	4.00	---	---	---	5.74	5.74	6.60	7.60	7.60	---	---	---	11.13	15.24
90	3½	2.10	3.00	4.00	---	---	---	5.70	5.70	7.00	8.10	8.10	---	---	---	12.70	---
100	4	2.10	3.00	4.00	---	---	---	6.00	6.00	7.10	8.60	8.60	---	11.10	---	13.50	17.10
125	5	2.80	3.40	5.00	---	---	---	6.60	6.60	8.10	9.50	9.50	---	12.70	---	15.90	19.00
150	6	2.80	3.40	5.00	---	---	---	7.10	7.10	9.30	11.00	11.00	---	14.30	---	18.26	21.90
200	8	2.80	3.80	6.50	---	6.40	7.00	8.20	8.20	10.30	12.70	12.70	15.10	18.26	20.60	23.00	22.20
250	10	3.40	4.20	6.50	---	6.40	7.80	9.30	9.30	12.70	12.70	15.10	18.30	21.44	25.40	28.60	25.40
300	12	4.00	4.60	6.50	---	6.40	8.40	9.50	10.30	14.30	12.70	17.48	21.44	25.40	28.80	33.30	25.40
350	14	4.00	4.80	7.90	6.40	7.90	9.50	9.50	11.10	15.10	12.70	19.05	23.80	27.80	31.80	35.70	---
400	16	4.20	4.80	7.90	6.40	7.90	9.50	9.50	12.70	16.70	12.70	21.44	26.20	30.96	36.50	40.50	---
450	18	4.20	4.80	7.90	6.40	7.90	11.10	9.50	14.30	19.05	12.70	23.80	29.40	34.90	39.70	45.24	---
500	20	4.80	5.50	7.90	6.40	9.50	12.70	9.50	15.10	20.60	12.70	26.20	32.54	38.10	44.45	50.00	---
550	22	---	---	---	6.40	9.50	12.70	9.50	---	22.20	12.70	28.60	34.90	41.30	47.60	54.00	---
600	24	5.50	6.40	---	6.40	9.50	14.30	9.50	17.50	24.60	12.70	31.00	38.90	46.00	52.40	59.54	---
650	26	---	---	---	7.90	12.70	---	9.50	---	---	12.70	---	---	---	---	---	---
700	28	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
750	30	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
800	32	---	---	---	7.90	12.70	15.90	9.50	17.50	---	12.70	---	---	---	---	---	---
850	34	---	---	---	7.90	12.70	15.90	9.50	17.50	---	12.70	---	---	---	---	---	---
900	36	---	---	---	7.90	12.70	15.90	9.50	19.10	---	12.70	---	---	---	---	---	---
950	38	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1000	40	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1050	42	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1100	44	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1150	46	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1200	48	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1250	50	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1300	52	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1350	54	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1400	56	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1450	58	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1500	60	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1600	62	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---
1650	64	---	---	---	7.90	12.70	15.90	9.50	---	---	12.70	---	---	---	---	---	---



ELBOWS WEIGHT LIST

ANSI B16.9 / B16.28

45D LR																	
SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
15	½	0.03	0.03	0.04	---	---	---	0.04	0.04	0.05	0.05	0.05	---	---	---	0.06	0.08
20	¾	0.03	0.04	0.05	---	---	---	0.05	0.05	0.06	0.07	0.07	---	---	---	0.09	0.11
25	1	0.04	0.07	0.07	---	---	---	0.06	0.08	0.09	0.10	0.10	---	---	---	0.13	0.17
32	1¼	0.06	0.11	0.11	---	---	---	0.13	0.13	0.16	0.17	0.17	---	---	---	0.22	0.30
40	1½	0.09	0.14	0.15	---	---	---	0.18	0.18	0.22	0.25	0.25	---	---	---	0.33	0.43
50	2	0.14	0.24	0.29	---	---	---	0.33	0.33	0.40	0.45	0.45	---	---	---	0.66	0.81
65	2½	0.28	0.39	0.45	---	---	---	0.65	0.65	0.74	0.85	0.85	---	---	---	1.11	1.52
80	3	0.40	0.57	0.75	---	---	---	1.01	1.01	1.20	1.37	1.37	---	---	---	1.91	2.47
90	3¾	0.54	0.76	1.01	---	---	---	1.41	1.41	1.71	1.95	1.95	---	---	---	2.91	---
100	4	0.70	0.98	1.30	---	---	---	1.91	1.91	2.24	2.68	2.68	---	3.37	---	4.01	4.89
125	5	1.43	1.73	2.51	---	---	---	3.27	3.27	3.97	4.61	4.61	---	6.01	---	7.34	8.55
150	6	2.06	2.49	3.62	---	---	---	5.07	5.07	6.56	7.67	7.67	---	9.76	---	12.11	14.22
200	8	3.58	4.83	8.16	---	8.04	8.76	10.21	10.21	12.70	15.48	15.48	18.19	21.59	24.15	26.63	25.81
250	10	6.76	8.33	12.78	---	12.58	15.25	18.08	18.08	24.38	24.38	28.72	34.38	39.71	46.39	51.56	46.39
300	12	11.32	12.99	18.25	---	17.97	23.43	26.41	28.56	39.16	34.96	47.17	57.25	67.05	74.69	85.58	67.05
350	14	14.51	17.38	28.34	23.05	28.33	33.91	33.91	39.44	53.05	44.93	65.99	81.48	94.03	106.24	117.84	---
400	16	19.95	22.77	37.18	30.22	37.16	44.51	44.51	59.02	76.85	59.04	97.29	117.63	137.01	159.43	174.99	---
450	18	25.26	28.83	47.12	38.28	47.10	65.70	56.43	84.04	110.52	74.93	136.92	166.95	195.63	220.00	247.37	---
500	20	35.63	40.77	58.58	47.34	69.83	92.75	69.83	109.74	148.11	92.79	186.20	227.96	264.09	303.63	337.80	---
550	22	43.16	49.39	---	57.35	84.65	112.50	84.65	---	193.32	112.55	246.08	296.72	346.85	394.89	442.38	---
600	24	58.53	68.35	---	68.32	100.90	150.66	100.90	183.38	254.80	134.22	317.58	393.07	459.04	516.97	579.54	---
650	26	---	---	---	98.85	157.74	---	118.58	---	---	157.80	---	---	---	---	---	---
700	28	---	---	---	114.68	183.10	228.19	137.60	---	---	183.18	---	---	---	---	---	---
750	30	107.00	131.82	---	131.76	210.47	262.38	158.11	---	---	210.56	---	---	728.75	---	---	---
800	32	---	---	---	150.03	239.74	298.95	180.05	328.37	---	239.84	---	---	---	---	---	---
850	34	---	---	---	169.48	270.92	337.91	203.42	371.21	---	271.03	---	---	---	---	---	---
900	36	---	---	---	190.04	303.89	379.11	228.12	453.78	---	304.01	---	---	---	---	---	---
950	38	---	---	---	211.86	338.87	422.83	254.34	506.21	---	339.01	---	---	---	---	---	---
1000	40	---	---	---	234.86	375.75	468.93	281.97	---	---	375.91	---	---	---	---	---	---
1050	42	---	---	---	259.04	414.54	517.42	311.03	---	---	414.72	---	---	---	---	---	---
1100	44	---	---	---	284.31	455.08	568.09	341.40	---	---	455.26	---	---	---	---	---	---
1150	46	---	---	---	310.98	497.87	621.59	373.45	---	---	498.07	---	---	---	---	---	---
1200	48	---	---	---	338.67	542.29	677.12	406.72	---	---	542.51	---	---	---	---	---	---

45D SR																	
SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
25	1	0.03	0.04	0.05	---	---	---	0.05	0.05	0.06	0.07	0.07	---	---	---	0.09	0.11
32	1¼	0.04	0.07	0.08	---	---	---	0.09	0.09	0.11	0.12	0.12	---	---	---	0.14	0.20
40	1½	0.06	0.10	0.10	---	---	---	0.12	0.12	0.15	0.16	0.16	---	---	---	0.22	0.29
50	2	0.10	0.16	0.20	---	---	---	0.22	0.22	0.27	0.30	0.30	---	---	---	0.44	0.54
65	2½	0.19	0.26	0.30	---	---	---	0.44	0.44	0.50	0.57	0.57	---	---	---	0.74	1.02
80	3	0.27	0.38	0.50	---	---	---	0.68	0.68	0.80	0.91	0.91	---	---	---	1.28	1.65
90	3½	0.36	0.51	0.67	---	---	---	0.94	0.94	1.14	1.31	1.31	---	---	---	1.95	---
100	4	0.47	0.66	0.87	---	---	---	1.28	1.28	1.50	1.79	1.79	---	2.26	---	2.68	3.27
125	5	0.96	1.16	1.68	---	---	---	2.19	2.19	2.65	3.08	3.08	---	4.02	---	4.90	5.72
150	6	1.37	1.66	2.41	---	---	---	3.38	3.38	4.66	5.11	5.11	---	6.50	---	8.06	9.46
200	8	2.38	3.22	5.44	---	5.36	5.84	6.81	6.81	8.46	10.31	10.31	12.12	14.39	16.09	17.74	17.20
250	10	4.51	5.55	8.52	---	8.39	10.17	12.06	12.06	16.26	16.26	19.15	22.92	26.48	30.93	34.37	30.93
300	12	7.55	8.67	12.17	---	11.99	15.63	17.62	19.05	26.12	23.31	31.46	38.19	44.72	49.82	57.08	44.72
350	14	9.68	11.59	18.91	15.39	18.91	22.64	22.64	26.33	35.40	29.98	44.03	54.36	62.73	70.88	78.62	---
400	16	13.29	15.17	24.77	20.14	24.77	29.67	29.67	39.34	51.20	39.34	64.82	78.37	91.28	106.22	116.58	---
450	18	16.83	19.21	31.40	25.53	31.40	43.81	37.63	56.03	73.66	49.94	91.25	111.27	130.38	146.63	164.87	---
500	20	23.75	27.18	38.85	31.57	46.57	61.86	46.57	73.19	98.74	61.86	124.14	151.97	176.06	202.42	225.20	---
550	22	28.78	32.93	---	38.26	56.47	75.05	56.47	---	128.91	75.05	164.09	197.86	231.29	263.32	294.99	---
600	24	39.24	45.59	---	45.59	67.32	100.53	67.32	122.36	169.94	89.52	211.81	262.16	306.16	344.80	386.53	---
650	26	---	---	---	65.86	105.10	---	79.01	---	---	105.10	---	---	---	---	---	---
700	28	---	---	---	76.47	122.10	152.16	91.75	---	---	122.10	---	---	---	---	---	---
750	30	71.33	87.88	---	87.88	140.67	174.99	105.45	---	---	140.67	---	---	485.83	---	---	---
800	32	---	---	---	100.08	159.92	199.42	120.11	219.04	---	159.92	---	---	---	---	---	---
850	34	---	---	---	113.07	180.74	225.44	135.71	247.65	---	180.74	---	---	---	---	---	---
900	36	---	---	---	85.14	136.14	169.84	102.20	203.29	---	136.14	---	---	---	---	---	---
950	38	---	---	---	141.25	225.93	281.90	169.57	337.50	---	225.93	---	---	---	---	---	---
1000	40	---	---	---	156.64	250.61	312.75	188.06	---	---	250.61	---	---	---	---	---	---
1050	42	---	---	---	172.79	276.51	345.13	207.47	---	---	276.51	---	---	---	---	---	---
1100	44	---	---	---	189.66	303.58	378.97	227.75	---	---	303.58	---	---	---	---	---	---
1150	46	---	---	---	207.29	331.86	414.33	248.93	---	---	331.86	---	---	---	---	---	---
1200	48	---	---	---	225.81	361.57	451.48	271.19	---	---	361.57	---	---	---	---	---	---



ELBOWS WEIGHT LIST

ANSI B16.9 / B16.28

90D LR																	
SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
15	½	0.05	0.06	0.07	---	---	---	0.08	0.08	0.09	0.10	0.10	---	---	---	0.11	0.15
20	¾	0.06	0.08	0.09	---	---	---	0.10	0.10	0.12	0.13	0.13	---	---	---	0.17	0.22
25	1	0.08	0.13	0.13	---	---	---	0.15	0.15	0.17	0.19	0.19	---	---	---	0.25	0.33
32	1¼	0.12	0.21	0.22	---	---	---	0.26	0.26	0.32	0.34	0.34	---	---	---	0.43	0.59
40	1½	0.17	0.28	0.30	---	---	---	0.66	0.36	0.43	0.49	0.49	---	---	---	0.65	0.86
50	2	0.28	0.47	0.58	---	---	---	0.65	0.65	0.80	0.89	0.89	---	---	---	1.32	1.61
65	2½	0.55	0.77	0.89	---	---	---	1.30	1.30	1.48	1.70	1.70	---	---	---	2.22	3.04
80	3	0.80	1.14	1.50	---	---	---	2.02	2.02	2.40	2.73	2.73	---	---	---	3.81	4.94
90	3½	1.08	1.52	2.01	---	---	---	2.81	2.81	3.41	3.90	3.90	---	---	---	5.81	---
100	4	1.39	1.96	2.60	---	---	---	3.82	3.82	4.48	5.35	5.35	---	6.74	---	8.01	9.78
125	5	2.85	3.45	5.01	---	---	---	6.54	6.54	7.94	9.21	9.21	---	12.01	---	14.67	17.09
150	6	4.11	4.97	7.24	---	---	---	10.14	10.14	13.11	15.34	15.34	---	19.52	---	24.22	28.43
200	8	7.15	9.66	16.32	---	16.07	17.52	20.41	20.41	25.40	30.95	30.95	36.37	43.18	48.29	53.26	51.62
250	10	13.52	16.65	25.55	---	25.16	30.50	36.16	36.16	48.76	48.76	57.44	68.75	79.42	92.77	103.11	92.77
300	12	22.63	25.98	36.49	---	35.93	46.86	52.81	57.11	78.31	69.61	94.33	114.50	134.10	149.38	171.16	134.10
350	14	29.02	34.75	56.68	46.10	56.66	67.82	67.82	78.88	106.10	89.86	131.97	162.96	188.05	212.48	235.67	---
400	16	39.89	45.53	74.35	60.43	74.32	89.01	89.01	118.03	153.70	118.08	194.58	235.25	274.02	318.86	349.98	---
450	18	50.51	57.65	94.23	76.56	94.19	131.40	112.86	168.07	221.03	149.86	273.83	333.89	391.25	440.00	494.74	---
500	20	71.26	81.54	116.55	94.67	139.65	185.50	139.65	219.48	296.21	185.57	372.40	455.91	528.17	607.26	675.59	---
550	22	86.31	98.77	---	114.70	169.30	225.00	169.30	---	386.63	225.10	492.16	593.44	693.69	789.77	884.75	---
600	24	117.65	136.70	---	136.64	201.79	301.32	201.79	366.76	509.59	268.43	635.15	786.14	918.07	1033.93	1159.07	---
650	26	---	---	---	197.69	315.47	---	237.15	---	---	315.60	---	---	---	---	---	---
700	28	---	---	---	229.36	366.20	456.37	275.19	---	---	366.35	---	---	---	---	---	---
750	30	214.00	263.63	---	263.52	420.94	524.75	316.22	---	---	421.11	---	---	1457.50	---	---	---
800	32	---	---	---	300.05	479.48	597.89	360.10	656.74	---	479.68	---	---	---	---	---	---
850	34	---	---	---	338.95	541.84	675.81	406.83	742.41	---	542.06	---	---	---	---	---	---
900	36	---	---	---	380.07	607.77	758.21	456.24	907.55	---	606.02	---	---	---	---	---	---
950	38	---	---	---	423.71	677.73	845.65	508.67	1012.41	---	678.01	---	---	---	---	---	---
1000	40	---	---	---	469.71	751.50	937.86	563.94	---	---	751.81	---	---	---	---	---	---
1050	42	---	---	---	518.08	829.08	1034.84	622.06	---	---	829.43	---	---	---	---	---	---
1100	44	---	---	---	568.61	910.15	1136.18	682.79	---	---	910.52	---	---	---	---	---	---
1150	46	---	---	---	621.96	995.73	1243.17	746.90	---	---	996.14	---	---	---	---	---	---
1200	48	---	---	---	677.33	1084.57	1354.24	813.44	---	---	1085.01	---	---	---	---	---	---

90D SR																	
SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
25	1	0.05	0.08	0.09	---	---	---	0.10	0.10	0.11	0.13	0.13	---	---	---	0.17	0.22
32	1¼	0.08	0.14	0.15	---	---	---	0.17	0.17	0.21	0.23	0.23	---	---	---	0.28	0.39
40	1½	0.11	0.19	0.20	---	---	---	0.24	0.24	0.29	0.32	0.32	---	---	---	0.43	0.57
50	2	0.19	0.32	0.39	---	---	---	0.43	0.43	0.53	0.59	0.59	---	---	---	0.88	1.07
65	2½	0.37	0.52	0.60	---	---	---	0.87	0.87	0.99	1.14	1.14	---	---	---	1.48	2.03
80	3	0.54	0.76	1.00	---	---	---	1.35	1.35	1.60	1.82	1.82	---	---	---	2.55	3.30
90	3½	0.72	1.02	1.34	---	---	---	1.88	1.88	2.28	2.61	2.61	---	---	---	3.89	---
100	4	0.93	1.31	1.74	---	---	---	2.56	2.56	2.99	3.58	3.58	---	4.51	---	5.35	6.54
125	5	1.91	2.31	3.35	---	---	---	4.37	4.37	5.30	6.16	6.16	---	8.03	---	9.80	11.43
150	6	2.73	3.31	4.82	---	---	---	6.75	6.75	8.72	10.21	10.21	---	12.99	---	16.12	18.92
200	8	4.76	6.44	10.87	---	10.71	11.68	13.61	13.61	16.92	20.62	20.62	24.23	28.77	32.17	35.46	34.39
250	10	9.01	11.10	17.03	---	16.78	20.34	24.12	24.12	32.51	32.51	38.30	45.84	52.95	61.85	68.74	61.85
300	12	15.10	17.33	24.34	---	23.97	31.26	35.23	38.10	52.23	46.62	62.91	76.37	89.44	99.63	114.16	89.44
350	14	19.36	23.18	37.82	30.77	37.82	45.27	45.27	52.65	70.79	59.95	88.05	108.72	125.46	141.76	157.23	---
400	16	26.58	30.33	49.53	40.28	49.53	59.33	59.33	78.67	102.40	78.67	129.63	156.73	182.56	212.43	233.16	---
450	18	33.66	38.42	62.80	51.05	62.80	87.61	75.25	112.06	147.31	99.88	182.50	222.53	260.76	293.25	329.73	---
500	20	47.50	54.36	77.70	63.14	93.14	123.72	93.14	146.38	197.47	123.72	248.27	303.94	352.12	404.84	450.39	---
550	22	57.55	65.86	---	76.51	112.94	150.10	112.94	---	257.82	150.10	328.18	395.72	462.57	526.64	589.97	---
600	24	78.47	91.17	---	91.17	134.64	201.05	134.64	244.72	339.88	179.03	423.62	524.32	612.31	689.59	773.05	---
650	26	---	---	---	131.72	210.19	---	158.01	---	---	210.19	---	---	---	---	---	---
700	28	---	---	---	152.94	244.19	304.32	183.50	---	---	244.19	---	---	---	---	---	---
750	30	142.66	175.75	---	175.75	280.74	349.98	210.90	---	---	280.74	---	---	971.66	---	---	---
800	32	---	---	---	200.15	319.84	398.83	240.21	438.08	---	319.84	---	---	---	---	---	---
850	34	---	---	---	226.13	361.48	450.87	271.42	495.30	---	361.48	---	---	---	---	---	---
900	36	---	---	---	170.27	272.28	339.67	204.40	406.58	---	272.28	---	---	---	---	---	---
950	38	---	---	---	282.49	451.85	563.80	339.13	674.99	---	451.85	---	---	---	---	---	---
1000	40	---	---	---	313.27	501.21	625.50	376.12	---	---	501.21	---	---	---	---	---	---
1050	42	---	---	---	345.57	553.02	690.26	414.93	---	---	553.02	---	---	---	---	---	---
1100	44	---	---	---	379.32	607.16	757.94	455.49	---	---	607.16	---	---	---	---	---	---
1150	46	---	---	---	414.58	663.72	828.65	497.86	---	---	663.72	---	---	---	---	---	---
1200	48	---	---	---	451.62	723.14	902.95	542.37	---	---	723.14	---	---	---	---	---	---



ELBOWS WEIGHT LIST

ANSI B16.9 / B16.28

180D LR																	
SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
15	½	0.10	0.12	0.14	---	---	---	0.16	0.16	0.18	0.20	0.20	---	---	---	0.22	0.30
20	¾	0.12	0.16	0.18	---	---	---	0.20	0.20	0.24	0.26	0.26	---	---	---	0.34	0.44
25	1	0.16	0.26	0.26	---	---	---	0.30	0.30	0.34	0.38	0.38	---	---	---	0.50	0.66
32	1¼	0.24	0.42	0.44	---	---	---	0.52	0.52	0.64	0.68	0.68	---	---	---	0.86	1.18
40	1½	0.34	0.56	0.60	---	---	---	0.72	0.72	0.86	0.98	0.98	---	---	---	1.30	1.72
50	2	0.56	0.94	1.16	---	---	---	1.30	1.30	1.60	1.78	1.78	---	---	---	2.64	3.22
65	2½	1.10	1.54	1.78	---	---	---	2.60	2.60	2.96	3.40	3.40	---	---	---	4.44	6.08
80	3	1.60	2.28	3.00	---	---	---	4.04	4.04	4.80	5.46	5.46	---	---	---	7.62	9.88
90	3½	2.16	3.04	4.02	---	---	---	5.62	5.62	6.82	7.80	7.80	---	---	---	11.62	---
100	4	2.78	3.92	5.20	---	---	---	7.64	7.64	8.96	10.70	10.70	---	13.48	---	16.02	19.56
125	5	5.70	6.90	10.02	---	---	---	13.08	13.08	15.88	18.42	18.42	---	24.02	---	29.34	34.18
150	6	8.22	9.94	14.48	---	---	---	20.28	20.28	26.22	30.68	30.68	---	39.04	---	48.44	56.86
200	8	14.30	19.32	32.64	---	32.14	35.04	40.82	40.82	50.80	61.90	61.90	72.74	86.36	96.58	106.52	103.24
250	10	27.04	33.30	51.10	---	50.32	61.00	72.32	72.32	97.52	97.52	114.88	137.50	158.84	185.54	206.22	185.54
300	12	45.26	51.96	72.98	---	71.86	93.72	105.62	114.22	156.62	139.82	188.66	229.00	268.20	298.76	342.32	268.20
350	14	58.04	69.50	113.36	92.20	113.32	135.64	135.64	157.76	212.20	179.72	263.94	325.92	376.10	424.96	471.34	---
400	16	79.78	91.06	148.70	120.86	148.64	178.02	178.02	236.06	307.40	236.16	389.16	470.50	548.04	637.72	699.96	---
450	18	101.02	115.30	188.46	153.12	188.38	262.80	225.72	336.14	442.06	299.72	547.66	867.78	782.50	880.00	989.48	---
500	20	142.52	163.08	233.10	189.34	279.30	371.00	279.30	438.96	592.42	371.14	744.80	911.82	1056.34	1214.52	1351.18	---
550	22	172.62	197.54	---	229.40	338.60	450.00	338.60	---	773.26	450.20	984.32	1186.88	1387.38	1579.54	1769.50	---
600	24	235.30	273.40	---	273.28	403.58	602.64	403.58	733.52	1019.18	536.86	1270.30	1572.28	1836.14	2067.86	2318.14	---

180D SR																	
SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
25	1	0.10	0.16	0.18	---	---	---	0.20	0.20	0.22	0.26	0.26	---	---	---	0.34	0.44
32	1¼	0.16	0.28	0.30	---	---	---	0.34	0.34	0.42	0.46	0.46	---	---	---	0.56	0.78
40	1½	0.22	0.38	0.40	---	---	---	0.48	0.48	0.58	0.64	0.64	---	---	---	0.86	1.14
50	2	0.38	0.64	0.78	---	---	---	0.86	0.86	1.06	1.18	1.18	---	---	---	1.76	2.14
65	2½	0.74	1.04	1.20	---	---	---	1.74	1.74	1.98	2.28	2.28	---	---	---	2.96	4.06
80	3	1.08	1.52	2.00	---	---	---	2.70	2.70	3.20	3.64	3.64	---	---	---	5.10	6.60
90	3½	1.44	2.04	2.68	---	---	---	3.76	3.76	4.56	5.22	5.22	---	---	---	7.78	---
100	4	1.86	2.62	3.48	---	---	---	5.12	5.12	5.98	7.16	7.16	---	9.02	---	10.70	13.08
125	5	3.82	4.62	6.70	---	---	---	8.74	8.74	10.60	12.32	12.32	---	16.06	---	19.60	22.86
150	6	5.46	6.62	9.64	---	---	---	13.50	13.50	17.44	20.42	20.42	---	25.98	---	32.24	37.84
200	8	9.52	12.88	21.74	---	21.42	23.36	27.22	27.22	33.84	41.24	41.24	48.46	57.54	64.34	70.96	68.78
250	10	18.02	22.20	34.06	---	33.56	40.68	48.24	48.24	65.02	65.02	76.60	91.68	105.90	123.70	137.48	123.70
300	12	30.20	34.66	48.68	---	47.94	62.52	70.46	76.20	104.46	93.24	125.82	152.74	178.88	199.26	228.32	178.88
350	14	38.72	46.36	75.64	61.54	75.64	90.54	90.54	105.30	141.58	119.90	176.10	217.44	250.92	283.52	314.46	---
400	16	53.16	60.66	99.06	80.56	99.06	118.66	118.66	157.34	204.80	157.34	259.26	313.46	365.12	424.86	466.32	---
450	18	67.32	76.84	125.60	102.10	125.60	175.22	150.50	224.12	294.62	199.76	365.00	445.06	521.52	586.50	659.46	---
500	20	95.00	108.72	155.40	126.28	186.28	247.44	186.28	292.76	394.94	247.44	496.54	607.88	704.24	809.68	900.78	---
550	22	115.10	131.72	---	153.02	225.88	300.20	225.88	---	515.64	300.20	656.36	791.44	925.14	1053.28	1179.94	---
600	24	156.94	182.34	---	182.34	269.28	402.10	269.28	489.44	679.76	358.06	847.24	1048.64	1224.62	1379.18	1546.10	---



TEES WEIGHT LIST

ANSI B16.9

SIZE		S5S	S10S	S20S	S20	S30S	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG														
15	½	0.05	0.06	0.07	---	---	0.08	0.08	0.09	0.10	0.10	---	---	---	0.12	0.16
20	¾	0.08	0.09	0.11	---	---	0.13	0.13	0.14	0.16	0.16	---	---	---	0.21	0.27
20 x 20 x 15	¾ x ¾ x ½	0.07	0.09	0.10	---	---	0.12	0.12	0.14	0.15	0.15	---	---	---	0.20	0.25
25	1	0.13	0.21	0.22	---	---	0.24	0.24	0.28	0.31	0.31	---	---	---	0.41	0.53
25 x 25 x 20	1 x 1 x ¾	0.12	0.19	0.20	---	---	0.23	0.23	0.26	0.29	0.29	---	---	---	0.39	0.49
25 x 25 x 15	1 x 1 x ½	0.12	0.18	0.20	---	---	0.22	0.22	0.25	0.28	0.28	---	---	---	0.36	0.47
32	1¼	0.20	0.33	0.36	---	---	0.42	0.42	0.51	0.55	0.55	---	---	---	0.69	0.96
32 x 32 x 25	1¼ x 1¼ x 1	0.19	0.32	0.34	---	---	0.40	0.40	0.48	0.52	0.52	---	---	---	0.66	0.89
32 x 32 x 20	1¼ x 1¼ x ¾	0.19	0.30	0.32	---	---	0.37	0.37	0.45	0.49	0.49	---	---	---	0.62	0.84
32 x 32 x 15	1¼ x 1¼ x ½	0.18	0.29	0.31	---	---	0.36	0.36	0.44	0.48	0.48	---	---	---	0.59	0.81
40	1½	0.28	0.46	0.49	---	---	0.60	0.60	0.71	0.80	0.80	---	---	---	1.06	1.41
40 x 40 x 32	1½ x 1½ x 1¼	0.27	0.45	0.48	---	---	0.58	0.58	0.69	0.77	0.77	---	---	---	1.01	1.35
40 x 40 x 25	1½ x 1½ x 1	0.26	0.43	0.46	---	---	0.55	0.55	0.65	0.72	0.72	---	---	---	0.96	1.27
40 x 40 x 20	1½ x 1½ x ¾	0.25	0.40	0.43	---	---	0.52	0.52	0.62	0.69	0.69	---	---	---	0.92	1.21
40 x 40 x 15	1½ x 1½ x ½	0.24	0.39	0.42	---	---	0.51	0.51	0.60	0.67	0.67	---	---	---	0.89	1.18
50	2	0.39	0.64	0.79	---	---	0.88	0.88	1.08	1.20	1.20	---	---	---	1.79	2.18
50 x 50 x 40	2 x 2 x 1½	0.36	0.60	0.73	---	---	0.82	0.82	1.00	1.11	1.11	---	---	---	1.63	2.01
50 x 50 x 32	2 x 2 x 1¼	0.35	0.58	0.71	---	---	0.79	0.79	0.97	1.07	1.07	---	---	---	1.57	1.93
50 x 50 x 25	2 x 2 x 1	0.33	0.55	0.67	---	---	0.75	0.75	0.92	1.02	1.02	---	---	---	1.51	1.84
50 x 50 x 20	2 x 2 x ¾	0.32	0.53	0.65	---	---	0.72	0.72	0.88	0.98	0.98	---	---	---	1.46	1.77
60	2½	0.70	0.99	1.15	---	---	1.66	1.66	1.90	2.18	2.18	---	---	---	2.85	3.90
60 x 60 x 50	2½ x 2½ x 2	0.64	0.92	1.06	---	---	1.50	1.50	1.73	1.98	1.98	---	---	---	2.63	3.55
60 x 60 x 40	2½ x 2½ x 1½	0.62	0.88	1.01	---	---	1.45	1.45	1.66	1.90	1.90	---	---	---	2.48	3.39
60 x 60 x 32	2½ x 2½ x 1¼	0.60	0.86	0.98	---	---	1.42	1.42	1.62	1.86	1.86	---	---	---	2.42	3.31
60 x 60 x 25	2½ x 2½ x 1	0.58	0.83	0.96	---	---	1.37	1.37	1.56	1.80	1.80	---	---	---	2.36	3.21
80	3	0.96	1.36	1.79	---	---	2.42	2.42	2.86	3.25	3.25	---	---	---	4.55	5.90
80 x 80 x 65	3 x 3 x 2½	0.91	1.29	1.67	---	---	2.28	2.28	2.69	3.06	3.06	---	---	---	4.24	5.54
80 x 80 x 50	3 x 3 x 2	0.85	1.22	1.60	---	---	2.12	2.12	2.52	2.86	2.86	---	---	---	4.01	5.18
80 x 80 x 40	3 x 3 x 1½	0.83	1.18	1.54	---	---	2.06	2.06	2.44	2.78	2.78	---	---	---	3.87	5.03
80 x 80 x 32	3 x 3 x 1¼	0.82	1.16	1.51	---	---	2.03	2.03	2.41	2.74	2.74	---	---	---	3.81	4.95
90	3½	1.21	1.71	2.25	---	---	3.16	3.16	3.82	4.37	4.37	---	---	---	6.52	---
90 x 90 x 80	3½ x 3½ x 3	1.16	1.65	2.17	---	---	3.03	3.03	3.65	4.18	4.18	---	---	---	6.17	---
90 x 90 x 65	3½ x 3½ x 2½	1.12	1.58	2.06	---	---	2.89	2.89	3.48	3.98	3.98	---	---	---	5.86	---
90 x 90 x 50	3½ x 3½ x 2	1.06	1.51	1.99	---	---	2.74	2.74	3.32	3.79	3.79	---	---	---	5.65	---
90 x 90 x 40	3½ x 3½ x 1½	1.03	1.47	1.92	---	---	2.68	2.68	3.24	3.70	3.70	---	---	---	5.49	---
100	4	1.50	2.12	2.81	---	---	4.13	4.13	4.84	5.78	5.78	---	7.28	---	8.65	10.57
100 x 100 x 90	4 x 4 x 3½	1.45	2.06	2.72	---	---	3.97	3.97	4.67	5.55	5.55	---	---	---	8.30	---
100 x 100 x 80	4 x 4 x 3	1.40	1.99	2.63	---	---	3.83	3.83	4.49	5.33	5.33	---	---	---	7.92	9.74
100 x 100 x 65	4 x 4 x 2½	1.36	1.93	2.51	---	---	3.69	3.69	4.32	5.14	5.14	---	---	---	7.61	9.38
100 x 100 x 50	4 x 4 x 2	1.30	1.86	2.44	---	---	3.54	3.54	4.15	4.94	4.94	---	---	---	7.40	9.04
100 x 100 x 40	4 x 4 x 1½	1.27	1.82	2.36	---	---	3.48	3.48	4.08	4.86	4.86	---	---	---	7.26	8.88
125	5	2.88	3.48	5.06	---	---	6.61	6.61	8.02	9.30	9.30	---	12.14	---	14.82	17.27
125 x 125 x 100	5 x 5 x 4	2.64	3.25	4.67	---	---	6.18	6.18	7.47	8.70	8.70	---	11.30	---	13.75	16.11
125 x 125 x 90	5 x 5 x 3½	2.60	3.18	4.59	---	---	6.02	6.02	7.31	8.47	8.47	---	---	---	13.40	---
125 x 125 x 80	5 x 5 x 3	2.55	3.12	4.51	---	---	5.89	5.89	7.14	8.27	8.27	---	---	---	13.05	15.33
125 x 125 x 65	5 x 5 x 2½	2.51	3.06	4.39	---	---	5.76	5.76	6.97	8.08	8.08	---	---	---	12.75	14.97
125 x 125 x 50	5 x 5 x 2	2.45	3.00	4.34	---	---	5.62	5.62	6.83	7.91	7.91	---	---	---	12.57	14.67
150	6	3.94	4.77	6.94	---	---	9.73	9.73	12.57	14.71	14.71	---	18.73	---	23.23	27.27
150 x 150 x 125	6 x 6 x 5	3.77	4.57	6.65	---	---	9.23	9.23	11.84	13.84	13.84	---	17.66	---	21.87	25.64
150 x 150 x 100	6 x 6 x 4	3.53	4.33	6.26	---	---	8.81	8.81	11.29	13.23	13.23	---	16.83	---	20.81	24.49
150 x 150 x 90	6 x 6 x 3½	3.49	4.27	6.17	---	---	8.65	8.65	11.13	13.00	13.00	---	---	---	20.46	---
150 x 150 x 80	6 x 6 x 3	3.45	4.21	6.09	---	---	8.52	8.52	10.96	12.77	12.81	---	---	---	20.12	23.71
150 x 150 x 65	6 x 6 x 2½	3.40	4.15	5.98	---	---	8.39	8.39	10.79	12.62	12.62	---	---	---	19.82	23.36
200	8	6.34	8.56	14.46	14.25	15.54	18.10	18.10	22.51	27.44	27.44	32.24	38.27	42.80	47.21	45.75
200 x 200 x 150	8 x 8 x 6	5.98	7.99	13.31	---	---	16.83	16.83	21.01	25.51	25.51	---	35.27	---	43.53	43.00
200 x 200 x 125	8 x 8 x 5	5.82	7.79	13.01	---	---	16.33	16.33	20.28	24.63	24.63	---	34.21	---	42.17	41.38
200 x 200 x 100	8 x 8 x 4	5.59	7.56	12.64	---	---	15.93	15.93	19.75	24.05	24.05	---	33.41	---	41.15	40.28
200 x 200 x 90	8 x 8 x 3½	5.54	7.49	12.54	---	---	15.75	15.75	19.57	23.80	23.80	---	---	---	40.78	---



TEES WEIGHT LIST

ANSI B16.9

SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
250	10	11.57	14.24	21.86	---	21.53	26.10	30.94	30.94	41.71	41.71	49.14	58.81	67.93	79.35	88.19	79.35
250 x 250 x 200	10 x 10 x 8	10.76	13.37	20.73	---	20.41	24.48	28.97	28.97	38.75	39.53	45.80	54.72	63.37	73.73	81.88	74.19
250 x 250 x 150	10 x 10 x 6	10.43	12.83	19.62	---	---	---	27.76	27.76	37.33	37.68	43.95	---	60.50	---	78.36	71.57
250 x 250 x 125	10 x 10 x 5	10.29	12.66	19.38	---	---	---	27.33	27.33	36.68	36.91	43.18	---	59.57	---	77.17	70.15
250 x 250 x 100	10 x 10 x 4	10.04	12.42	18.98	---	---	---	26.90	26.90	36.12	36.29	42.57	---	58.72	---	76.09	68.97
300	12	18.93	21.73	30.53	---	30.07	39.22	44.20	47.80	65.51	58.48	78.92	95.79	112.19	124.97	143.19	112.19
300 x 300 x 250	12 x 12 x 10	17.82	20.60	29.22	---	28.78	37.23	42.20	45.25	61.91	55.96	74.40	90.18	105.48	118.06	134.86	107.25
300 x 300 x 200	12 x 12 x 8	17.03	19.75	28.13	---	27.71	35.65	40.28	43.32	59.02	53.84	71.14	86.19	101.03	112.56	128.68	102.21
300 x 300 x 150	12 x 12 x 6	16.68	19.19	26.99	---	---	---	39.03	42.07	57.54	51.95	69.24	---	98.08	---	125.07	99.49
300 x 300 x 125	12 x 12 x 5	16.55	19.02	26.75	---	---	---	38.60	41.65	56.90	51.18	68.48	---	97.16	---	123.88	98.08
350	14	22.86	27.37	44.65	36.33	44.65	53.45	53.45	62.16	83.58	70.79	103.96	128.37	147.99	167.38	185.65	---
350 x 350 x 300	14 x 14 x 12	22.26	26.51	42.49	---	42.42	51.27	52.03	59.96	80.82	68.91	100.13	123.38	142.63	160.89	179.15	---
350 x 350 x 250	14 x 14 x 10	21.14	25.38	41.18	---	41.13	49.28	50.03	57.41	77.21	66.38	95.61	117.77	135.92	153.98	170.81	---
350 x 350 x 200	14 x 14 x 8	20.40	24.59	40.19	---	40.15	47.81	48.24	55.61	74.47	64.46	92.54	114.00	131.72	148.77	164.96	---
350 x 350 x 150	14 x 14 x 6	20.04	24.00	39.01	---	---	---	46.94	54.32	72.94	62.49	90.57	---	128.66	---	161.20	---
400	16	29.65	33.84	55.26	44.94	55.26	66.18	66.18	87.76	114.23	87.76	144.62	174.85	203.67	236.99	260.12	---
400 x 400 x 350	16 x 16 x 14	28.94	33.22	54.25	44.12	54.25	64.97	64.97	84.81	110.80	86.15	139.99	169.67	197.26	228.94	251.59	---
400 x 400 x 300	16 x 16 x 12	28.31	32.32	52.03	---	51.96	62.72	63.48	82.53	107.92	84.16	136.01	164.50	191.70	222.21	244.82	---
400 x 400 x 250	16 x 16 x 10	27.22	31.22	50.77	---	50.72	60.79	61.55	80.04	104.40	81.72	131.60	159.02	185.14	215.48	236.68	---
400 x 400 x 200	16 x 16 x 8	26.45	30.41	49.73	---	49.70	59.27	59.70	78.19	101.60	79.72	128.45	155.15	180.83	210.13	230.68	---
400 x 400 x 150	16 x 16 x 6	26.11	29.84	48.58	---	---	---	58.43	76.93	100.11	77.81	126.53	---	177.84	---	227.01	---
450	18	37.55	42.86	70.06	56.95	70.06	97.74	83.95	125.01	164.33	111.42	203.59	248.25	290.90	327.15	367.57	---
450 x 450 x 400	18 x 18 x 16	36.41	41.56	67.92	55.21	67.92	93.20	81.38	119.64	157.12	108.00	195.10	237.68	278.34	314.15	352.09	---
450 x 450 x 350	18 x 18 x 14	35.70	40.95	66.91	54.40	66.91	91.99	80.17	116.70	153.70	106.39	190.49	232.51	271.96	306.14	343.59	---
450 x 450 x 300	18 x 18 x 12	35.10	40.08	64.75	---	64.68	89.81	78.76	114.50	150.93	104.50	186.65	227.52	266.60	299.64	337.08	---
450 x 450 x 250	18 x 18 x 10	33.98	38.95	63.44	---	63.39	87.82	76.75	111.95	147.32	101.97	182.12	221.90	259.87	292.71	328.72	---
450 x 450 x 200	18 x 18 x 8	33.22	38.14	62.41	---	62.38	86.31	74.91	110.10	144.53	99.98	178.98	218.04	255.58	287.39	322.75	---
500	20	52.95	60.59	86.61	70.38	103.82	137.90	103.82	163.17	220.11	137.90	276.73	338.79	392.49	451.25	502.03	---
500 x 500 x 450	20 x 20 x 18	50.74	58.04	84.22	68.43	98.97	132.12	100.95	157.66	212.07	134.07	266.20	325.75	377.85	433.38	482.66	---
500 x 500 x 400	20 x 20 x 16	49.64	56.78	82.16	66.76	96.91	127.68	98.47	152.43	205.04	130.78	257.92	315.45	365.60	420.75	467.59	---
500 x 500 x 350	20 x 20 x 14	48.92	56.17	81.15	65.94	95.90	126.47	97.26	149.48	201.60	129.15	253.29	310.25	359.19	412.69	459.04	---
500 x 500 x 300	20 x 20 x 12	48.29	55.27	78.92	---	93.60	124.21	95.77	147.19	198.71	127.17	249.30	305.08	353.62	405.95	452.27	---
500 x 500 x 250	20 x 20 x 10	47.17	54.13	77.61	---	92.31	122.23	93.77	144.63	195.11	124.64	244.79	299.47	346.91	399.04	443.93	---
500 x 500 x 200	20 x 20 x 8	46.43	53.35	76.62	---	91.34	120.76	91.97	142.84	192.38	122.73	241.73	295.71	342.73	393.85	438.10	---
600	24	81.19	94.34	---	94.34	139.32	208.03	139.32	253.21	351.67	185.25	438.32	542.50	633.54	713.48	799.83	---
600 x 600 x 500	24 x 24 x 20	78.35	90.90	---	92.30	136.29	201.06	136.29	244.06	338.03	181.21	421.66	521.35	608.38	686.48	769.01	---
600 x 600 x 450	24 x 24 x 18	76.13	88.35	---	90.36	131.43	195.27	133.41	238.55	329.98	177.37	411.10	508.29	593.72	668.58	749.61	---
600 x 600 x 400	24 x 24 x 16	74.99	87.04	---	88.62	129.29	190.73	130.84	233.19	322.77	173.95	402.61	497.72	581.17	655.59	734.14	---
600 x 600 x 350	24 x 24 x 14	74.28	86.43	---	87.81	128.29	189.53	129.64	230.25	319.36	172.34	398.01	492.56	574.80	647.58	725.65	---
600 x 600 x 300	24 x 24 x 12	73.68	85.57	---	---	126.05	187.35	128.22	228.05	316.59	170.46	394.17	487.57	569.44	641.08	719.15	---
600 x 600 x 200	24 x 24 x 10	72.56	84.43	---	---	124.76	185.36	126.22	225.49	312.98	167.93	389.65	481.96	562.71	634.16	710.79	---
650	26	---	---	---	146.79	234.25	---	176.09	---	---	234.25	---	---	---	---	---	---
650 x 650 x 600	26 x 26 x 24	---	---	---	140.39	222.29	---	172.44	---	---	229.37	---	---	---	---	---	---
650 x 650 x 500	26 x 26 x 20	---	---	---	135.88	215.63	---	165.77	---	---	220.49	---	---	---	---	---	---
650 x 650 x 450	26 x 26 x 18	---	---	---	133.94	210.78	---	162.90	---	---	216.66	---	---	---	---	---	---
650 x 650 x 400	26 x 26 x 16	---	---	---	132.27	208.72	---	160.43	---	---	213.37	---	---	---	---	---	---
650 x 650 x 350	26 x 26 x 14	---	---	---	131.46	207.72	---	159.22	---	---	211.75	---	---	---	---	---	---
650 x 650 x 300	26 x 26 x 12	---	---	---	---	205.42	---	157.72	---	---	209.77	---	---	---	---	---	---
700	28	---	---	---	165.43	264.13	329.16	198.48	---	---	264.13	---	---	---	---	---	---
700 x 700 x 650	28 x 28 x 26	---	---	---	163.79	261.50	---	196.51	---	---	261.50	---	---	---	---	---	---
700 x 700 x 600	28 x 28 x 24	---	---	---	157.27	249.36	316.06	192.71	---	---	256.43	---	---	---	---	---	---
700 x 700 x 500	28 x 28 x 20	---	---	---	152.85	242.82	303.84	186.17	---	---	247.71	---	---	---	---	---	---
700 x 700 x 450	28 x 28 x 18	---	---	---	150.91	237.96	298.04	183.29	---	---	243.87	---	---	---	---	---	---
700 x 700 x 400	28 x 28 x 16	---	---	---	149.17	235.82	293.50	180.72	---	---	240.45	---	---	---	---	---	---
700 x 700 x 350	28 x 28 x 14	---	---	---	148.36	234.81	292.29	179.51	---	---	238.83	---	---	---	---	---	---
700 x 700 x 300	28 x 28 x 12	---	---	---	---	232.58	290.11	178.10	---	---	236.95	---	---	---	---	---	---



TEES WEIGHT LIST

ANSI B16.9

SIZE		S5S	S10S	S10	S20	S30	STD	S40	XS
mm	inch	KG							
750	30	150.55	190.39	190.39	304.13	379.13	228.47	---	304.13
750 x 750 x 700	30 x 30 x 28	---	---	186.85	298.45	372.04	224.21	---	298.45
750 x 750 x 650	30 x 30 x 26	---	---	185.22	295.83	---	222.25	---	295.83
750 x 750 x 600	30 x 30 x 24	145.77	178.71	178.71	283.72	358.96	218.45	---	290.76
750 x 750 x 500	30 x 30 x 20	140.89	172.90	174.30	277.19	346.76	211.92	---	282.06
750 x 750 x 450	30 x 30 x 18	138.67	170.35	172.36	272.34	304.98	209.05	---	278.23
750 x 750 x 400	30 x 30 x 16	137.57	169.09	170.68	270.26	336.55	206.57	---	274.93
750 x 750 x 350	30 x 30 x 14	136.86	168.48	169.87	269.27	335.33	205.36	---	273.31
750 x 750 x 300	30 x 30 x 12	136.23	167.58	---	266.97	333.07	203.87	---	271.32
750 x 750 x 250	30 x 30 x 10	135.11	166.44	---	265.68	331.09	201.87	---	268.80
800	32	---	---	217.11	346.95	432.63	260.57	475.21	346.95
800 x 800 x 750	32 x 32 x 30	---	---	213.32	340.87	425.03	256.01	---	340.87
800 x 800 x 700	32 x 32 x 28	---	---	209.92	335.42	418.22	251.92	---	335.42
800 x 800 x 650	32 x 32 x 26	---	---	208.28	332.78	---	249.95	---	332.78
800 x 800 x 600	32 x 32 x 24	---	---	201.75	320.64	405.10	246.14	448.77	327.71
800 x 800 x 500	32 x 32 x 20	---	---	197.25	313.94	392.71	239.48	433.03	318.83
800 x 800 x 450	32 x 32 x 18	---	---	195.38	309.22	387.07	236.72	427.69	315.14
800 x 800 x 400	32 x 32 x 16	---	---	193.64	307.08	382.52	234.14	422.32	311.72
800 x 800 x 350	32 x 32 x 14	---	---	192.83	306.07	381.31	232.94	419.38	310.10
850	34	---	---	245.59	392.59	489.66	294.77	537.92	392.59
850 x 850 x 800	34 x 34 x 32	---	---	241.54	386.10	481.55	289.91	529.00	386.10
850 x 850 x 750	34 x 34 x 30	---	---	237.89	380.26	474.25	285.53	---	380.26
850 x 850 x 700	34 x 34 x 28	---	---	234.35	374.58	467.16	281.27	---	374.58
850 x 850 x 650	34 x 34 x 26	---	---	232.71	371.95	---	279.31	---	371.95
850 x 850 x 600	34 x 34 x 24	---	---	226.20	359.83	454.06	275.50	502.60	366.88
850 x 850 x 500	34 x 34 x 22	---	---	221.78	353.29	441.85	268.97	487.07	358.17
850 x 850 x 450	34 x 34 x 20	---	---	219.84	348.43	436.07	266.09	481.56	354.34
850 x 850 x 400	34 x 34 x 18	---	---	218.10	346.29	431.53	263.52	476.20	350.92
900	36	---	---	275.81	441.05	550.22	331.09	658.60	441.05
900 x 900 x 850	36 x 36 x 34	---	---	271.51	434.15	541.60	325.92	641.65	434.15
900 x 900 x 800	36 x 36 x 32	---	---	267.62	427.92	533.81	321.25	633.08	427.92
900 x 900 x 750	36 x 36 x 30	---	---	263.82	421.83	526.20	316.68	---	421.83
900 x 900 x 700	36 x 36 x 28	---	---	260.28	416.16	519.12	312.43	---	416.16
900 x 900 x 650	36 x 36 x 26	---	---	258.65	413.53	---	310.47	---	413.53
900 x 900 x 600	36 x 36 x 24	---	---	252.24	401.58	506.26	306.81	606.63	408.66
900 x 900 x 500	36 x 36 x 20	---	---	247.74	394.91	493.86	300.15	590.87	399.77
900 x 900 x 450	36 x 36 x 18	---	---	245.87	390.15	488.21	297.38	585.53	396.09
900 x 900 x 400	36 x 36 x 16	---	---	244.13	388.01	483.66	294.81	580.15	392.66
950	38	---	---	---	---	---	369.51	---	492.32
950 x 950 x 900	38 x 38 x 36	---	---	---	---	---	366.79	---	488.69
950 x 950 x 850	38 x 38 x 34	---	---	---	---	---	361.47	---	481.59
950 x 950 x 800	38 x 38 x 32	---	---	---	---	---	356.65	---	475.16
950 x 950 x 750	38 x 38 x 30	---	---	---	---	---	351.94	---	468.87
950 x 950 x 700	38 x 38 x 28	---	---	---	---	---	345.56	---	460.37
950 x 950 x 650	38 x 38 x 26	---	---	---	---	---	343.60	---	457.74
950 x 950 x 600	38 x 38 x 24	---	---	---	---	---	339.79	---	452.67
950 x 950 x 500	38 x 38 x 20	---	---	---	---	---	333.25	---	443.95
950 x 950 x 450	38 x 38 x 18	---	---	---	---	---	330.37	---	440.12
1000	40	---	---	---	---	---	410.04	---	546.42
1000 x 1000 x 950	40 x 40 x 38	---	---	---	---	---	407.18	---	542.59
1000 x 1000 x 900	40 x 40 x 36	---	---	---	---	---	401.76	---	535.36
1000 x 1000 x 850	40 x 40 x 34	---	---	---	---	---	396.44	---	528.26
1000 x 1000 x 800	40 x 40 x 32	---	---	---	---	---	391.42	---	521.56
1000 x 1000 x 750	40 x 40 x 30	---	---	---	---	---	386.71	---	515.28
1000 x 1000 x 700	40 x 40 x 28	---	---	---	---	---	380.34	---	506.79
1000 x 1000 x 650	40 x 40 x 26	---	---	---	---	---	378.38	---	504.16
1000 x 1000 x 600	40 x 40 x 24	---	---	---	---	---	374.58	---	499.10
1000 x 1000 x 500	40 x 40 x 20	---	---	---	---	---	368.05	---	490.39
1000 x 1000 x 450	40 x 40 x 18	---	---	---	---	---	365.17	---	486.56



TEES WEIGHT LIST

ANSI B16.9

SIZE		STD	XS
mm	inch	KG	
1050	42	421.48	561.74
1050 x 1050 x 1000	42 x 42 x 40	419.36	558.92
1050 x 1050 x 950	42 x 42 x 38	417.25	556.09
1050 x 1050 x 900	42 x 42 x 36	415.13	553.26
1050 x 1050 x 850	42 x 42 x 34	413.02	550.44
1050 x 1050 x 800	42 x 42 x 32	410.91	547.61
1050 x 1050 x 750	42 x 42 x 30	408.79	544.79
1050 x 1050 x 700	42 x 42 x 28	404.54	539.12
1050 x 1050 x 650	42 x 42 x 26	402.58	536.50
1050 x 1050 x 600	42 x 42 x 24	395.28	526.77
1050 x 1050 x 500	42 x 42 x 20	392.27	522.75
1050 x 1050 x 450	42 x 42 x 18	389.50	519.06
1050 x 1050 x 400	42 x 42 x 16	386.93	515.64
1100	44	474.85	632.97
1100 x 1100 x 1050	44 x 44 x 42	472.43	629.73
1100 x 1100 x 1000	44 x 44 x 40	466.95	622.42
1100 x 1100 x 950	44 x 44 x 38	462.00	615.81
1100 x 1100 x 900	44 x 44 x 36	457.12	609.30
1100 x 1100 x 850	44 x 44 x 34	455.16	606.68
1100 x 1100 x 800	44 x 44 x 32	450.74	600.79
1100 x 1100 x 750	44 x 44 x 30	448.93	598.37
1100 x 1100 x 700	44 x 44 x 28	444.98	593.10
1100 x 1100 x 650	44 x 44 x 26	443.33	590.89
1100 x 1100 x 600	44 x 44 x 24	441.66	588.67
1100 x 1100 x 500	44 x 44 x 20	436.96	582.38
1150	46	520.67	694.14
1150 x 1150 x 1100	46 x 46 x 44	518.11	690.70
1150 x 1150 x 1050	46 x 46 x 42	512.32	682.98
1150 x 1150 x 1000	46 x 46 x 40	507.07	675.98
1150 x 1150 x 950	46 x 46 x 38	501.89	669.07
1150 x 1150 x 900	46 x 46 x 36	499.78	666.24
1150 x 1150 x 850	46 x 46 x 34	495.06	659.95
1150 x 1150 x 800	46 x 46 x 32	493.10	657.32
1150 x 1150 x 750	46 x 46 x 30	489.02	651.89
1150 x 1150 x 700	46 x 46 x 28	487.20	649.46
1150 x 1150 x 650	46 x 46 x 26	485.39	647.02
1150 x 1150 x 600	46 x 46 x 24	481.73	642.15
1200	48	568.61	758.13
1200 x 1200 x 1150	48 x 48 x 46	565.89	754.49
1200 x 1200 x 1100	48 x 48 x 44	563.17	750.86
1200 x 1200 x 1050	48 x 48 x 42	554.26	738.97
1200 x 1200 x 1000	48 x 48 x 40	551.84	735.74
1200 x 1200 x 950	48 x 48 x 38	549.42	732.50
1200 x 1200 x 900	48 x 48 x 36	541.49	721.92
1200 x 1200 x 850	48 x 48 x 34	539.37	719.10
1200 x 1200 x 800	48 x 48 x 32	537.26	716.28
1200 x 1200 x 750	48 x 48 x 30	530.75	707.59
1200 x 1200 x 700	48 x 48 x 28	528.93	705.16
1200 x 1200 x 650	48 x 48 x 26	527.12	702.74
1200 x 1200 x 600	48 x 48 x 24	521.78	695.63



REDUCERS WEIGHT LIST

ANSI B16.9

SIZE		S5S	S10S	S20S	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG														
20 x 8	¾ x ¼	0.03	0.03	0.04	---	---	0.04	0.04	0.05	0.06	0.06	---	---	---	---	---
20 x 15	¾ x ½	0.03	0.04	0.05	---	---	0.06	0.06	0.06	0.07	0.07	---	---	---	0.09	0.12
25 x 20	1 x ¾	0.06	0.09	0.10	---	---	0.11	0.11	0.12	0.14	0.14	---	---	---	0.18	0.21
25 x 15	1 x ½	0.05	0.08	0.09	---	---	0.10	0.10	0.11	0.12	0.12	---	---	---	0.16	0.19
32 x 35	1½ x 1	0.08	0.12	0.13	---	---	0.15	0.15	0.18	0.20	0.20	---	---	---	0.25	0.34
32 x 20	1½ x ¾	0.07	0.10	0.11	---	---	0.13	0.13	0.16	0.17	0.17	---	---	---	0.22	0.29
32 x 15	1½ x ½	0.06	0.09	0.10	---	---	0.12	0.12	0.14	0.16	0.16	---	---	---	0.19	0.26
40 x 32	1½ x 1½	0.11	0.19	0.20	---	---	0.24	0.24	0.29	0.32	0.32	---	---	---	0.41	0.56
40 x 25	1½ x 1	0.10	0.17	0.18	---	---	0.21	0.21	0.25	0.28	0.28	---	---	---	0.67	0.48
40 x 20	1½ x ¾	0.09	0.14	0.15	---	---	0.18	0.18	0.22	0.24	0.24	---	---	---	0.32	0.42
40 x 15	1½ x ½	0.09	0.13	0.14	---	---	0.17	0.17	0.20	0.23	0.23	---	---	---	0.29	0.39
50 x 40	2 x 1½	0.16	0.27	0.31	---	---	0.36	0.36	0.44	0.49	0.49	---	---	---	0.69	0.88
50 x 32	2 x 1	0.15	0.25	0.30	---	---	0.34	0.34	0.41	0.45	0.45	---	---	---	0.64	0.81
50 x 25	2 x 1	0.14	0.23	0.27	---	---	0.30	0.30	0.36	0.40	0.40	---	---	---	0.58	0.73
50 x 20	2 x ¾	0.13	0.20	0.24	---	---	0.27	0.27	0.33	0.37	0.37	---	---	---	0.53	0.65
50 x 15	2 x ½	0.12	0.19	0.23	---	---	0.25	0.25	0.31	0.34	0.34	---	---	---	0.49	0.61
65 x 50	2½ x 2	0.27	0.41	0.49	---	---	0.63	0.63	0.74	0.84	0.84	---	---	---	1.15	1.51
65 x 40	2½ x 1½	0.25	0.37	0.42	---	---	0.57	0.57	0.66	0.75	0.75	---	---	---	0.98	1.33
65 x 32	2½ x 1	0.24	0.35	0.40	---	---	0.54	0.54	0.63	0.71	0.71	---	---	---	0.91	1.25
65 x 25	2½ x 1	0.22	0.32	0.37	---	---	0.50	0.50	0.57	0.65	0.65	---	---	---	0.85	1.15
80 x 65	3 x 2½	0.36	0.51	0.64	---	---	0.89	0.89	1.04	1.19	1.19	---	---	---	1.61	2.14
80 x 50	3 x 2	0.31	0.46	0.59	---	---	0.74	0.74	0.89	1.01	1.01	---	---	---	1.44	1.83
80 x 40	3 x 1½	0.28	0.42	0.52	---	---	0.68	0.68	0.81	0.92	0.92	---	---	---	1.27	1.66
80 x 32	3 x 1	0.27	0.40	0.50	---	---	0.66	0.66	0.78	0.88	0.88	---	---	---	1.20	1.58
80 x 25	3 x 1	0.26	0.38	0.47	---	---	0.62	0.62	0.72	0.82	0.82	---	---	---	1.14	1.47
90 x 80	3½ x 3	0.49	0.70	0.92	---	---	1.26	1.26	1.52	1.73	1.73	---	---	---	2.51	---
90 x 65	3½ x 2½	0.45	0.64	0.80	---	---	1.13	1.13	1.34	1.53	1.53	---	---	---	2.18	---
90 x 50	3½ x 2	0.38	0.57	0.74	---	---	0.96	0.96	1.17	1.33	1.33	---	---	---	1.98	---
90 x 45	3½ x 1½	0.36	0.53	0.66	---	---	0.90	0.90	1.08	1.23	1.23	---	---	---	1.79	---
90 x 32	3½ x 1	0.35	0.51	0.64	---	---	0.86	0.86	1.05	1.18	1.18	---	---	---	1.71	---
100 x 90	4 x 3½	0.56	0.79	1.05	---	---	1.50	1.50	1.79	2.10	2.10	---	---	---	3.13	---
100 x 80	4 x 3	0.53	0.74	0.98	---	---	1.39	1.39	1.64	1.92	1.92	---	---	---	2.80	3.50
100 x 65	4 x 2½	0.48	0.68	0.86	---	---	1.26	1.26	1.46	1.72	1.72	---	---	---	2.47	3.13
100 x 50	4 x 2	0.42	0.62	0.80	---	---	1.09	1.09	1.30	1.52	1.52	---	---	---	2.28	2.78
100 x 40	4 x 1½	0.39	0.58	0.73	---	---	1.02	1.02	1.21	1.42	1.42	---	---	---	2.08	2.58
125 x 100	5 x 4	0.98	1.26	1.76	---	---	2.41	2.41	2.88	3.38	3.38	---	4.35	---	5.25	6.24
125 x 90	5 x 3½	0.93	1.20	1.68	---	---	2.25	2.25	2.73	3.15	3.15	---	---	---	4.89	---
125 x 80	5 x 3	0.89	1.14	1.60	---	---	2.11	2.11	2.54	2.93	2.93	---	---	---	4.47	5.39
125 x 65	5 x 2½	0.84	1.06	1.45	---	---	1.94	1.94	2.32	2.68	2.68	---	---	---	4.07	4.93
125 x 50	5 x 2	0.76	0.99	1.38	---	---	1.74	1.74	2.11	2.43	2.43	---	---	---	3.83	4.49
150 x 125	6 x 5	1.47	1.78	2.59	---	---	3.51	3.51	4.41	5.15	5.15	---	6.62	---	8.16	9.55
150 x 100	6 x 4	1.21	1.54	2.17	---	---	3.10	3.10	3.87	4.56	4.56	---	5.78	---	7.06	8.40
150 x 90	6 x 3½	1.16	1.48	2.08	---	---	2.92	2.92	3.70	4.29	4.29	---	---	---	6.66	---
150 x 80	6 x 3	1.11	1.41	2.00	---	---	2.77	2.77	3.49	4.05	4.05	---	---	---	6.21	7.47
150 x 65	6 x 2½	1.06	1.33	1.83	---	---	2.58	2.58	3.25	3.78	3.78	---	---	---	5.76	6.96
150 x 50	6 x 2	0.97	1.25	1.75	---	---	2.36	2.36	3.02	3.51	3.51	---	---	---	5.49	6.48
200 x 150	8 x 6	2.00	2.58	4.12	---	---	5.39	5.39	6.80	8.16	8.16	---	10.98	---	13.57	14.20
200 x 125	8 x 5	1.86	2.41	3.87	---	---	4.91	4.91	6.05	7.26	7.26	---	9.91	---	12.19	12.55
200 x 100	8 x 4	1.58	2.16	3.42	---	---	4.46	4.46	5.46	6.62	6.62	7.11	9.00	---	11.00	11.31
200 x 90	8 x 3½	1.53	2.09	3.32	---	---	4.27	4.27	5.27	6.33	6.33	---	---	---	10.57	---
200 x 80	8 x 3	1.48	2.02	3.23	---	---	4.10	4.10	5.05	6.07	6.07	---	---	---	10.07	10.29
250 x 200	10 x 8	3.34	4.27	6.84	6.73	7.80	9.18	9.18	11.98	13.01	14.30	16.99	19.85	22.78	25.25	23.40
250 x 150	10 x 6	3.03	3.71	5.60	---	---	7.90	7.90	10.50	11.06	12.35	---	16.65	---	21.34	20.85
250 x 125	10 x 5	2.86	3.51	5.30	---	---	7.34	7.34	9.63	10.01	11.30	---	15.41	---	19.72	18.91
250 x 100	10 x 4	2.53	3.21	4.77	---	---	6.81	6.81	8.93	9.25	10.55	---	14.34	---	18.33	17.46
300 x 250	12 x 10	5.50	6.50	9.50	9.36	11.81	13.62	14.23	19.36	18.17	23.10	27.87	32.46	36.89	41.72	34.73
300 x 200	12 x 8	4.72	5.72	8.62	8.49	10.35	11.80	12.41	16.46	16.45	19.91	23.91	28.13	31.37	35.51	29.92
300 x 150	12 x 6	4.36	5.08	7.21	---	---	10.34	10.95	14.78	14.22	17.68	---	24.49	---	31.06	27.00
300 x 125	12 x 5	4.17	4.85	6.87	---	---	9.70	10.31	13.78	13.03	16.48	---	23.07	---	29.21	24.79



REDUCERS WEIGHT LIST

ANSI B16.9

SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160
mm	inch	KG														
350 x 300	14 x 12	10.93	12.83	19.57	---	19.44	24.16	25.53	28.70	38.93	33.80	47.72	58.47	67.93	76.26	85.84
350 x 250	14 x 10	9.45	11.45	18.23	---	18.12	21.80	23.36	25.54	34.38	31.18	41.87	51.10	59.00	67.50	74.92
350 x 200	14 x 8	8.19	10.18	16.80	---	16.72	19.42	20.42	22.60	29.67	28.39	36.69	44.67	51.96	58.53	64.82
350 x 150	14 x 6	7.61	9.13	14.50	---	---	---	18.04	20.22	26.94	24.76	33.06	---	46.04	---	57.58
400 x 350	16 x 14	13.59	15.85	25.88	21.05	25.88	30.98	30.98	38.73	51.14	41.06	64.24	78.39	90.93	104.46	115.18
400 x 300	16 x 12	13.03	14.91	22.87	---	22.74	28.18	29.66	36.13	48.00	39.30	59.57	72.14	84.21	96.34	107.52
400 x 250	16 x 10	11.44	13.42	21.43	---	21.31	25.63	27.32	32.72	43.08	36.46	53.27	64.19	74.57	86.88	95.74
400 x 200	16 x 8	10.07	12.05	19.88	---	19.79	23.07	24.14	29.54	38.01	33.45	47.67	57.25	66.98	77.21	84.85
450 x 400	18 x 16	16.87	19.26	31.46	25.58	31.46	40.97	37.69	53.24	69.69	50.01	87.16	105.88	123.74	141.29	157.10
450 x 350	18 x 14	15.54	18.11	29.58	24.05	29.58	38.71	35.43	47.72	63.27	46.98	78.50	96.18	112.05	126.24	141.13
450 x 300	18 x 12	14.95	17.10	26.37	---	26.22	35.71	34.01	44.93	59.91	45.09	73.51	89.50	104.85	117.54	132.94
450 x 250	18 x 10	13.25	15.51	24.82	---	24.69	32.98	31.51	41.28	54.65	42.06	66.76	80.99	94.54	107.42	120.33
500 x 450	20 x 18	27.05	30.91	46.98	38.18	51.90	70.42	56.30	86.29	115.04	74.73	143.68	175.58	204.45	232.75	260.08
500 x 400	20 x 16	25.71	29.39	44.47	36.14	49.38	63.02	53.28	77.94	103.65	70.72	130.67	159.19	184.82	213.50	236.26
500 x 350	20 x 14	23.94	27.86	41.95	34.11	46.87	59.99	50.26	70.57	95.09	66.68	119.13	146.26	169.22	193.43	214.97
500 x 300	20 x 12	23.14	26.51	37.67	---	42.39	56.00	48.37	66.85	90.62	64.16	112.47	137.34	159.63	181.83	204.05
600 x 500	24 x 20	35.93	41.48	---	44.28	65.36	92.70	65.36	111.50	153.00	86.87	191.38	235.80	274.47	311.75	348.38
600 x 450	24 x 18	32.72	37.77	---	42.24	57.93	84.32	62.34	104.55	142.26	82.83	176.92	217.79	254.65	266.63	321.58
600 x 400	24 x 16	31.39	36.25	---	40.21	55.42	76.92	59.31	96.20	130.87	78.78	163.92	201.40	235.01	267.38	297.76
600 x 350	24 x 14	29.61	34.72	---	38.17	52.90	73.90	56.29	88.83	122.31	74.74	152.37	188.47	219.41	247.31	276.47
650 x 600	26 x 24	---	---	---	67.80	104.73	---	89.37	---	---	118.87	---	---	---	---	---
650 x 500	26 x 20	---	---	---	62.92	97.49	---	82.13	---	---	109.18	---	---	---	---	---
650 x 450	26 x 18	---	---	---	60.47	88.57	---	78.50	---	---	104.33	---	---	---	---	---
650 x 400	26 x 16	---	---	---	58.02	85.55	---	74.87	---	---	99.48	---	---	---	---	---
700 x 650	28 x 26	---	---	---	80.56	128.59	---	96.65	---	---	128.59	---	---	---	---	---
700 x 600	28 x 24	---	---	---	70.82	109.59	147.16	93.00	---	---	123.72	---	---	---	---	---
700 x 500	28 x 20	---	---	---	65.93	102.34	130.46	85.76	---	---	114.03	---	---	---	---	---
700 x 450	28 x 18	---	---	---	63.49	93.42	125.61	82.13	---	---	109.18	---	---	---	---	---
750 x 700	30 x 28	---	---	---	86.60	138.29	172.38	103.91	---	---	138.29	---	---	---	---	---
750 x 650	30 x 26	---	---	---	83.58	133.44	---	100.28	---	---	133.44	---	---	---	---	---
750 x 600	30 x 24	---	---	---	73.83	114.44	153.23	96.63	---	---	128.57	---	---	---	---	---
750 x 500	30 x 20	---	---	---	68.95	107.19	136.54	89.39	---	---	118.88	---	---	---	---	---
800 x 750	32 x 30	---	---	---	92.63	148.00	184.53	111.17	---	---	148.00	---	---	---	---	---
800 x 700	32 x 28	---	---	---	89.61	143.15	178.45	107.54	---	---	143.15	---	---	---	---	---
800 x 650	32 x 26	---	---	---	86.60	138.29	---	103.91	---	---	138.29	---	---	---	---	---
800 x 600	32 x 24	---	---	---	76.85	119.29	159.31	100.26	182.60	---	133.42	---	---	---	---	---
850 x 800	34 x 32	---	---	---	98.67	157.70	196.68	118.43	216.10	---	157.70	---	---	---	---	---
850 x 750	34 x 30	---	---	---	95.65	152.85	190.60	114.80	---	---	152.85	---	---	---	---	---
850 x 700	34 x 28	---	---	---	92.63	148.00	184.53	111.17	---	---	148.00	---	---	---	---	---
850 x 650	34 x 26	---	---	---	89.61	143.15	---	107.54	---	---	143.15	---	---	---	---	---
900 x 850	36 x 34	---	---	---	104.71	167.41	208.83	125.68	240.00	---	167.41	---	---	---	---	---
900 x 800	36 x 32	---	---	---	101.69	162.56	202.75	122.05	233.30	---	162.56	---	---	---	---	---
900 x 750	36 x 30	---	---	---	98.67	157.70	196.68	118.43	---	---	157.70	---	---	---	---	---
900 x 700	36 x 28	---	---	---	95.65	152.85	190.60	114.80	---	---	152.85	---	---	---	---	---
950 x 900	38 x 36	---	---	---	---	---	---	132.94	---	---	177.11	---	---	---	---	---
950 x 850	38 x 34	---	---	---	---	---	---	129.31	---	---	172.26	---	---	---	---	---
950 x 800	38 x 32	---	---	---	---	---	---	125.68	---	---	167.41	---	---	---	---	---
950 x 750	38 x 30	---	---	---	---	---	---	122.05	---	---	162.56	---	---	---	---	---
1000 x 950	40 x 38	---	---	---	---	---	---	140.20	---	---	186.82	---	---	---	---	---
1000 x 900	40 x 36	---	---	---	---	---	---	136.57	---	---	181.97	---	---	---	---	---
1000 x 850	40 x 34	---	---	---	---	---	---	132.94	---	---	177.11	---	---	---	---	---
1000 x 800	40 x 32	---	---	---	---	---	---	129.31	---	---	172.26	---	---	---	---	---
1050 x 1000	42 x 40	---	---	---	---	---	---	147.46	---	---	196.52	---	---	---	---	---
1050 x 950	42 x 38	---	---	---	---	---	---	143.83	---	---	191.67	---	---	---	---	---
1050 x 900	42 x 36	---	---	---	---	---	---	140.20	---	---	186.82	---	---	---	---	---
1050 x 850	42 x 34	---	---	---	---	---	---	136.57	---	---	181.97	---	---	---	---	---
1100 x 1050	44 x 42	---	---	---	---	---	---	154.72	---	---	206.23	---	---	---	---	---
1100 x 1000	44 x 40	---	---	---	---	---	---	151.09	---	---	201.38	---	---	---	---	---
1100 x 950	44 x 38	---	---	---	---	---	---	147.46	---	---	196.52	---	---	---	---	---
1100 x 900	44 x 36	---	---	---	---	---	---	143.83	---	---	191.67	---	---	---	---	---
1150 x 1100	46 x 44	---	---	---	---	---	---	188.80	---	---	251.69	---	---	---	---	---
1150 x 1050	46 x 42	---	---	---	---	---	---	184.57	---	---	246.03	---	---	---	---	---
1150 x 1000	46 x 40	---	---	---	---	---	---	180.34	---	---	240.37	---	---	---	---	---
1150 x 950	46 x 38	---	---	---	---	---	---	176.11	---	---	234.72	---	---	---	---	---
1200 x 1150	48 x 46	---	---	---	---	---	---	197.26	---	---	263.00	---	---	---	---	---
1200 x 1100	48 x 44	---	---	---	---	---	---	193.03	---	---	257.34	---	---	---	---	---
1200 x 1050	48 x 42	---	---	---	---	---	---	188.80	---	---	251.69	---	---	---	---	---
1200 x 1000	48 x 40	---	---	---	---	---	---	184.57	---	---	246.03	---	---	---	---	---



CAPS WEIGHT LIST

ANSI B16.9

SIZE		S5S	S10S	S20S	S10	S20	S30	STD	S40	S60	XS	S80	S100	S120	S140	S160	XXS
mm	inch	KG															
15	½	0.02	0.03	0.03	---	---	---	0.04	0.04	0.04	0.05	0.05	---	---	---	0.06	0.10
20	¾	0.03	0.04	0.04	---	---	---	0.05	0.05	0.06	0.07	0.07	---	---	---	0.09	0.13
25	1	0.05	0.09	0.10	---	---	---	0.11	0.11	0.12	0.14	0.14	---	---	---	0.20	0.29
32	1¼	0.07	0.11	0.12	---	---	---	0.14	0.14	0.18	0.20	0.20	---	---	---	0.26	0.39
40	1½	0.08	0.13	0.14	---	---	---	0.17	0.17	0.21	0.23	0.23	---	---	---	0.33	0.47
50	2	0.10	0.17	0.21	---	---	---	0.23	0.23	0.29	0.33	0.33	---	---	---	0.52	0.66
65	2½	0.16	0.23	0.27	---	---	---	0.40	0.40	0.46	0.53	0.53	---	---	---	0.72	1.07
80	3	0.25	0.36	0.48	---	---	---	0.66	0.66	0.79	0.91	0.91	---	---	---	1.34	1.83
90	3½	0.35	0.50	0.67	---	---	---	0.96	0.96	1.18	1.36	1.36	---	---	---	2.13	---
100	4	0.41	0.58	0.78	---	---	---	1.17	1.17	1.38	1.68	1.68	---	2.16	---	2.63	3.33
125	5	0.80	0.98	1.44	---	---	---	1.90	1.90	2.33	2.73	2.73	---	3.65	---	4.57	5.46
150	6	1.14	1.39	2.04	---	---	---	2.90	2.90	3.79	4.49	4.49	---	5.83	---	7.42	8.93
200	8	1.78	2.41	4.12	---	4.06	4.44	5.20	5.20	6.53	8.05	8.05	9.57	11.54	13.06	14.58	14.08
250	10	3.35	4.14	6.41	---	6.31	7.69	9.17	9.17	12.53	12.53	14.90	18.05	21.11	25.06	28.21	25.06
300	12	5.59	6.43	9.09	---	8.95	11.75	13.29	14.41	20.00	17.76	24.34	29.93	35.53	40.00	46.58	35.53
350	14	6.69	8.02	13.21	10.70	13.21	15.88	15.88	18.55	25.24	21.23	31.76	39.78	46.47	53.16	59.68	---
400	16	8.84	10.10	16.62	13.47	16.62	19.99	19.99	26.72	35.14	26.72	45.03	55.13	65.02	76.80	85.22	---
450	18	11.29	12.90	21.23	17.20	21.23	29.83	25.53	38.43	51.06	34.13	63.96	79.01	93.79	106.68	121.46	---
500	20	16.06	18.40	26.43	21.41	31.78	42.48	31.78	50.51	68.91	42.48	87.64	108.72	127.45	148.53	167.26	---
550	22	---	---	---	26.07	38.69	51.73	38.69	---	90.42	51.73	116.49	142.15	168.22	193.88	219.95	---
600	24	26.06	30.33	---	30.33	45.02	67.76	45.02	82.93	116.57	60.18	146.90	184.34	217.98	248.31	281.95	---
650	26	---	---	---	41.86	67.30	---	50.34	---	---	67.30	---	---	---	---	---	---
700	28	---	---	---	46.56	74.85	93.71	55.98	---	---	74.85	---	---	---	---	---	---
750	30	41.76	51.54	---	51.54	82.86	103.74	61.98	---	---	82.86	---	---	---	---	---	---
800	32	---	---	---	56.78	91.28	114.28	68.28	125.78	---	91.28	---	---	---	---	---	---
850	34	---	---	---	62.23	100.03	125.24	74.83	137.84	---	100.03	---	---	---	---	---	---
900	36	---	---	---	67.90	109.15	136.66	81.65	164.16	---	109.15	---	---	---	---	---	---
950	38	---	---	---	---	---	---	94.47	---	---	126.29	---	---	---	---	---	---
1000	40	---	---	---	---	---	---	102.18	---	---	136.60	---	---	---	---	---	---
1050	42	---	---	---	---	---	---	110.22	---	---	147.35	---	---	---	---	---	---
1100	44	---	---	---	---	---	---	124.94	---	---	167.02	---	---	---	---	---	---
1150	46	---	---	---	---	---	---	133.78	---	---	178.84	---	---	---	---	---	---
1200	48	---	---	---	---	---	---	142.92	---	---	191.07	---	---	---	---	---	---

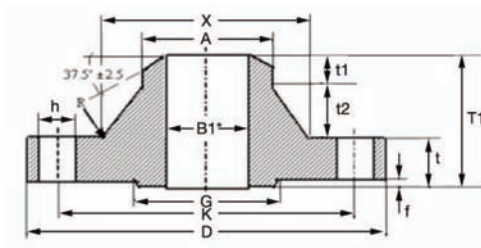
FLANGES



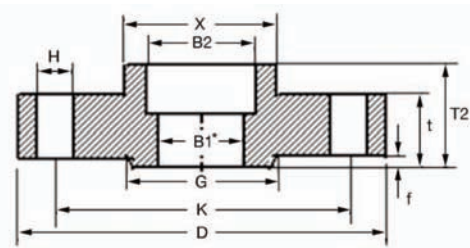
ANSI FLANGES



ANSI B16.5 CLASS 150 FLANGES



Welding Neck RF



Socket Welding RF

WELDING NECK RF STD* DIMENSIONS (mm)

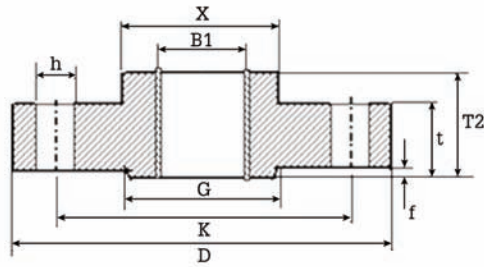
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
						Base Diam.	Thick-ness	Thick-ness	Diam.		Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	BI*	t	T1	X	t2	t1	A	R	h	n	K	G	f	kg
15	½	88.90	15.75	11.18	47.75	30.23	29.21	7.37	21.34	3.05	15.75	4	60.45	35.05	1.52	0.49
20	¾	98.55	20.83	12.70	52.32	38.10	31.75	7.87	26.67	3.05	15.75	4	69.85	42.93	1.52	0.72
25	1	107.95	26.67	14.22	55.63	49.28	33.02	8.38	33.53	3.05	15.75	4	79.25	50.80	1.52	1.03
32	1¼	117.35	35.05	15.75	57.15	58.67	33.02	8.38	42.16	4.83	15.75	4	88.90	63.50	1.52	1.34
40	1½	127.00	40.89	17.53	61.98	65.02	35.56	8.89	48.26	6.35	15.75	4	98.55	73.15	1.52	1.74
50	2	152.40	52.58	19.05	63.50	77.72	35.56	8.89	60.45	7.87	19.05	4	120.65	91.95	1.52	2.60
65	2½	177.80	62.74	22.35	69.85	90.42	38.10	9.40	73.15	7.87	19.05	4	139.70	104.65	1.52	4.17
80	3	190.50	77.93	23.88	69.85	107.95	36.83	9.14	88.90	9.65	19.05	4	152.40	127.00	1.52	4.99
90	3½	215.90	90.17	23.88	71.37	122.17	38.10	9.40	101.60	9.65	19.05	8	177.80	139.70	1.52	6.18
100	4	228.60	102.26	23.88	76.20	134.87	41.91	10.41	114.30	11.18	19.05	8	190.50	157.23	1.52	6.98
125	5	254.00	128.19	23.88	88.90	163.58	52.07	12.95	141.22	11.18	22.35	8	215.90	185.67	1.52	8.72
150	6	279.40	154.05	25.40	88.90	192.02	50.80	12.70	168.40	12.70	22.35	8	241.30	215.90	1.52	10.74
200	8	342.90	202.72	28.45	101.60	246.13	58.42	14.73	219.20	12.70	22.35	8	298.45	269.75	1.52	17.68
250	10	406.40	254.51	30.23	101.60	304.80	57.15	14.22	273.05	12.70	25.40	12	361.95	323.85	1.52	24.25
300	12	482.60	304.80	31.75	114.30	365.25	66.04	16.51	323.85	12.70	25.40	12	431.80	381.00	1.52	36.93
350	14	533.40	336.55	35.05	127.00	400.05	73.66	18.29	355.60	12.70	28.45	12	476.25	412.75	1.52	48.88
400	16	596.90	387.35	36.58	127.00	457.20	72.39	18.03	406.40	12.70	28.45	16	539.75	469.90	1.52	60.47
450	18	635.00	438.15	39.62	139.70	504.95	80.01	20.07	457.20	12.70	31.75	16	577.85	533.40	1.52	68.37
500	20	698.50	488.95	42.93	144.53	558.80	81.28	20.32	508.00	12.70	31.75	20	635.00	584.20	1.52	84.60
600	24	812.80	590.55	47.75	152.40	663.45	83.82	20.83	609.60	12.70	35.05	20	749.30	692.15	1.52	115.33

SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

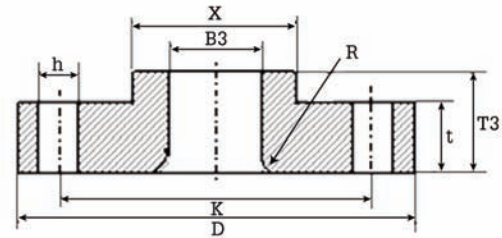
Size		Outside Diam.	Bore Diameter STD		Bore Diameter XS		Thick-ness	Socket Depth	Total Thick-ness	Diam. at Base of Hub	Holes			Raised Face		Net Weight
			B2	BI*	B2	BI*					Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	BI*	B2	BI*	t	Y	T2	X	h	n	K	G	f	kg
15	½	88.90	22.35	15.75	22.35	13.97	11.18	9.65	15.75	30.23	15.75	4	60.45	35.05	1.52	0.41
20	¾	98.55	27.69	20.83	27.69	18.80	12.70	11.18	15.75	38.10	15.75	4	69.85	42.93	1.52	0.58
25	1	107.95	34.54	26.67	34.54	24.38	14.22	12.70	17.53	49.28	15.75	4	79.25	50.80	1.52	0.79
32	1¼	117.35	43.18	35.05	43.18	32.51	15.75	14.22	20.57	58.67	15.75	4	88.90	63.50	1.52	1.05
40	1½	127.00	49.53	40.89	49.53	38.10	17.53	15.75	22.35	65.02	15.75	4	98.55	73.15	1.52	1.36
50	2	152.40	61.98	52.58	61.98	49.28	19.05	17.53	25.40	77.72	19.05	4	120.65	91.95	1.52	2.12
65	2½	177.80	74.68	62.74	74.68	58.93	22.35	19.05	28.45	90.42	19.05	4	139.70	104.65	1.52	3.40
80	3	190.50	90.68	77.98	90.68	73.66	23.88	20.57	30.23	107.95	19.05	4	152.40	127.00	1.52	4.01
90	3½	215.90	103.38	90.17	103.38	85.34	23.88	22.35	31.75	122.17	19.05	8	177.80	139.70	1.52	4.99
100	4	228.60	116.08	102.36	116.08	97.28	23.88	23.88	33.27	134.87	19.05	8	190.50	157.23	1.52	5.50
125	5	254.00	143.76	128.27	143.76	122.17	23.88	23.88	36.58	163.58	22.35	8	215.90	185.67	1.52	6.43
150	6	279.40	170.69	154.18	170.69	146.30	25.40	26.92	39.62	192.02	22.35	8	241.30	215.90	1.52	7.88
200	8	342.90	221.49	253.49	221.49	193.80	28.45	31.75	44.45	246.13	22.35	8	298.45	269.75	1.52	10.88
250	10	406.40	276.35	254.51	276.35	247.65	30.23	33.27	49.28	304.80	25.40	12	361.95	323.85	1.52	17.70
300	12	482.60	327.15	304.80	327.15	298.45	31.75	39.62	55.63	365.25	25.40	12	431.80	381.00	1.52	27.65
350	14	533.40	359.16	336.55	359.16	330.20	35.05	41.40	57.15	400.05	28.45	12	476.25	412.75	1.52	36.29
400	16	596.90	410.46	387.35	410.46	381.00	36.58	44.45	63.50	457.20	28.45	16	539.75	469.90	1.52	47.18
450	18	635.00	461.77	438.15	461.77	431.80	39.62	49.28	68.33	504.95	31.75	16	577.85	533.40	1.52	51.39
500	20	698.50	513.08	488.95	513.08	482.60	42.93	54.10	73.15	558.80	31.75	20	635.00	584.20	1.52	64.91
600	24	812.80	615.95	590.55	615.95	584.20	47.75	63.50	82.55	663.45	35.05	20	749.30	692.15	1.52	90.73



ANSI B16.5 CLASS 150 FLANGES



Threaded RF



Lap Joint RF

THREADED RF DIMENSIONS (mm)

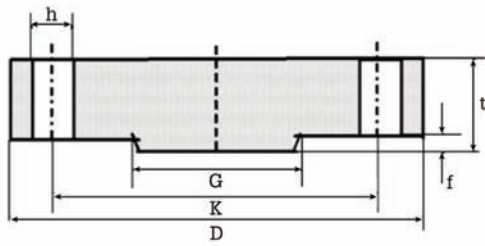
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Diam. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
								Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	Q	h	n	K	G	f	kg
15	½	88.90	22.35	11.18	15.75	30.23	15.75	15.75	4	60.45	35.05	1.52	0.40
20	¾	98.55	27.69	12.70	15.75	38.10	15.75	15.75	4	69.85	42.93	1.52	0.57
25	1	107.95	34.54	14.22	17.53	49.28	17.53	15.75	4	79.25	50.80	1.52	0.78
32	1¼	117.35	43.18	15.75	20.57	58.67	20.57	15.75	4	88.90	63.50	1.52	1.02
40	1½	127.00	49.53	17.53	22.35	65.02	22.35	15.75	4	98.55	73.15	1.52	1.33
50	2	152.40	61.98	19.05	25.40	77.72	25.40	19.05	4	120.65	91.95	1.52	2.07
65	2½	177.80	74.68	22.35	28.45	90.42	28.45	19.05	4	139.70	104.65	1.52	3.31
80	3	190.50	90.68	23.88	30.23	107.95	30.23	19.05	4	152.40	127.00	1.52	3.88
90	3½	215.90	103.38	23.88	31.75	122.17	31.75	19.05	8	177.80	139.70	1.52	4.84
100	4	228.60	116.08	23.88	33.27	134.87	33.27	19.05	8	190.50	157.23	1.52	5.32
125	5	254.00	143.76	23.88	36.58	163.58	36.58	22.35	8	215.90	185.67	1.52	6.10
150	6	279.40	170.69	25.40	39.62	192.02	39.62	22.35	8	241.30	215.90	1.52	7.46
200	8	342.90	221.49	28.45	44.45	246.13	44.45	22.35	8	298.45	269.75	1.52	12.07
250	10	406.40	276.35	30.23	49.28	304.80	49.28	25.40	12	361.95	323.85	1.52	16.56
300	12	482.60	327.15	31.75	55.63	365.25	55.63	25.40	12	431.80	381.00	1.52	26.26
350	14	533.40	359.16	35.05	57.15	400.05	57.15	28.45	12	476.25	412.75	1.52	34.76
400	16	596.90	410.46	36.58	63.50	457.20	63.50	28.45	16	539.75	469.90	1.52	45.02
450	18	635.00	461.77	39.62	68.33	504.95	68.33	31.75	16	577.85	533.40	1.52	48.90
500	20	698.50	513.08	42.93	73.15	558.80	73.15	31.75	20	635.00	584.20	1.52	62.07
600	24	812.80	615.95	47.75	82.55	663.45	82.55	35.05	20	749.30	692.15	1.52	87.13

LAP JOINT RF DIMENSIONS (mm)

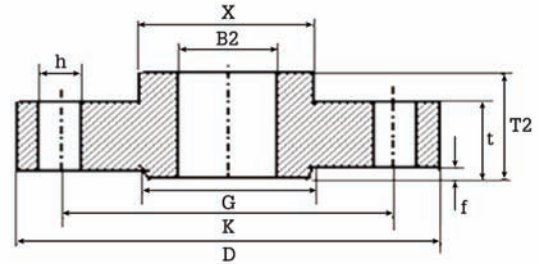
Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Diam. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
							Diam.	No.	P.C.D		Outside Diam.	Thick-ness	
mm	inch	D	B3	t	T3	X	h	n	K	R	G	f	kg
15	½	88.90	22.86	11.18	15.75	30.23	15.75	4	60.45	3.05	35.05	1.52	0.40
20	¾	98.55	28.19	12.70	15.75	38.10	15.75	4	69.85	3.05	42.93	1.52	0.57
25	1	107.95	35.05	14.22	17.53	49.28	15.75	4	79.25	3.05	50.80	1.52	0.78
32	1¼	117.35	43.69	15.75	20.57	58.67	15.75	4	88.90	4.83	63.50	1.52	1.02
40	1½	127.00	50.04	17.53	22.35	65.02	15.75	4	98.55	6.35	73.15	1.52	1.33
50	2	152.40	62.48	19.05	25.40	77.72	19.05	4	120.65	7.87	91.95	1.52	2.06
65	2½	177.80	75.44	22.35	28.45	90.42	19.05	4	139.70	7.87	104.65	1.52	3.29
80	3	190.50	91.44	23.88	30.23	107.95	19.05	4	152.40	9.65	127.00	1.52	3.85
90	3½	215.90	104.14	23.88	31.75	122.17	19.05	8	177.80	9.65	139.70	1.52	4.81
100	4	228.60	116.84	23.88	33.27	134.87	19.05	8	190.50	11.18	157.23	1.52	5.29
125	5	254.00	144.53	23.88	36.58	163.58	22.35	8	215.90	11.18	185.67	1.52	6.05
150	6	279.40	171.45	25.40	39.62	192.02	22.35	8	241.30	12.70	215.90	1.52	7.39
200	8	342.90	222.25	28.45	44.45	246.13	22.35	8	298.45	12.70	269.75	1.52	11.98
250	10	406.40	277.37	30.23	49.28	304.80	25.40	12	361.95	12.70	323.85	1.52	16.38
300	12	482.60	328.17	31.75	55.63	365.25	25.40	12	431.80	12.70	381.00	1.52	26.03
350	14	533.40	360.17	35.05	57.15	400.05	28.45	12	476.25	12.70	412.75	1.52	38.63
400	16	596.90	411.23	36.58	63.50	457.20	28.45	16	539.75	12.70	469.90	1.52	50.65
450	18	635.00	462.28	39.62	68.33	504.95	31.75	16	577.85	12.70	533.40	1.52	55.94
500	20	698.50	514.35	42.93	73.15	558.80	31.75	20	635.00	12.70	584.20	1.52	70.30
600	24	812.80	615.95	47.75	82.55	663.45	35.05	20	749.30	12.70	692.15	1.52	97.89



ANSI B16.5 CLASS 150 FLANGES



Blind RF



Slip On

BLIND RF DIMENSIONS (mm)

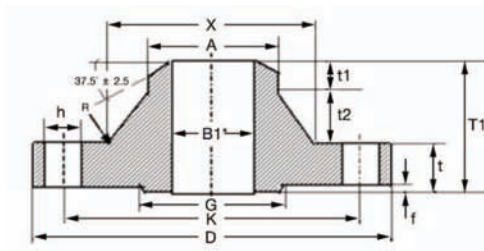
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
				Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	kg
15	½	88.90	11.18	15.75	4	60.45	35.05	1.52	0.42
20	¾	98.55	12.70	15.75	4	69.85	42.93	1.52	0.62
25	1	107.95	14.22	15.75	4	79.25	50.80	1.52	0.86
32	1¼	117.35	15.75	15.75	4	88.90	63.50	1.52	1.16
40	1½	127.00	17.53	15.75	4	98.55	73.15	1.52	1.54
50	2	152.40	19.05	19.05	4	120.65	91.95	1.52	2.43
65	2½	177.80	22.35	19.05	4	139.70	104.65	1.52	3.98
80	3	190.50	23.88	19.05	4	152.40	127.00	1.52	4.95
90	3½	215.90	23.88	19.05	8	177.80	139.70	1.52	6.21
100	4	228.60	23.88	19.05	8	190.50	157.23	1.52	7.04
125	5	254.00	23.88	22.35	8	215.90	185.67	1.52	8.67
150	6	279.40	25.40	22.35	8	241.30	215.90	1.52	11.34
200	8	342.90	28.45	22.35	8	298.45	269.75	1.52	19.54
250	10	406.40	30.23	25.40	12	361.95	323.85	1.52	28.85
300	12	482.60	31.75	25.40	12	431.80	381.00	1.52	43.33
350	14	533.40	35.05	28.45	12	476.25	412.75	1.52	58.41
400	16	596.90	36.58	28.45	16	539.75	469.90	1.52	76.28
450	18	635.00	39.62	31.75	16	577.85	533.40	1.52	93.60
500	20	698.50	42.93	31.75	20	635.00	584.20	1.52	122.62
600	24	812.80	47.75	35.05	20	749.30	692.15	1.52	185.79

SLIP ON RF DIMENSIONS (mm)

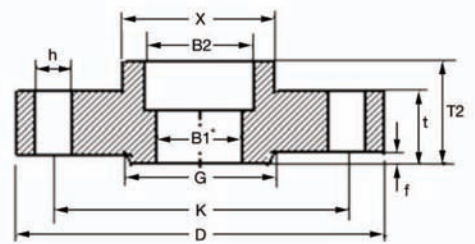
Size		Outside Diam.	Bore Diam.	Thickness	Total Thick-ness	Diam. of Base of Hub	Holes			Raised Face		Net Weight
							Diam.	No.	P.C.D	Outside Diam.	Thickness	
mm	inch	D	B2	t	T2	X	h	n	K	G	f	kg
15	½	88.90	22.35	11.18	15.75	30.23	15.75	4	60.45	35.05	1.52	0.40
20	¾	98.55	27.69	12.70	15.75	38.10	15.75	4	69.85	42.93	1.52	0.57
25	1	107.95	34.54	14.22	17.53	49.28	15.75	4	79.25	50.80	1.52	0.78
32	1¼	117.35	43.18	15.75	20.57	58.67	15.75	4	88.90	63.50	1.52	1.02
40	1½	127.00	49.53	17.53	22.35	65.02	15.75	4	98.55	73.15	1.52	1.33
50	2	152.40	61.98	19.05	25.40	77.72	19.05	4	120.65	91.95	1.52	2.07
65	2½	177.80	74.68	22.35	28.45	90.42	19.05	4	139.70	104.65	1.52	3.31
80	3	190.50	90.68	23.88	30.23	107.95	19.05	4	152.40	127.00	1.52	3.88
90	3½	215.90	103.38	23.88	31.75	122.17	19.05	8	177.80	139.70	1.52	4.84
100	4	228.60	116.06	23.88	33.27	134.87	19.05	8	190.50	157.23	1.52	5.32
125	5	254.00	143.76	23.88	36.58	163.58	22.35	8	215.90	185.67	1.52	6.10
150	6	279.40	170.69	25.40	39.62	192.02	22.35	8	241.30	215.90	1.52	7.46
200	8	342.90	221.49	28.45	44.45	246.13	22.35	8	298.45	269.75	1.52	12.07
250	10	406.40	276.35	30.23	49.28	304.80	25.40	12	361.95	323.85	1.52	16.56
300	12	482.60	327.15	31.75	55.63	365.25	25.40	12	431.80	381.00	1.52	26.26
350	14	533.40	359.16	35.05	57.15	400.05	28.45	12	476.25	412.75	1.52	34.76
400	16	596.90	410.46	36.58	63.50	457.20	28.45	16	539.75	469.90	1.52	45.02
450	18	635.00	461.77	39.62	68.33	504.95	31.75	16	577.85	533.40	1.52	48.90
500	20	698.50	513.08	42.93	73.15	558.80	31.75	20	635.00	584.20	1.52	62.07
600	24	812.80	615.95	47.75	82.55	663.45	35.05	20	749.30	692.15	1.52	87.13



ANSI B16.5 CLASS 300 FLANGES



Welding Neck RF



Socket Welding RF

WELDING NECK RF STD* DIMENSIONS (mm)

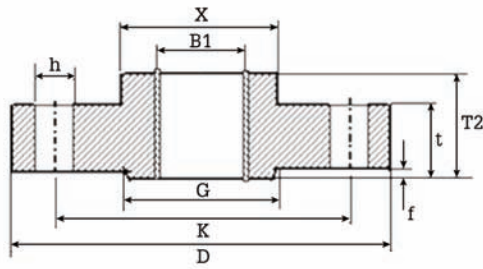
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
						Base Diam.	Thick-ness	Thick-ness	Diam.		Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	BI*	t	T1	X	t2	t1	A	R	h	n	K	G	f	kg
15	½	95.25	15.75	14.22	52.32	38.10	30.48	7.62	21.34	3.05	15.75	4.00	66.55	35.05	1.52	0.76
20	¾	117.35	20.83	15.75	57.15	47.75	33.12	8.28	26.67	3.05	19.05	4.00	82.55	42.93	1.52	1.27
25	1	123.95	26.67	17.53	61.98	53.85	35.56	8.89	33.53	3.05	19.05	4.00	88.90	50.80	1.52	1.61
32	1¼	133.35	35.05	19.05	65.02	63.50	36.78	9.19	42.16	4.83	19.05	4.00	98.55	63.50	1.52	2.05
40	1½	155.45	40.89	20.57	68.33	69.85	38.20	9.55	48.26	6.35	22.35	4.00	114.30	73.15	1.52	2.92
50	2	165.10	52.58	22.35	69.85	84.07	38.00	9.50	60.45	7.87	19.05	8.00	127.00	91.95	1.52	3.46
65	2½	190.50	62.74	25.40	76.20	100.08	40.64	10.16	73.15	7.87	22.35	8.00	149.35	104.65	1.52	5.24
80	3	209.55	77.98	28.45	79.25	117.35	40.64	10.16	88.90	9.65	22.35	8.00	168.15	127.00	1.52	6.98
90	3¾	228.60	90.17	30.23	81.03	133.35	40.64	10.16	101.60	9.65	22.35	8.00	184.15	139.70	1.52	8.79
100	4	254.00	102.36	31.75	85.85	146.05	43.28	10.82	114.30	11.18	22.35	8.00	200.15	157.53	1.52	11.38
125	5	279.40	128.27	35.05	98.55	177.80	50.80	12.70	141.22	11.18	22.35	8.00	234.95	185.67	1.52	15.20
150	6	317.50	154.18	36.58	98.55	206.25	49.58	12.40	168.40	12.70	22.35	12.00	269.75	215.90	1.52	19.42
200	8	381.00	202.69	41.15	111.25	260.35	56.08	14.02	219.20	12.70	25.40	12.00	330.20	269.75	1.52	30.16
250	10	444.50	254.51	47.75	117.35	320.55	55.68	13.92	273.05	12.70	28.45	16.00	387.35	323.85	1.52	43.45
300	12	520.70	304.80	50.80	130.05	374.65	63.40	15.85	323.85	12.70	31.75	16.00	450.85	381.00	1.52	62.36
350	14	584.20	336.55	53.85	142.75	425.45	71.12	17.78	355.60	12.70	31.75	20.00	514.35	412.75	1.52	86.43
400	16	647.70	387.35	57.15	146.05	482.60	71.12	17.78	406.40	12.70	35.05	20.00	571.50	469.90	1.52	107.38
450	18	711.20	438.15	60.45	158.75	533.40	78.64	19.66	457.20	12.70	35.05	24.00	628.65	533.40	1.52	132.34
500	20	774.70	488.95	63.50	162.05	587.25	78.64	19.71	508.00	12.70	35.05	24.00	685.80	584.20	1.52	159.80
600	24	914.40	590.55	69.85	168.15	701.55	78.64	19.66	609.60	12.70	41.15	24.00	812.80	692.15	1.52	231.82

SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

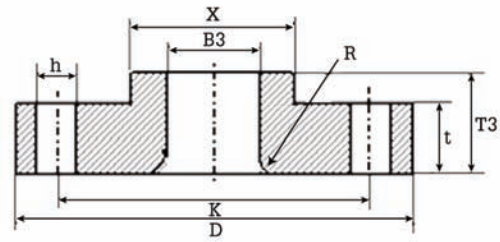
Size		Outside Diam.	Bore Diameter STD		Bore Diameter XS		Thick-ness	Socket Depth	Total Thick-ness	Diam. at Base of Hub	Holes			Raised Face		Net Weight
			B2	BI	B2	BI					Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	BI	B2	BI	t	Y	T2	X	h	n	K	G	f	kg
15	½	95.25	22.35	15.75	22.35	13.87	14.22	9.65	22.35	38.10	15.75	4.00	66.55	35.05	1.52	0.67
20	¾	117.35	27.69	20.83	27.69	18.85	15.75	11.18	25.40	47.75	19.05	4.00	82.55	42.93	1.52	1.14
25	1	123.95	34.54	26.67	34.54	24.31	17.53	12.70	26.92	53.85	19.05	4.00	88.90	50.80	1.52	1.41
32	1¼	133.35	43.18	35.05	43.18	32.46	19.05	14.22	26.92	63.50	19.05	4.00	98.55	63.50	1.52	1.74
40	1½	155.45	49.53	40.89	49.53	38.10	20.57	15.75	30.23	69.85	22.35	4.00	114.30	73.15	1.52	2.56
50	2	165.10	61.98	52.58	61.98	49.25	22.35	17.53	33.27	84.07	19.05	8.00	127.00	91.95	1.52	3.00
65	2½	190.50	74.68	62.74	74.68	59.00	25.40	19.05	38.10	100.08	22.35	8.00	149.35	104.65	1.52	4.52
80	3	209.55	90.68	77.98	90.68	73.66	28.45	20.57	42.93	117.35	22.35	8.00	168.15	127.00	1.52	6.13
90	3¾	228.60	103.38	90.17	103.38	85.45	30.23	22.35	44.45	133.35	22.35	8.00	184.15	139.70	1.52	7.70
100	4	254.00	116.08	102.36	116.08	97.18	31.75	23.88	47.75	146.05	22.35	8.00	200.15	157.53	1.52	10.09
125	5	279.40	143.76	128.27	143.76	122.25	35.05	23.88	50.80	177.80	22.35	8.00	234.95	185.67	1.52	12.93
150	6	317.50	170.69	154.18	170.69	146.33	36.58	26.92	52.32	206.25	22.35	12.00	269.75	215.90	1.52	16.50
200	8	381.00	221.49	202.69	221.49	193.68	41.15	31.75	61.98	260.35	25.40	12.00	330.20	269.75	1.52	25.70
250	10	444.50	276.35	254.51	276.35	247.65	47.75	33.27	66.55	320.55	28.45	16.00	387.35	323.85	1.52	36.56
300	12	520.70	327.15	304.80	327.15	298.45	50.80	39.62	73.15	374.65	31.75	16.00	450.85	381.00	1.52	52.83
350	14	584.20	359.16	336.55	359.16	330.20	53.85	41.40	76.20	425.45	31.75	20.00	514.35	412.75	1.52	72.92
400	16	647.70	410.46	387.35	410.46	381.00	57.15	44.45	82.55	482.60	35.05	20.00	571.50	469.90	1.52	92.58
450	18	711.20	461.77	438.15	461.77	431.80	60.45	49.28	88.90	533.40	35.05	24.00	628.65	533.40	1.52	113.95
500	20	774.70	513.08	489.95	513.08	482.60	63.50	54.10	95.25	587.25	35.05	24.00	685.80	584.20	1.52	140.32
600	24	914.40	615.95	590.55	615.95	584.20	69.85	63.50	106.43	701.55	41.15	24.00	812.80	692.15	1.52	209.77



ANSI B16.5 CLASS 300 FLANGES



Threaded RF



Lap Joint RF

THREADED RF DIMENSIONS (mm)

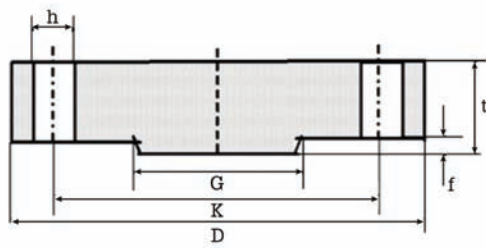
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Diam. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
								Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	Q	h	n	K	G	f	kg
15	½	95.25	22.35	14.22	22.35	38.10	15.75	15.75	4.00	66.55	35.05	1.52	0.65
20	¾	117.35	27.69	15.75	25.40	47.75	15.75	19.05	4.00	82.55	42.93	1.52	1.11
25	1	123.95	34.54	17.53	26.92	53.85	17.53	19.05	4.00	88.90	50.80	1.52	1.37
32	1¼	133.35	43.18	19.05	26.92	63.50	20.57	19.05	4.00	98.55	63.50	1.52	1.69
40	1½	155.45	49.53	20.57	30.23	69.85	22.35	22.35	4.00	114.30	73.15	1.52	2.49
50	2	165.10	61.98	22.35	33.27	84.07	28.45	19.05	8.00	127.00	91.95	1.52	2.89
65	2½	190.50	74.68	25.40	38.10	100.08	31.75	22.35	8.00	149.35	104.65	1.52	4.33
80	3	209.55	90.68	28.45	42.93	117.35	31.75	22.35	8.00	168.15	127.00	1.52	5.83
90	3½	228.60	103.38	30.23	44.45	133.35	36.58	22.35	8.00	184.15	139.70	1.52	7.36
100	4	254.00	116.08	31.75	47.75	146.05	36.58	22.35	8.00	200.15	157.53	1.52	9.65
125	5	279.40	143.76	35.05	50.80	177.80	42.93	22.35	8.00	234.95	185.67	1.52	12.23
150	6	317.50	170.69	36.58	52.32	206.25	45.97	22.35	12.00	269.75	215.90	1.52	15.66
200	8	381.00	221.49	41.15	61.98	260.35	50.80	25.40	12.00	330.20	269.75	1.52	24.22
250	10	444.50	276.35	47.75	66.55	320.55	55.63	28.45	16.00	387.35	323.85	1.52	34.18
300	12	520.70	327.15	50.80	73.15	374.65	60.45	31.75	16.00	450.85	381.00	1.52	49.91
350	14	584.20	359.16	53.85	76.20	425.45	63.50	31.75	20.00	514.35	412.75	1.52	69.54
400	16	647.70	410.46	57.15	82.55	482.60	68.33	35.05	20.00	571.50	469.90	1.52	88.25
450	18	711.20	461.77	60.45	88.90	533.40	69.85	35.05	24.00	628.65	533.40	1.52	108.76
500	20	774.70	513.08	63.50	95.25	587.25	73.15	35.05	24.00	685.80	584.20	1.52	134.18
600	24	914.40	615.95	69.85	106.43	701.55	82.55	41.15	24.00	812.80	692.15	1.52	201.66

LAP JOINT RF DIMENSIONS (mm)

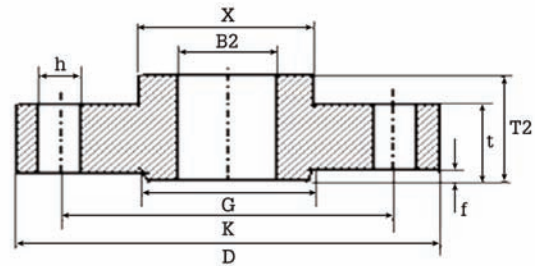
Size		Outside Diam.	Bore Diam.	Thick-ness	Lenght thru Hub	Diam. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
							Diam.	No.	P.C.D		Outside Diam.	Thick-ness	
mm	inch	D	B3	t	T3	X	h	n	K	R	G	f	kg
15	½	95.25	22.86	14.22	22.35	38.10	15.75	4.00	66.55	3.05	35.05	1.52	0.64
20	¾	117.35	28.19	15.75	25.40	47.75	19.05	4.00	82.55	3.05	42.93	1.52	1.11
25	1	123.95	35.05	17.53	26.92	53.85	19.05	4.00	88.90	3.05	50.80	1.52	1.36
32	1¼	133.35	43.69	19.05	26.92	63.50	19.05	4.00	98.55	4.83	63.50	1.52	1.68
40	1½	155.45	50.04	20.57	30.23	69.85	22.35	4.00	114.30	6.35	73.15	1.52	2.48
50	2	165.10	62.48	22.35	33.27	84.07	19.05	8.00	127.00	7.87	91.95	1.52	2.88
65	2½	190.50	75.44	25.40	38.10	100.08	22.35	8.00	149.35	7.87	104.65	1.52	4.30
80	3	209.55	91.44	28.45	42.93	117.35	22.35	8.00	168.15	9.65	127.00	1.52	5.79
90	3½	228.60	104.14	30.23	44.45	133.35	22.35	8.00	184.15	9.65	139.70	1.52	7.31
100	4	254.00	116.84	31.75	47.75	146.05	22.35	8.00	200.15	11.18	157.53	1.52	9.60
125	5	279.40	144.53	35.05	50.80	177.80	22.35	8.00	234.95	11.18	185.67	1.52	12.16
150	6	317.50	171.45	36.58	52.32	206.25	22.35	12.00	269.75	12.70	215.90	1.52	15.58
200	8	381.00	222.25	41.15	61.98	260.35	25.40	12.00	330.20	12.70	269.75	1.52	24.09
250	10	444.50	277.37	47.75	66.55	320.55	28.45	16.00	387.35	12.70	323.85	1.52	38.52
300	12	520.70	328.17	50.80	73.15	374.65	31.75	16.00	450.85	12.70	381.00	1.52	55.34
350	14	584.20	360.17	53.85	76.20	425.45	31.75	20.00	514.35	12.70	412.75	1.52	80.28
400	16	647.70	411.23	57.15	82.55	482.60	35.05	20.00	571.50	12.70	469.90	1.52	102.92
450	18	711.20	462.28	60.45	88.90	533.40	35.05	24.00	628.65	12.70	533.40	1.52	126.47
500	20	774.70	514.35	63.50	95.25	587.25	35.05	24.00	685.80	12.70	584.20	1.52	155.43



ANSI B16.5 CLASS 300 FLANGES



Blind RF



Slip On

BLIND RF DIMENSIONS (mm)

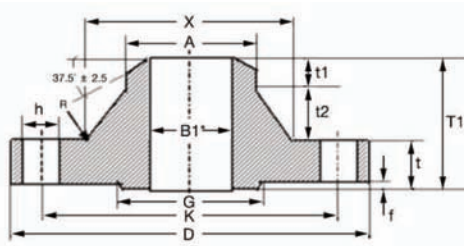
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
				Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	kg
15	½	95.25	14.22	15.75	4.00	66.55	35.05	1.52	0.64
20	¾	117.35	15.75	19.05	4.00	82.55	42.93	1.52	1.10
25	1	123.95	17.53	19.05	4.00	88.90	50.80	1.52	1.40
32	1¼	133.35	19.05	19.05	4.00	98.55	63.50	1.52	1.80
40	1½	165.45	20.57	22.35	4.00	114.30	73.15	1.52	2.65
50	2	165.10	22.35	19.05	8.00	127.00	91.95	1.52	3.21
65	2½	190.50	25.40	22.35	8.00	149.35	104.65	1.52	4.86
80	3	209.55	28.45	22.35	8.00	168.15	127.00	1.52	6.78
90	3½	228.60	30.23	22.35	8.00	184.15	139.70	1.52	8.73
100	4	254.00	31.75	22.35	8.00	200.15	157.23	1.52	11.51
125	5	279.40	35.05	22.35	8.00	234.95	185.67	1.52	15.63
150	6	317.50	38.58	22.35	12.00	269.75	215.90	1.52	20.93
200	8	381.00	41.15	25.40	12.00	330.20	269.75	1.52	34.26
250	10	444.50	47.75	28.45	16.00	387.35	323.85	1.52	53.61
300	12	520.70	50.80	31.75	16.00	450.85	381.00	1.52	78.84
350	14	584.20	53.85	31.75	20.00	514.35	412.75	1.52	105.20
400	16	647.70	57.15	35.05	20.00	571.50	469.90	1.52	137.53
450	18	711.20	60.45	35.05	24.00	628.65	533.40	1.52	175.73
500	20	774.70	63.50	35.05	24.00	685.80	584.20	1.52	221.27
600	24	914.40	69.85	41.15	24.00	812.80	692.15	1.52	339.61

SLIP ON RF DIMENSIONS (mm)

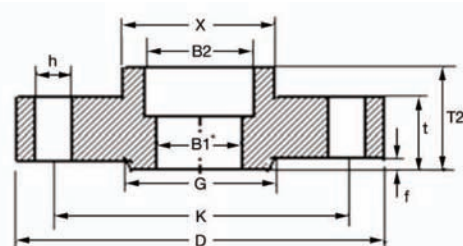
Size		Outside Diam.	Bore Diam.	Thickness	Total Thickness	Diam. of Base of Hub	Holes			Raised Face		Net Weight
							Diam.	No.	P.C.D	Outside Diam.	Thickness	
mm	inch	D	B2	t	T2	X	h	n	K	G	f	kg
15	½	95.25	22.35	14.22	22.35	38.10	15.75	4.00	66.55	35.05	1.52	0.65
20	¾	117.35	27.69	15.75	25.40	47.75	19.05	4.00	82.55	42.93	1.52	1.11
25	1	123.95	34.54	17.53	26.92	53.85	19.05	4.00	88.90	50.80	1.52	1.37
32	1¼	133.35	43.18	19.05	26.92	63.50	19.05	4.00	98.55	63.50	1.52	1.69
40	1½	165.45	49.53	20.57	30.23	69.85	22.35	4.00	114.30	73.15	1.52	2.49
50	2	165.10	61.98	22.35	33.27	84.07	19.05	8.00	127.00	91.95	1.52	2.89
65	2½	190.50	74.68	25.40	38.10	100.08	22.35	8.00	149.35	104.65	1.52	4.33
80	3	209.55	90.68	28.45	42.93	117.35	22.35	8.00	168.15	127.00	1.52	5.83
90	3½	228.60	103.38	30.23	44.45	133.35	22.35	8.00	184.15	139.70	1.52	7.36
100	4	254.00	116.08	31.75	47.75	146.05	22.35	8.00	200.15	157.23	1.52	9.65
125	5	279.40	143.76	35.05	50.80	177.80	22.35	8.00	234.95	185.67	1.52	12.23
150	6	317.50	170.69	38.58	52.32	206.25	22.35	12.00	269.75	215.90	1.52	15.66
200	8	381.00	221.49	41.15	61.98	260.35	25.40	12.00	330.20	269.75	1.52	24.22
250	10	444.50	276.35	47.75	66.55	320.55	28.45	16.00	387.35	323.85	1.52	34.18
300	12	520.70	327.15	50.80	73.15	374.65	31.75	16.00	450.85	381.00	1.52	49.91
350	14	584.20	359.16	53.85	76.20	425.45	31.75	20.00	514.35	412.75	1.52	69.54
400	16	647.70	410.46	57.15	82.55	482.60	35.05	20.00	571.50	469.90	1.52	88.25
450	18	711.20	461.77	60.45	88.90	533.40	35.05	24.00	628.65	533.40	1.52	108.76
500	20	774.70	513.08	63.50	95.25	587.25	35.05	24.00	685.80	584.20	1.52	134.18
600	24	914.40	615.95	69.85	106.43	701.55	41.15	24.00	812.80	692.15	1.52	201.66



ANSI B16.5 CLASS 600 FLANGES



Welding Neck RF



Socket Welding RF

WELDING NECK RF STD* DIMENSIONS (mm)

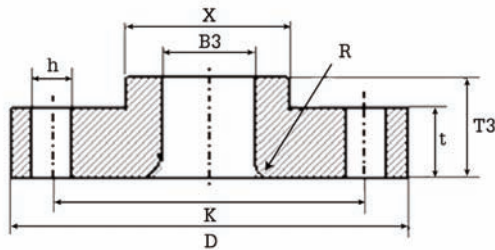
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face	
						Base Diam.	Thick-ness	Thick-ness	Diam.		Diam.	No.	P.C.D	Outside Diam.	Thick-ness
mm	inch	D	BI*	t	TI	X	t2	tI	A	R	h	n	K	G	f
15	½	95.25	15.75	14.22	52.32	38.10	30.48	7.62	21.34	3.05	15.75	4.00	66.55	35.05	6.35
20	¾	117.35	20.83	15.75	57.15	47.75	33.02	8.38	26.67	3.05	19.05	4.00	82.55	42.93	6.35
25	1	123.95	26.67	17.53	61.98	53.85	35.56	8.89	33.53	3.05	19.05	4.00	88.90	50.80	6.35
32	1¼	133.35	35.05	20.57	66.55	63.50	36.83	9.14	42.16	4.83	19.05	4.00	98.55	63.50	6.35
40	1½	155.45	40.89	22.35	69.85	69.85	38.10	9.40	48.26	6.35	22.35	4.00	114.30	73.15	6.35
50	2	165.10	52.58	25.40	73.15	84.07	38.10	9.65	60.45	7.87	19.05	8.00	127.00	91.95	6.35
65	2½	190.50	62.74	28.45	79.25	100.08	40.64	10.16	73.15	7.87	22.35	8.00	149.35	104.65	6.35
80	3	209.55	77.98	31.75	82.55	117.35	40.64	10.16	88.90	9.65	22.35	8.00	168.15	127.00	6.35
90	3½	228.60	90.17	35.05	85.85	133.35	40.64	10.16	101.60	9.65	25.40	8.00	184.15	139.70	6.35
100	4	273.05	102.36	38.10	101.60	152.40	50.80	12.70	114.30	11.18	25.40	8.00	215.90	157.53	6.35
125	5	330.20	128.27	44.45	114.30	188.98	55.88	13.97	141.22	11.18	28.45	8.00	266.70	185.67	6.35
150	6	355.60	154.18	47.75	117.35	222.25	55.63	13.97	168.40	12.70	28.45	12.00	292.10	215.90	6.35
200	8	419.10	202.69	55.63	133.35	273.05	62.23	15.49	219.20	12.70	31.75	12.00	349.25	269.75	6.35
250	10	508.00	254.51	63.50	152.40	342.90	71.12	17.78	273.05	12.70	35.05	16.00	431.80	323.85	6.35
300	12	558.80	304.80	66.55	155.45	400.05	71.12	17.78	323.85	12.70	35.05	20.00	488.95	381.00	6.35
350	14	603.25	336.55	69.85	165.10	431.80	76.20	19.05	355.60	12.70	38.10	20.00	527.05	412.75	6.35
400	16	685.80	387.35	76.20	177.80	493.30	81.28	20.32	406.40	12.70	41.15	20.00	603.25	469.90	6.35
450	18	742.95	438.15	82.55	184.15	546.10	81.28	20.32	457.20	12.70	44.45	20.00	654.05	533.40	6.35
500	20	812.80	488.95	88.90	190.50	609.60	81.28	20.32	508.00	12.70	44.45	24.00	723.90	584.20	6.35

SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

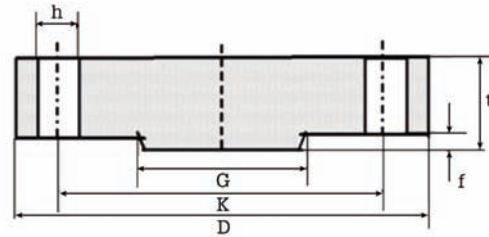
Size		Outside Diam.	Bore Diameter STD		Bore Diameter XS		Thick-ness	Socket Depth	Total Thick-ness	Diam. at Base of Hub	Holes			Raised Face		Net Weight
											Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	BI	B2	BI	t	Y	T2	X	h	n	K	G	f	kg
15	½	95.25	22.35	15.75	22.35	13.87	14.22	9.65	22.35	38.10	15.75	4.00	66.55	35.05	6.35	0.77
20	¾	117.35	27.69	20.83	27.69	18.85	15.75	11.18	25.40	47.75	19.05	4.00	82.55	42.93	6.35	1.30
25	1	123.95	34.54	26.67	34.54	24.31	17.53	12.70	26.92	53.85	19.05	4.00	88.90	50.80	6.35	1.59
32	1¼	133.35	43.18	35.05	43.18	32.46	20.57	14.22	26.92	63.50	19.05	4.00	98.55	63.50	6.35	2.11
40	1½	155.45	49.53	40.89	49.53	38.10	22.35	15.75	31.75	69.85	22.35	4.00	114.30	73.15	6.35	3.08
50	2	165.10	61.98	52.58	61.98	49.25	25.40	17.53	36.58	84.07	19.05	8.00	127.00	91.95	6.35	3.78
65	2½	190.50	74.68	62.74	74.68	59.00	28.45	19.05	41.15	100.08	22.35	8.00	149.35	104.65	6.35	5.53
80	3	209.55	90.68	77.98	90.68	73.66	31.75	20.57	45.97	117.35	22.35	8.00	168.15	127.00	6.35	7.42
90	3½	228.60	103.38	90.17	103.38	85.45	35.05	22.35	49.28	133.35	25.40	8.00	184.15	139.70	6.35	9.36
100	4	273.05	116.08	102.36	116.08	97.18	38.10	23.88	53.85	152.40	25.40	8.00	215.90	157.53	6.35	15.19
125	5	330.20	143.76	128.27	143.76	122.25	44.45	23.88	60.45	188.98	28.45	8.00	266.70	185.67	6.35	25.58
150	6	355.60	170.69	154.18	170.69	146.33	47.75	26.92	66.55	222.25	28.45	12.00	292.10	215.90	6.35	30.34
200	8	419.10	221.49	202.69	221.49	193.68	55.63	31.75	76.20	273.05	31.75	12.00	349.25	269.75	6.35	45.93
250	10	508.00	276.35	254.51	276.35	247.65	63.50	33.27	85.85	342.90	35.05	16.00	431.80	323.85	6.35	74.45
300	12	558.80	327.15	304.80	327.15	298.45	66.55	39.62	91.95	400.05	35.05	20.00	488.95	381.00	6.35	89.03
350	14	603.25	359.16	336.55	359.16	330.20	69.85	41.40	93.73	431.80	38.10	20.00	527.05	412.75	6.35	104.43
400	16	685.80	410.46	387.35	410.46	381.00	76.20	44.45	106.43	495.30	41.15	20.00	603.25	469.90	6.35	150.03
450	18	742.95	461.77	438.15	461.77	431.80	82.55	49.28	117.35	546.10	44.45	20.00	654.05	533.40	6.35	183.07
500	20	812.80	513.08	489.95	513.08	482.60	88.90	54.10	127.00	609.60	44.45	24.00	723.90	584.20	6.35	232.14
600	24	939.80	615.95	590.55	615.95	584.20	101.60	63.50	139.70	717.55	50.80	24.00	838.20	692.15	6.35	328.13



ANSI B16.5 CLASS 600 FLANGES



Lap Joint RF



Blind RF

LAP JOINT RF DIMENSIONS (mm)

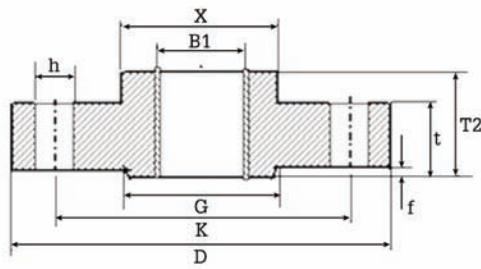
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Length thru Hub	Dia. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
							Diam.	No.	P.C.D		Outside Diam.	Thick-ness	
mm	inch	D	B3	t	T3	X	h	n	K	R	G	f	Kg
15	½	95.25	22.86	14.22	22.35	38.10	15.75	4.00	66.55	3.05	35.05	6.35	0.74
20	¾	117.35	28.19	15.75	25.40	47.75	19.05	4.00	82.55	3.05	42.93	6.35	1.25
25	1	123.95	35.05	17.53	26.92	53.85	19.05	4.00	88.90	3.05	50.80	6.35	1.52
32	1¼	133.35	43.69	20.57	28.45	63.50	19.05	4.00	98.55	4.83	63.50	6.35	2.02
40	1½	155.45	50.04	22.35	31.75	69.85	22.35	4.00	114.30	6.35	73.15	6.35	2.96
50	2	165.10	62.48	25.40	36.58	84.07	19.05	8.00	127.00	7.87	91.95	6.35	3.60
65	2½	190.50	75.44	28.45	41.15	100.08	22.35	8.00	149.35	7.87	104.65	6.35	5.21
80	3	209.55	91.44	31.75	45.97	117.35	22.35	8.00	168.15	9.65	127.00	6.35	6.96
90	3½	228.60	104.14	35.05	49.28	133.35	25.40	8.00	184.15	9.65	139.70	6.35	8.78
100	4	273.05	116.84	38.10	53.85	152.40	25.40	8.00	215.90	11.18	157.53	6.35	14.46
125	5	330.20	144.53	44.45	60.45	188.98	28.45	8.00	266.70	11.18	185.67	6.35	24.38
150	6	355.60	171.45	47.75	66.55	222.25	28.45	12.00	292.10	12.70	215.90	6.35	28.71
200	8	419.10	222.25	55.63	76.20	273.05	31.75	12.00	349.25	12.70	269.75	6.35	43.26
250	10	508.00	277.37	63.50	111.25	342.90	35.05	16.00	431.80	12.70	323.85	6.35	76.28
300	12	558.80	328.17	66.55	117.35	400.05	35.05	20.00	488.95	12.70	381.00	6.35	91.71
350	14	603.25	360.17	69.85	127.00	431.80	38.10	20.00	527.05	12.70	412.75	6.35	109.93
400	16	685.80	411.23	76.20	139.70	495.30	41.15	20.00	603.25	12.70	469.90	6.35	157.46
450	18	742.95	462.28	82.55	152.40	546.10	44.45	20.00	654.05	12.70	533.40	6.35	191.22
500	20	812.80	514.35	88.90	165.10	609.60	44.45	24.00	723.90	12.70	584.20	6.35	244.41
600	24	939.90	615.95	101.60	184.15	717.55	50.80	24.00	838.20	12.70	692.15	6.35	349.66

BLIND RF DIMENSIONS (mm)

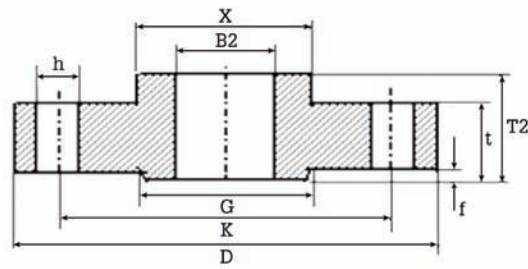
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
				Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	Kg
15	½	95.25	14.22	15.75	4.00	66.55	35.05	6.35	0.76
20	¾	117.35	15.75	19.05	4.00	82.55	42.93	6.35	1.27
25	1	123.95	17.53	19.05	4.00	88.90	50.80	6.35	1.60
32	1¼	133.35	20.57	19.05	4.00	98.55	63.50	6.35	3.23
40	1½	155.45	22.35	22.35	4.00	114.30	73.15	6.35	3.26
50	2	165.10	25.40	19.05	8.00	127.00	91.95	6.35	4.14
65	2½	190.50	28.45	22.35	8.00	149.35	104.65	6.35	6.09
80	3	209.55	31.75	22.35	8.00	168.15	127.00	6.35	8.44
90	3½	228.60	35.05	25.40	8.00	169.15	139.70	6.35	10.94
100	4	273.05	38.10	25.40	8.00	200.15	157.53	6.35	17.27
125	5	330.20	44.45	28.45	8.00	234.95	185.67	6.35	29.46
150	6	355.60	47.75	28.45	12.00	269.75	215.90	6.35	36.19
200	8	419.10	55.63	31.75	12.00	330.20	269.75	6.35	58.94
250	10	508.00	63.50	35.05	16.00	387.35	323.85	6.35	97.44
300	12	558.80	66.55	35.05	20.00	450.85	381.00	6.35	123.72
350	14	603.25	69.85	38.10	20.00	514.35	412.75	6.35	150.89
400	16	685.80	76.20	41.15	20.00	571.50	469.90	6.35	213.69
450	18	742.95	82.55	44.45	24.00	628.65	533.40	6.35	267.93
500	20	812.80	88.90	44.45	24.00	685.80	584.20	6.35	349.47
600	24	939.90	101.60	50.80	24.00	812.80	692.15	6.35	533.21



ANSI B16.5 CLASS 600 FLANGES



Threaded RF



Slip On RF

THREADED RF DIMENSIONS (mm)

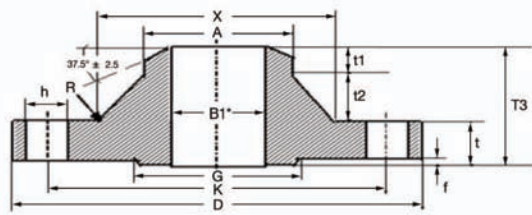
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
								Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	BI	t	T2	X	Q	h	n	K	G	f	Kg
15	½	95.25	22.35	14.22	22.35	38.10	15.75	15.75	4.00	66.55	35.05	6.35	0.74
20	¾	117.35	27.69	15.75	25.40	47.75	15.75	19.05	4.00	82.55	42.93	6.35	1.25
25	1	123.95	34.54	17.53	26.92	53.85	17.53	19.05	4.00	88.90	50.80	6.35	1.53
32	1¼	133.35	43.18	20.57	28.45	63.50	20.57	19.05	4.00	98.55	63.50	6.35	2.02
40	1½	155.45	49.53	22.35	31.75	69.85	22.35	22.35	4.00	114.30	73.15	6.35	2.97
50	2	165.10	61.98	25.40	36.58	84.07	28.45	19.05	8.00	127.00	91.95	6.35	3.62
65	2½	190.50	74.68	28.45	41.15	100.08	31.75	22.35	8.00	149.35	104.65	6.35	5.24
80	3	209.55	90.68	31.75	45.97	117.35	35.05	22.35	8.00	168.15	127.00	6.35	7.00
90	3½	228.60	103.38	35.05	49.28	133.35	39.62	25.40	8.00	184.15	139.70	6.35	8.84
100	4	273.05	116.08	38.10	53.85	152.40	41.15	25.40	8.00	215.90	157.23	6.35	14.52
125	5	330.20	143.76	44.45	60.45	188.98	47.75	28.45	8.00	266.70	185.67	6.35	24.47
150	6	355.60	170.69	47.75	66.55	222.25	50.80	28.45	12.00	292.10	215.90	6.35	28.82
200	8	419.10	221.49	55.63	76.20	273.05	57.15	31.75	12.00	349.25	269.75	6.35	43.43
250	10	508.00	276.35	63.50	85.85	342.90	65.02	35.05	16.00	431.80	323.85	6.35	70.23
300	12	558.80	327.15	66.55	91.95	400.05	69.85	35.05	20.00	488.95	381.00	6.35	83.92
350	14	603.25	359.16	69.85	93.73	431.80	60.45	38.10	20.00	527.05	412.75	6.35	98.74
400	16	685.80	410.46	76.20	106.43	495.30	77.72	41.15	20.00	603.25	469.90	6.35	142.27
450	18	742.95	461.77	82.55	117.35	546.10	79.25	44.45	20.00	654.05	533.40	6.35	173.32
500	20	812.80	513.08	88.90	127.00	609.60	82.55	44.45	24.00	723.90	584.20	6.35	220.33
600	24	939.90	615.95	101.60	139.70	717.55	91.95	50.80	24.00	838.20	692.15	6.35	312.53

SLIP ON RF DIMENSIONS (mm)

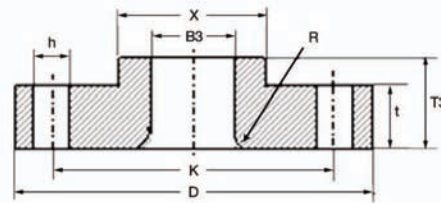
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Holes			Raised Face		Net Weight
							Diam.	Number	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	h	n	K	G	f	Kg
15	½	95.25	22.35	14.22	22.35	38.10	15.75	4.00	66.55	35.05	6.35	0.74
20	¾	117.35	27.69	15.75	25.40	47.75	19.05	4.00	82.55	42.93	6.35	1.25
25	1	123.95	34.54	17.53	26.92	53.85	19.05	4.00	88.90	50.80	6.35	1.53
32	1¼	133.35	43.18	20.57	28.45	63.50	19.05	4.00	98.55	63.50	6.35	2.02
40	1½	155.45	49.53	22.35	31.75	69.85	22.35	4.00	114.30	73.15	6.35	2.97
50	2	165.10	61.98	25.40	36.58	84.07	19.05	8.00	127.00	91.95	6.35	3.62
65	2½	190.50	74.68	28.45	41.15	100.08	22.35	8.00	149.35	104.65	6.35	5.24
80	3	209.55	90.68	31.75	45.97	117.35	22.35	8.00	168.15	127.00	6.35	7.00
90	3½	228.60	103.38	35.05	49.28	133.35	25.40	8.00	169.15	139.70	6.35	8.84
100	4	273.05	116.08	38.10	53.85	152.40	25.40	8.00	215.90	157.23	6.35	14.52
125	5	330.20	143.76	44.45	60.45	188.98	28.45	8.00	266.70	185.67	6.35	24.47
150	6	355.60	170.69	47.75	66.55	222.25	28.45	12.00	292.10	215.90	6.35	28.82
200	8	419.10	221.49	55.63	76.20	273.05	31.75	12.00	349.25	269.75	6.35	43.43
250	10	508.00	276.35	63.50	85.85	342.90	35.05	16.00	431.80	323.85	6.35	70.23
300	12	558.80	327.15	66.55	91.95	400.05	35.05	20.00	488.95	381.00	6.35	83.92
350	14	603.25	359.16	69.85	93.73	431.80	38.10	20.00	527.05	412.75	6.35	98.74
400	16	685.80	410.46	76.20	106.43	495.30	41.15	20.00	603.25	469.90	6.35	142.27
450	18	742.95	461.77	82.55	117.35	546.10	44.45	20.00	654.05	533.40	6.35	173.32
500	20	812.80	513.08	88.90	127.00	609.60	44.45	24.00	723.90	584.20	6.35	220.33
600	24	939.90	615.95	101.60	139.70	717.55	50.80	24.00	838.20	692.15	6.35	312.53



ANSI B16.5 CLASS 900 FLANGES



Welding Neck RF



Lap Joint RF

WELDING NECK RF STD* DIMENSIONS (mm)

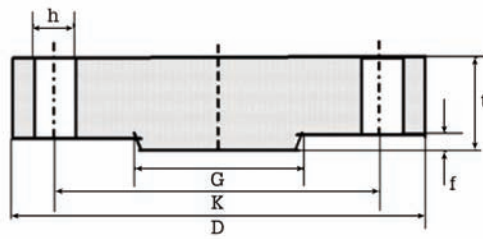
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
						Base Diam.	Thick-ness	Thick-ness	Diam.		Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	BI*	t	TI	X	t2	tI	A	R	h	n	K	G	f	Kg
15	½	120.65	15.80	22.35	60.45	38.10	30.48	7.62	21.34	3.05	22.35	4.00	82.55	35.05	6.35	1.88
20	¾	130.05	20.93	25.40	69.85	44.45	35.56	8.89	26.67	3.05	22.35	4.00	88.90	42.93	6.35	2.54
25	1	149.35	26.64	28.45	73.15	52.32	35.76	8.94	33.53	3.05	25.40	4.00	101.60	50.80	6.35	3.72
32	1¼	158.75	35.05	28.45	73.15	63.50	35.76	8.94	42.16	4.83	25.40	4.00	111.25	63.50	6.35	4.29
40	1½	177.80	40.89	31.75	82.55	69.85	40.64	10.16	48.56	6.35	28.45	4.00	123.95	73.15	6.35	5.94
50	2	215.90	52.50	38.10	101.60	104.65	50.80	12.70	60.45	7.87	25.40	8.00	165.10	91.95	6.35	10.81
65	2½	244.35	62.71	41.15	104.65	123.95	50.80	12.70	73.15	7.87	28.45	8.00	190.50	104.65	6.35	14.92
80	3	241.30	77.93	38.10	101.60	127.00	50.80	12.70	88.90	9.65	25.40	8.00	190.50	127.00	6.35	13.60
100	4	292.10	102.26	44.45	114.30	158.75	55.88	13.97	114.30	11.18	31.75	8.00	234.95	157.23	6.35	22.37
125	5	349.25	128.19	50.80	127.00	190.50	60.96	15.24	141.22	11.18	35.05	8.00	279.40	185.67	6.35	35.90
150	6	381.00	154.05	55.63	139.70	234.95	67.26	16.81	168.40	12.70	31.75	12.00	317.50	215.90	6.35	46.98
200	8	469.90	202.72	63.50	162.05	298.45	78.84	19.71	219.20	12.70	38.10	12.00	393.70	269.75	6.35	80.07
250	10	546.10	254.51	69.85	184.15	368.30	91.44	22.86	273.05	12.70	38.10	16.00	469.90	323.85	6.35	117.90
300	12	609.60	304.80	79.25	200.15	419.10	96.72	24.18	323.85	12.70	38.10	20.00	533.40	381.00	6.35	156.80
350	14	641.35	336.55	85.85	212.85	450.85	101.60	25.40	355.60	12.70	41.15	20.00	558.80	412.75	6.35	179.94
400	16	704.85	387.35	88.90	215.90	508.00	101.60	25.40	406.40	12.70	44.45	20.00	615.95	469.90	6.35	216.91
450	18	787.40	438.15	101.60	228.60	565.15	101.60	25.40	457.20	12.70	50.80	20.00	685.80	533.40	6.35	293.63
500	20	857.25	488.95	107.95	247.65	622.30	111.76	27.94	508.00	12.70	53.85	20.00	749.30	584.20	6.35	364.11
600	24	1041.40	590.55	139.70	292.10	749.30	121.92	30.48	609.60	12.70	66.55	20.00	901.70	692.15	6.35	666.57

LAP JOINT RF DIMENSIONS (mm)

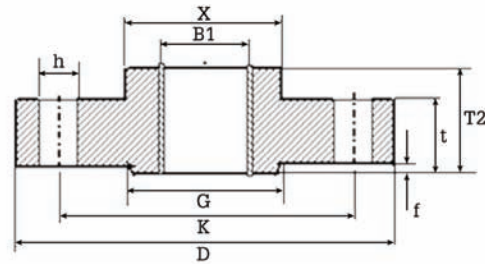
Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Dia. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
							Diam.	Number	P.C.D		Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T3	X	h	n	K	R	G	f	Kg
15	½	120.65	22.86	22.35	31.75	38.10	22.35	4.00	82.55	3.05	35.05	6.35	1.74
20	¾	130.05	28.19	25.40	35.05	44.45	22.35	4.00	88.90	3.05	42.93	6.35	2.32
25	1	149.35	35.05	28.45	41.15	52.32	25.40	4.00	101.60	3.05	50.80	6.35	3.42
32	1¼	158.75	43.69	28.45	41.15	63.50	25.40	4.00	111.25	4.83	63.50	6.35	3.88
40	1½	177.80	50.04	31.75	44.45	69.85	28.45	4.00	123.95	6.35	73.15	6.35	5.36
50	2	215.90	62.48	38.10	57.15	104.65	25.40	8.00	165.10	7.87	91.95	6.35	9.83
65	2½	244.35	75.44	41.15	63.50	123.95	28.45	8.00	190.50	7.87	104.65	6.35	13.60
80	3	241.30	91.44	38.10	53.85	127.00	25.40	8.00	190.50	9.65	127.00	6.35	11.56
100	4	292.10	116.84	44.45	69.85	158.75	31.75	8.00	234.95	11.18	157.23	6.35	19.67
125	5	349.25	144.53	50.80	79.25	190.50	35.05	8.00	279.40	11.18	185.67	6.35	31.82
150	6	381.00	171.45	55.63	85.85	234.95	31.75	8.00	317.50	12.70	215.90	6.35	41.04
200	8	469.90	222.25	63.50	114.30	298.45	38.10	12.00	393.70	12.70	269.75	6.35	73.63
250	10	546.10	277.37	69.85	127.00	368.30	38.10	16.00	469.90	12.70	323.85	6.35	107.08
300	12	609.60	328.17	79.25	142.75	419.10	38.10	20.00	533.40	12.70	381.00	6.35	142.84
350	14	641.35	360.17	85.85	155.45	450.85	41.15	20.00	558.80	12.70	412.75	6.35	164.28
400	16	704.85	411.23	88.90	165.10	508.00	44.45	20.00	615.95	12.70	469.90	6.35	201.77
450	18	787.40	462.28	101.60	190.50	565.15	50.80	20.00	685.80	12.70	533.40	6.35	282.88
500	20	857.25	514.35	107.95	209.55	622.30	53.85	24.00	749.30	12.70	584.20	6.35	354.29
600	24	1041.40	615.95	139.70	266.70	749.30	66.55	24.00	901.70	12.70	692.15	6.35	677.48



ANSI B16.5 CLASS 900 FLANGES



Blind RF



Threaded RF

BLIND RF DIMENSIONS (mm)

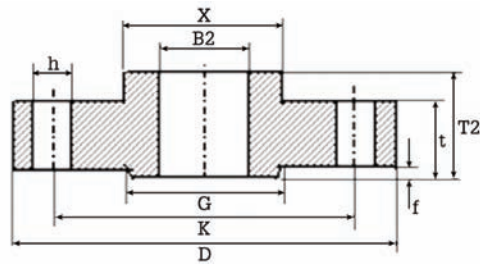
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
				Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	Kg
15	½	120.65	22.35	22.35	4.00	82.55	35.05	6.35	1.78
20	¾	130.05	25.40	22.35	4.00	88.90	42.93	6.35	2.41
25	1	149.35	28.45	25.40	4.00	101.60	50.80	6.35	3.56
32	1¼	158.75	28.45	25.40	4.00	111.25	63.50	6.35	4.13
40	1½	177.80	31.75	28.45	4.00	123.95	73.15	6.35	5.76
50	2	215.90	38.10	25.40	8.00	165.10	91.95	6.35	10.07
65	2½	244.35	41.15	28.45	8.00	190.50	104.65	6.35	13.93
80	3	241.30	38.10	25.40	8.00	190.50	127.00	6.35	13.10
100	4	292.10	44.45	31.75	8.00	234.95	157.23	6.35	22.14
125	5	349.25	50.80	35.05	8.00	279.40	185.67	6.35	36.47
150	6	381.00	55.63	31.75	12.00	317.50	215.90	6.35	47.46
200	8	469.90	63.50	38.10	12.00	393.70	269.75	6.35	82.47
250	10	546.10	69.85	38.10	16.00	469.90	323.85	6.35	122.54
300	12	609.60	79.25	38.10	20.00	533.40	381.00	6.35	173.07
350	14	641.35	85.85	41.15	20.00	558.80	412.75	6.35	206.46
400	16	704.85	88.90	44.45	20.00	615.95	469.90	6.35	259.29
450	18	787.40	101.60	50.80	20.00	685.80	533.40	6.35	367.18
500	20	857.25	107.95	53.85	20.00	749.30	584.20	6.35	463.86
600	24	1041.40	139.70	66.55	20.00	901.70	692.15	6.35	876.56

THREADED RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
								Diam.	Number	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	Q	h	n	K	G	f	Kg
15	½	120.65	22.35	22.35	31.75	38.10	22.35	22.35	4.00	82.55	35.05	6.35	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	25.40	22.35	4.00	88.90	42.93	6.35	2.33
25	1	149.35	34.54	28.45	41.15	52.32	28.45	25.40	4.00	101.60	50.80	6.35	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	30.23	25.40	4.00	111.25	63.50	6.35	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	31.75	28.45	4.00	123.95	73.15	6.35	5.38
50	2	215.90	61.98	38.10	57.15	104.65	38.10	25.40	8.00	165.10	91.95	6.35	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	47.75	28.45	8.00	190.50	104.65	6.35	13.65
80	3	241.30	90.68	38.10	53.85	127.00	41.15	25.40	8.00	190.50	127.00	6.35	11.61
100	4	292.10	116.08	44.45	69.85	158.75	47.75	31.75	8.00	234.95	157.23	6.35	19.76
125	5	349.25	143.76	50.80	79.25	190.50	53.85	35.05	8.00	279.40	185.67	6.35	31.93
150	6	381.00	170.69	55.63	85.85	234.95	57.15	31.75	8.00	317.50	215.90	6.35	41.19
200	8	469.90	221.49	63.50	101.60	298.45	63.50	38.10	12.00	393.70	269.75	6.35	70.75
250	10	546.10	276.35	69.85	107.95	368.30	71.37	38.10	16.00	469.90	323.85	6.35	100.58
300	12	609.60	327.15	79.25	117.35	419.10	76.20	38.10	20.00	533.40	381.00	6.35	132.70
350	14	641.35	359.16	85.85	130.05	450.85	82.55	41.15	20.00	558.80	412.75	6.35	153.37
400	16	704.85	410.46	88.90	133.35	508.00	85.85	44.45	20.00	615.95	469.90	6.35	184.90
450	18	787.40	461.77	101.60	152.40	565.15	88.90	50.80	20.00	685.80	533.40	6.35	258.51
500	20	857.25	513.08	107.95	158.75	622.30	91.95	53.85	24.00	749.30	584.20	6.35	317.19
600	24	1041.40	615.95	139.70	203.20	749.30	101.60	66.55	24.00	901.70	692.15	6.35	606.21



ANSI B16.5 CLASS 900 FLANGES



Slip On RF

SLIP ON RF DIMENSIONS (mm)

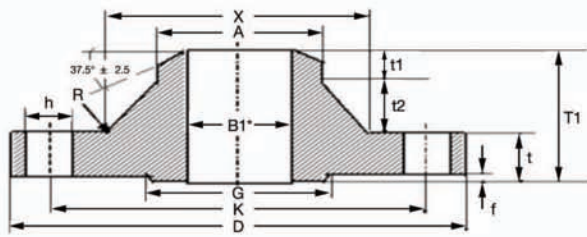
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Holes			Raised Face		Net Weight
							Diam.	Number	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	h	n	K	G	f	Kg
15	½	120.65	22.35	22.35	31.75	38.10	22.35	4.00	82.55	35.05	6.35	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	22.35	4.00	88.90	42.93	6.35	2.33
25	1	149.35	34.54	28.45	41.15	52.32	25.40	4.00	101.60	50.80	6.35	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	25.40	4.00	111.25	63.50	6.35	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	28.45	4.00	123.95	73.15	6.35	5.38
50	2	215.90	61.98	38.10	57.15	104.65	25.40	8.00	165.10	91.95	6.35	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	28.45	8.00	190.50	104.65	6.35	13.65
80	3	241.30	90.68	38.10	53.85	127.00	25.40	8.00	190.50	127.00	6.35	11.61
100	4	292.10	116.08	44.45	69.85	158.75	31.75	8.00	234.95	157.23	6.35	19.76
125	5	349.25	143.76	50.80	79.25	190.50	35.05	8.00	279.40	185.67	6.35	31.93
150	6	381.00	170.69	55.63	85.85	234.95	31.75	8.00	317.50	215.90	6.35	41.19
200	8	469.90	221.49	63.50	101.60	298.45	38.10	12.00	393.70	269.75	6.35	70.75
250	10	546.10	276.35	69.85	107.95	368.30	38.10	16.00	469.90	323.85	6.35	100.58
300	12	609.60	327.15	79.25	117.35	419.10	38.10	20.00	533.40	381.00	6.35	132.70
350	14	641.35	359.16	85.85	130.05	450.85	41.15	20.00	558.80	412.75	6.35	153.37
400	16	704.85	410.46	88.90	133.35	508.00	44.45	20.00	615.95	469.90	6.35	184.90
450	18	787.40	461.77	101.60	152.40	565.15	50.80	20.00	685.80	533.40	6.35	258.51
500	20	857.25	513.08	107.95	158.75	622.30	53.85	20.00	749.30	584.20	6.35	317.19
600	24	1041.40	615.95	139.70	203.20	749.30	66.55	20.00	901.70	692.15	6.35	606.21

SOCKET WELD

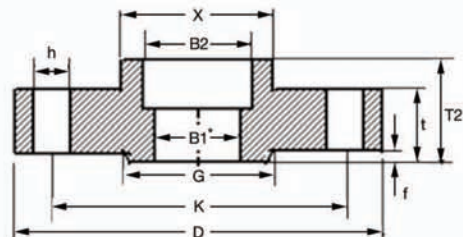
See Class 1500, is same up to 65NB



ANSI B16.5 CLASS 150 FLANGES



Welding Neck RF



Socket Welding RF

WELDING NECK RF STD* DIMENSIONS (mm)

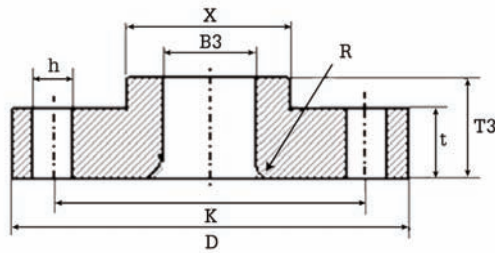
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
						Base Diam.	Thick-ness	Thick-ness	Diam.		Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	BI*	t	T1	X	t2	t1	A	R	h	n	K	G	f	Kg
15	½	120.65	15.80	22.35	60.45	38.10	30.48	7.62	21.34	3.05	22.35	4.00	82.55	35.05	6.35	1.88
20	¾	130.05	20.93	25.40	69.85	44.45	35.56	8.89	26.67	3.05	22.35	4.00	88.90	42.93	6.35	2.54
25	1	149.35	26.64	28.45	73.15	52.32	35.76	8.94	33.53	3.05	25.40	4.00	101.60	50.80	6.35	3.72
32	1¼	158.75	35.05	28.45	73.15	63.50	35.76	8.94	42.16	4.83	25.40	4.00	111.25	63.50	6.35	4.29
40	1½	177.80	40.89	31.75	82.55	69.85	40.64	10.16	48.26	6.35	28.45	4.00	123.95	73.15	6.35	5.94
50	2	215.90	52.50	38.10	101.60	104.65	50.80	12.70	60.45	7.87	25.40	8.00	165.10	91.95	6.35	10.81
65	2½	244.35	62.71	41.15	104.65	123.95	50.80	12.70	73.15	7.87	28.45	8.00	190.50	104.65	6.35	14.92
80	3	266.70	77.93	47.75	117.35	133.35	55.88	13.92	88.90	9.65	31.75	8.00	203.20	127.00	6.35	19.78
100	4	311.15	102.26	53.85	123.95	162.05	56.08	14.02	114.30	11.18	35.05	8.00	241.30	157.23	6.35	29.65
125	5	374.65	128.19	73.15	155.45	196.85	65.84	16.46	141.22	11.18	41.15	8.00	292.10	185.67	6.35	56.52
150	6	393.70	154.05	82.55	171.45	228.60	71.12	17.78	168.40	12.70	38.10	12.00	317.50	215.90	6.35	67.28
200	8	482.60	202.72	91.95	212.85	292.10	96.72	24.18	219.20	12.70	44.45	12.00	393.70	269.75	6.35	113.91
250	10	584.20	254.51	107.95	254.00	368.30	116.84	29.21	273.05	12.70	50.80	12.00	482.60	323.85	6.35	197.25
300	12	673.10	304.80	123.95	282.45	450.85	126.80	31.70	323.85	12.70	53.85	16.00	571.50	381.00	6.35	293.52
350	14	749.30	336.55	133.35	298.45	495.30	132.08	33.02	355.60	12.70	60.45	16.00	635.00	412.75	6.35	386.25
400	16	825.50	387.35	146.05	311.15	552.45	132.08	33.02	406.40	12.70	66.55	16.00	704.85	469.90	6.35	492.86
450	18	914.40	438.15	162.05	327.15	596.90	132.08	33.02	457.20	12.70	73.15	16.00	774.70	533.40	6.35	643.84
500	20	984.25	488.95	177.80	355.60	641.35	142.24	35.56	508.00	12.70	79.25	16.00	831.85	584.20	6.35	788.50

SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

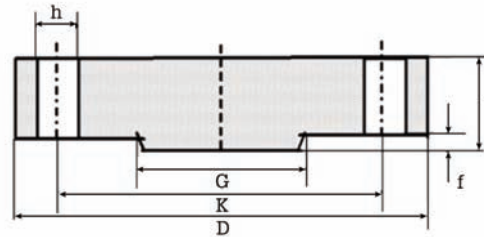
Size		Outside Diam.	Bore Diameter STD		Bore Diameter XS		Thick-ness	Socket Depth	Total Thick-ness	Diam. at Base of Hub	Holes			Raised Face		Net Weight
			B2	BI	B2	BI					Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	BI	B2	BI	t	Y	T2	X	h	n	K	G	f	Kg
15	½	120.65	22.35	15.75	22.35	13.87	22.35	9.65	31.75	38.10	22.35	4.00	82.55	35.05	6.35	1.79
20	¾	130.05	27.69	20.83	27.69	18.85	25.40	11.18	35.05	44.45	22.35	4.00	88.90	42.93	6.35	2.39
25	1	149.35	34.54	26.67	34.54	24.31	28.45	12.70	41.15	52.32	25.40	4.00	101.60	50.80	6.35	3.53
32	1¼	158.75	43.18	35.05	43.18	32.46	28.45	14.22	41.15	63.50	25.40	4.00	111.25	63.50	6.35	4.03
40	1½	177.80	49.53	40.89	49.53	38.10	31.75	15.75	44.45	69.85	28.45	4.00	123.95	73.15	6.35	5.55
50	2	215.90	61.98	52.58	61.98	49.25	38.10	17.53	57.15	104.65	25.40	8.00	165.10	91.95	6.35	10.16
65	2½	244.35	74.68	62.74	74.68	59.00	41.15	19.05	63.50	123.95	28.45	8.00	190.50	104.65	6.35	14.16
80	3	266.70	90.68	77.98	90.68	73.66	47.75	20.57	73.15	133.35	31.75	8.00	203.20	127.00	6.35	18.73



ANSI B16.5 CLASS 1500 FLANGES



Lap Joint RF



Blind RF

LAP JOINT RF DIMENSIONS (mm)

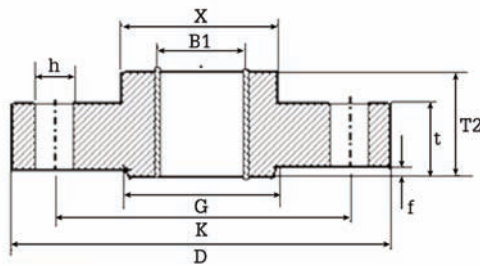
Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Diam. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
							Diam.	No.	P.C.D		Outside Diam.	Thick-ness	
mm	inch	D	B3	t	T3	X	h	n	K	R	G	f	Kg
15	½	120.65	22.86	22.35	31.75	38.10	22.35	4.00	82.55	3.05	35.05	6.35	1.74
20	¾	130.05	28.19	25.40	35.05	44.45	22.35	4.00	88.90	3.05	42.93	6.35	2.32
25	1	149.35	35.05	28.45	41.15	52.32	25.40	4.00	101.60	3.05	50.80	6.35	3.42
32	1¼	158.75	43.69	28.45	41.15	63.50	25.40	4.00	111.25	4.83	63.50	6.35	3.88
40	1½	177.80	50.04	31.75	44.45	69.85	28.45	4.00	123.95	6.35	73.15	6.35	5.36
50	2	215.90	62.48	38.10	57.15	104.65	25.40	8.00	165.10	7.87	91.95	6.35	9.83
65	2½	244.35	75.44	41.15	63.50	123.95	28.45	8.00	190.50	7.87	104.65	6.35	13.60
80	3	266.70	91.44	47.75	73.15	133.35	31.75	8.00	203.20	9.65	127.00	6.35	17.88
100	4	311.15	116.84	53.85	90.42	162.05	35.05	8.00	241.30	11.18	157.23	6.35	27.62
125	5	374.65	144.53	73.15	104.65	196.85	41.15	8.00	292.10	11.18	185.67	6.35	51.77
150	6	393.70	171.45	82.55	119.13	228.60	38.10	12.00	317.50	12.70	215.90	6.35	60.89
200	8	482.60	222.25	91.95	142.75	292.10	44.45	12.00	393.70	12.70	269.75	6.35	102.76
250	10	584.20	277.37	107.95	177.80	368.30	50.80	12.00	482.60	12.70	323.85	6.35	181.71
300	12	673.10	328.17	123.95	218.95	450.85	53.85	16.00	571.50	12.70	381.00	6.35	285.92
350	14	749.30	360.17	133.35	241.30	495.30	60.45	16.00	635.00	12.70	412.75	6.35	385.41
400	16	825.50	411.23	146.05	260.35	552.45	66.55	16.00	704.85	12.70	469.90	6.35	495.46
450	18	914.40	462.28	162.05	276.35	596.90	73.15	16.00	774.70	12.70	533.40	6.35	639.58
500	20	984.25	514.35	177.80	292.10	641.35	79.25	16.00	831.85	12.70	584.20	6.35	768.22
600	24	1168.40	615.95	203.20	330.20	762.00	91.95	16.00	990.60	12.70	692.15	6.35	1226.98

BLIND RF DIMENSIONS (mm)

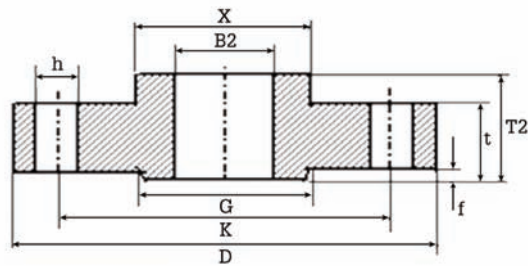
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
				Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	Kg
15	½	120.65	22.35	22.35	4.00	82.55	35.05	6.35	1.78
20	¾	130.05	25.40	22.35	4.00	88.90	42.93	6.35	2.41
25	1	149.35	28.45	25.40	4.00	101.60	50.80	6.35	3.56
32	1¼	158.75	28.45	25.40	4.00	111.25	63.50	6.35	4.13
40	1½	177.80	31.75	28.45	4.00	123.95	73.15	6.35	5.76
50	2	215.90	38.10	25.40	8.00	165.10	91.95	6.35	10.07
65	2½	244.35	41.15	28.45	8.00	190.50	104.65	6.35	13.93
80	3	266.70	47.75	31.75	8.00	203.20	127.00	6.35	19.20
100	4	311.15	53.85	35.05	8.00	241.30	157.23	6.35	29.85
125	5	374.65	73.15	41.15	8.00	292.10	185.67	6.35	58.54
150	6	393.70	82.55	38.10	12.00	317.50	215.90	6.35	71.85
200	8	482.60	91.95	44.45	12.00	393.70	269.75	6.35	121.44
250	10	584.20	107.95	50.80	12.00	482.60	323.85	6.35	210.64
300	12	673.10	123.95	53.85	16.00	571.50	381.00	6.35	316.46
350	14	749.30	133.35	60.45	16.00	635.00	412.75	6.35	420.20
400	16	825.50	146.05	66.55	16.00	704.85	469.90	6.35	558.45
450	18	914.40	162.05	73.15	16.00	774.70	533.40	6.35	760.98
500	20	984.25	177.80	79.25	16.00	831.85	584.20	6.35	965.15
600	24	1168.40	203.20	91.95	16.00	990.60	692.15	6.35	1559.56



ANSI B16.5 CLASS 1500 FLANGES



Threaded RF



Slip On RF

THREADED RF DIMENSIONS (mm)

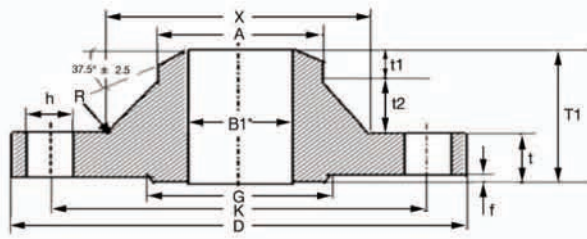
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Diam. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
								Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B1	t	T2	X	Q	h	n	K	G	f	Kg
15	½	120.65	22.35	22.35	31.75	38.10	22.35	22.35	4.00	82.55	35.05	6.35	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	25.40	22.35	4.00	88.90	42.93	6.35	2.33
25	1	149.35	34.54	28.45	41.15	52.32	28.45	25.40	4.00	101.60	50.80	6.35	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	30.23	25.40	4.00	111.25	63.50	6.35	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	31.75	28.45	4.00	123.95	73.15	6.35	5.38
50	2	215.90	61.98	38.10	57.15	104.65	38.10	25.40	8.00	165.10	91.95	6.35	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	47.75	28.45	8.00	190.50	104.65	6.35	13.65
80	3	266.70	90.68	47.75	73.15	133.35	50.80	31.75	8.00	203.20	127.00	6.35	17.95
100	4	311.15	116.08	53.85	90.42	162.05	57.15	35.05	8.00	241.30	157.23	6.35	27.73
125	5	374.65	143.76	73.15	104.65	196.85	63.50	41.15	8.00	292.10	185.67	6.35	51.93
150	6	393.70	170.69	82.55	119.13	228.60	69.85	38.10	12.00	317.50	215.90	6.35	61.09
200	8	482.60	221.49	91.95	142.75	292.10	76.20	44.45	12.00	393.70	269.75	6.35	103.07
250	10	584.20	276.35	107.95	158.75	368.30	84.07	50.80	12.00	482.60	323.85	6.35	175.39
300	12	673.10	327.15	123.95	180.85	450.85	91.95	53.85	16.00	571.50	381.00	6.35	264.24

SLIP ON RF DIMENSIONS (mm)

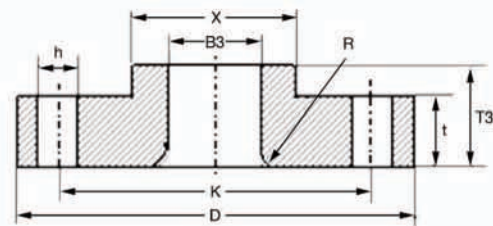
Size		Outside Diameter	Bore Diameter	Thickness	Total Thick-ness	Diam. of Base of Hub	Holes			Raised Face		Net Weight
							Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	h	n	K	G	f	Kg
15	½	120.65	22.35	22.35	31.75	38.10	22.35	4.00	82.55	35.05	6.35	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	22.35	4.00	88.90	42.93	6.35	2.33
25	1	149.35	34.54	28.45	41.15	52.32	25.40	4.00	101.60	50.80	6.35	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	25.40	4.00	111.25	63.50	6.35	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	28.45	4.00	123.95	73.15	6.35	5.38
50	2	215.90	61.98	38.10	57.15	104.65	25.40	8.00	165.10	91.95	6.35	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	28.45	8.00	190.50	104.65	6.35	13.65
80	3	266.70	90.68	47.75	73.15	133.35	31.75	8.00	203.20	127.00	6.35	17.95
100	4	311.15	116.08	53.85	90.42	162.05	35.05	8.00	241.30	157.23	6.35	27.73
125	5	374.65	143.76	73.15	104.65	196.85	41.15	8.00	292.10	185.67	6.35	51.93
150	6	393.70	170.69	82.55	119.13	228.60	38.10	12.00	317.50	215.90	6.35	61.09
200	8	482.60	221.49	91.95	142.75	292.10	44.45	12.00	393.70	269.75	6.35	103.07
250	10	584.20	276.35	107.95	158.75	368.30	50.80	12.00	482.60	323.85	6.35	175.39
300	12	673.10	327.15	123.95	180.85	450.85	53.85	16.00	571.50	381.00	6.35	264.24



ANSI B16.5 CLASS 2500 FLANGES



Welding Neck RF



Lap Joint RF

WELDING NECK RF STD* DIMENSIONS (mm)

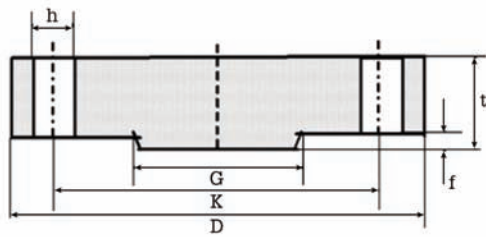
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
						Base Diam.	Thick-ness	Thick-ness	Diam.		Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	BI*	t	T1	X	t2	t1	A	R	h	n	K	G	f	Kg
15	½	133.35	15.75	30.23	73.15	42.93	34.29	8.64	21.34	3.05	22.35	4.00	88.90	35.05	6.35	3.13
20	¾	139.70	20.83	31.75	79.25	50.80	38.10	9.40	26.67	3.05	22.35	4.00	95.25	42.93	6.35	3.69
25	1	158.75	26.67	35.05	88.90	57.15	43.18	10.67	33.53	3.05	25.40	4.00	107.95	50.80	6.35	5.23
32	1¼	184.15	35.05	38.10	95.25	73.15	45.72	11.43	42.16	4.83	28.45	4.00	130.05	63.50	6.35	7.73
40	1½	203.20	40.89	44.45	111.25	79.25	53.34	13.46	48.26	6.35	31.75	4.00	146.05	73.15	6.35	10.83
50	2	234.95	52.58	50.80	127.00	95.25	60.96	15.24	60.45	7.87	28.45	8.00	171.45	91.95	6.35	16.09
65	2½	266.70	62.74	57.15	142.75	114.30	68.58	17.02	73.15	7.87	31.75	8.00	196.85	104.65	6.35	23.52
80	3	304.80	77.98	66.55	166.15	133.35	81.28	20.32	88.90	9.65	35.05	8.00	228.60	127.00	6.35	35.67
100	4	355.60	102.36	76.20	190.50	165.10	91.44	22.86	114.30	11.18	41.15	8.00	273.05	157.23	6.35	54.67
125	5	419.10	128.27	91.95	228.60	203.20	109.22	27.43	141.22	11.18	47.75	8.00	323.85	185.67	6.35	90.95
150	6	482.60	154.18	107.95	273.05	234.95	132.08	33.02	168.40	12.70	53.85	8.00	368.30	215.90	6.35	140.57
200	8	552.45	202.69	127.00	317.50	304.80	152.40	38.10	219.20	12.70	53.85	12.00	438.15	269.75	6.35	210.51
250	10	673.10	254.51	165.10	419.10	374.65	203.20	50.80	273.05	12.70	66.55	12.00	539.75	323.85	6.35	399.63
300	12	762.00	304.80	184.15	463.55	441.45	223.52	55.88	323.85	12.70	73.15	12.00	619.25	381.00	6.35	566.01

LAP JOINT RF DIMENSIONS (mm)

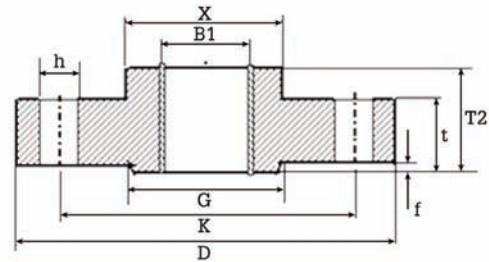
Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Dia. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
							Diam.	Number	P.C.D		Outside Diam.	Thick-ness	
mm	inch	D	B3	t	T3	X	h	n	K	R	G	f	Kg
15	½	133.35	22.86	30.23	39.62	42.93	22.35	4.00	88.90	3.05	35.05	6.35	2.95
20	¾	139.70	28.19	31.75	42.93	50.80	22.35	4.00	95.25	3.05	42.93	6.35	3.44
25	1	158.75	35.05	35.05	47.75	57.15	25.40	4.00	107.95	3.05	50.80	6.35	4.84
32	1¼	184.15	43.69	38.10	52.32	73.15	28.45	4.00	130.05	4.83	63.50	6.35	7.14
40	1½	203.20	50.04	44.45	60.45	79.25	31.75	4.00	146.05	6.35	73.15	6.35	10.01
50	2	234.95	62.48	50.80	69.85	95.25	28.45	8.00	171.45	7.87	91.95	6.35	14.82
65	2½	266.70	75.44	57.15	79.25	114.30	31.75	8.00	196.85	7.87	104.65	6.35	21.43
80	3	304.80	91.44	66.55	91.95	133.35	35.05	8.00	228.60	9.65	127.00	6.35	32.43
100	4	355.60	116.84	76.20	107.95	165.10	41.15	8.00	273.05	11.18	157.23	6.35	49.73
125	5	419.10	144.53	91.95	130.05	203.20	47.75	8.00	323.85	11.18	185.67	6.35	82.72
150	6	482.60	171.45	107.95	152.40	234.95	53.85	12.00	368.30	12.70	215.90	6.35	120.03
200	8	552.45	222.25	127.00	177.80	304.80	53.85	12.00	438.15	12.70	269.75	6.35	187.59
250	10	673.10	277.37	165.10	228.60	374.65	66.55	16.00	539.75	12.70	323.85	6.35	336.66
300	12	762.00	328.17	184.15	254.00	441.45	73.15	16.00	619.25	12.70	381.00	6.35	478.77



ANSI B16.5 CLASS 2500 FLANGES



Blind RF



Threaded RF

BLIND RF DIMENSIONS (mm)

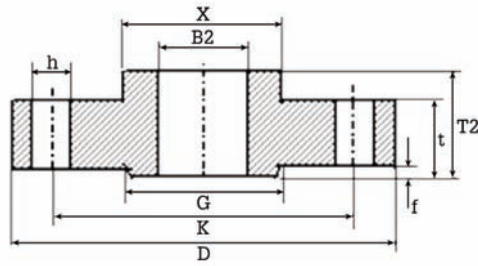
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
				Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	Kg
15	½	133.35	30.23	22.35	4.00	66.55	35.05	6.35	2.99
20	¾	139.70	31.75	22.35	4.00	82.55	42.93	6.35	3.50
25	1	158.75	35.05	25.40	4.00	88.90	50.80	6.35	4.99
32	1¼	184.15	38.10	28.45	4.00	98.55	63.50	6.35	7.36
40	1½	203.20	44.45	31.75	4.00	114.30	73.15	6.35	10.42
50	2	234.95	50.80	28.45	8.00	127.00	91.95	6.35	15.59
65	2½	266.70	57.15	31.75	8.00	149.35	104.65	6.35	22.65
80	3	304.80	66.55	35.05	8.00	168.15	127.00	6.35	34.72
100	4	355.60	76.20	41.15	8.00	200.15	157.23	6.35	54.01
125	5	419.10	91.95	47.75	8.00	234.95	185.67	6.35	90.58
150	6	482.60	107.95	53.85	12.00	269.75	215.90	6.35	133.67
200	8	552.45	127.00	53.85	12.00	330.20	269.75	6.35	214.58
250	10	673.10	165.10	66.55	16.00	387.35	323.85	6.35	393.15
300	12	762.00	184.15	73.15	16.00	450.85	381.00	6.35	567.72

THREADED RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Thread length	Holes			Raised Face		Net Weight
								Diam.	Number	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	Q	h	n	K	G	f	Kg
15	½	133.35	22.35	30.23	39.62	42.93	28.45	22.35	4.00	88.90	35.05	6.35	2.96
20	¾	139.70	27.69	31.75	42.93	50.80	31.75	22.35	4.00	95.25	42.93	6.35	3.45
25	1	158.75	34.54	35.05	47.75	57.15	35.05	25.40	4.00	107.95	50.80	6.35	4.85
32	1¼	184.15	43.18	38.10	52.32	73.15	38.10	28.45	4.00	130.05	63.50	6.35	7.16
40	1½	203.20	49.53	44.45	60.45	79.25	44.45	31.75	4.00	146.05	73.15	6.35	10.03
50	2	234.95	61.98	50.80	69.85	95.25	50.80	28.45	8.00	171.45	91.95	6.35	14.85
65	2½	266.70	74.68	57.15	79.25	114.30	57.15	31.75	8.00	196.85	104.65	6.35	21.49
80	3	304.80	90.68	66.55	91.95	133.35	63.50	35.05	8.00	228.60	127.00	6.35	32.52
100	4	355.60	118.08	76.20	107.95	165.10	69.85	41.15	8.00	273.05	157.23	6.35	49.85
125	5	419.10	143.76	91.95	130.05	203.20	76.20	47.75	8.00	323.85	185.67	6.35	82.90
150	6	482.60	170.69	107.95	152.40	234.95	82.55	53.85	8.00	368.30	215.90	6.35	128.01
200	8	552.45	221.49	127.00	177.80	304.80	95.25	53.85	12.00	438.15	269.75	6.35	187.97
250	10	673.10	276.35	165.10	228.60	374.65	107.95	66.55	12.00	539.75	323.85	6.35	355.51
300	12	762.00	327.15	184.15	254.00	441.45	120.65	73.15	12.00	619.25	381.00	6.35	504.15



ANSI B16.5 CLASS 2500 FLANGES



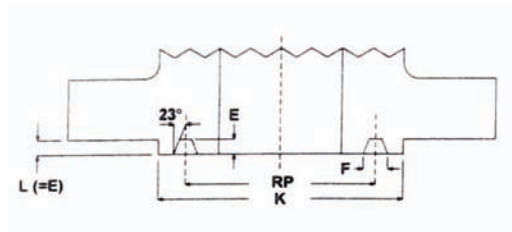
Slip On RF

SLIP ON RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick- ness	Total Thick- ness	Dia. at Base of Hub	Holes			Raised Face		Net Weight
							Diam.	Number	P.C.D	Outside Diam.	Thick- ness	
mm	inch	D	B2	t	T2	X	h	n	K	G	f	Kg
15	½	133.35	22.35	30.23	39.62	42.93	22.35	4.00	88.90	35.05	6.35	2.96
20	¾	139.70	27.69	31.75	42.93	50.80	22.35	4.00	95.25	42.93	6.35	3.45
25	1	158.75	34.54	35.05	47.75	57.15	25.40	4.00	107.95	50.80	6.35	4.85
32	1¼	184.15	43.18	38.10	52.32	73.15	28.45	4.00	130.05	63.50	6.35	7.16
40	1½	203.20	49.53	44.45	60.45	79.25	31.75	4.00	146.05	73.15	6.35	10.03
50	2	234.95	61.98	50.80	69.85	95.25	28.45	8.00	171.45	91.95	6.35	14.85
65	2½	266.70	74.68	57.15	79.25	114.30	31.75	8.00	196.85	104.65	6.35	21.49
80	3	304.80	90.68	66.55	91.95	133.35	35.05	8.00	228.60	127.00	6.35	32.52
100	4	355.60	116.08	76.20	107.95	165.10	41.15	8.00	273.05	157.23	6.35	49.85
125	5	419.10	143.76	91.95	130.05	203.20	47.75	8.00	323.85	185.67	6.35	82.90
150	6	482.60	170.69	107.95	152.40	234.95	53.85	8.00	368.30	215.90	6.35	128.01
200	8	552.45	221.49	127.00	177.80	304.80	53.85	12.00	438.15	269.75	6.35	187.97
250	10	673.10	276.35	165.10	228.60	374.65	66.55	12.00	539.75	323.85	6.35	355.51
300	12	762.00	327.15	184.15	254.00	441.45	73.15	12.00	619.25	381.00	6.35	504.15



ANSI B16.5 RING JOINT FACE DIMENSIONS



Ring Joint

RING JOINT FACE DIMENSIONS (mm)

Size	ANSI 150					ANSI 300/600					ANSI 900				
	Ring No.	Pitch Diam.	Width Groove	Depth Groove	RF Diam.	Ring No.	Pitch Diam.	Width Groove	Depth Groove	RF Diam.	Ring No.	Pitch Diam.	Width Groove	Depth Groove	RF Diam.
mm	RN	RP	F	E	K	RN	RP	F	E	K	RN	RP	F	E	K
15						11	34.1	7.1	5.5	50.8	12	39.6	8.7	6.3	60.3
20						13	42.8	8.7	6.3	63.5	14	44.4	8.7	6.3	66.6
25	15	47.6	8.7	6.3	63.5	16	50.8	8.7	6.3	69.8	16	50.8	8.7	6.3	71.4
32	17	57.1	8.7	6.3	73.0	18	60.3	8.7	6.3	79.3	18	60.3	8.7	6.3	80.9
40	19	65.0	8.7	6.3	82.5	20	68.2	8.7	6.3	90.4	20	68.2	8.7	6.3	92.0
50	22	82.5	8.7	6.3	101.6	23	82.5	11.9	7.9	107.9	24	95.2	11.9	7.9	123.8
65	25	101.6	8.7	6.3	120.6	26	101.6	11.9	7.9	127.0	27	107.9	11.9	7.9	136.5
80	29	114.3	8.7	6.3	133.3	31	123.8	11.9	7.9	146.0	31	123.8	11.9	7.9	155.5
90	33	131.7	8.7	6.3	153.9	34	131.7	11.9	7.9	158.7					
100	36	149.2	8.7	6.3	171.4	37	149.2	11.9	7.9	174.6	37	149.2	11.9	7.9	180.9
125	40	171.4	8.7	6.3	193.6	41	180.9	11.9	7.9	209.5	41	180.9	11.9	7.9	215.9
150	43	193.6	8.7	6.3	219.0	45	211.1	11.9	7.9	241.3	45	211.1	11.9	7.9	241.3
200	48	247.6	8.7	6.3	273.0	49	269.8	11.9	7.9	301.6	49	269.8	11.9	7.9	307.9
250	52	304.8	8.7	6.3	330.2	53	323.8	11.9	7.9	355.6	53	323.8	11.9	7.9	361.9
300	56	381.0	8.7	6.3	406.4	57	381.0	11.9	7.9	412.7	57	381.0	11.9	7.9	419.1
350	59	396.8	8.7	6.3	425.4	61	419.1	11.9	7.9	457.2	62	419.1	16.6	11.1	466.7
400	64	454.0	8.7	6.3	482.6	65	469.9	11.9	7.9	508.0	66	469.9	16.6	11.1	523.8
450	68	517.5	8.7	6.3	546.1	69	533.4	11.9	7.9	574.6	70	533.4	19.8	12.7	593.7
500	72	558.8	8.7	6.3	596.9	73	584.2	13.4	9.5	635.0	74	584.2	19.8	12.7	647.7
600	76	673.1	8.7	6.3	711.2	77	692.1	16.6	11.1	749.3	78	692.1	26.9	15.8	771.5

Size	ANSI 1500					ANSI 2500				
	Ring No.	Pitch Diam.	Width Groove	Depth Groove	RF Diam.	Ring No.	Pitch Diam.	Width Groove	Depth Groove	RF Diam.
mm	RN	RP	F	E	K	RN	RP	F	E	K
15	25NB TO 65NB ARE IDENTICAL TO ANSI 900					13	42.8	8.7	6.3	65.0
20						16	50.8	8.7	6.3	73.0
25						18	60.3	8.7	6.3	82.5
32						21	72.2	11.9	7.9	101.6
40						23	82.5	11.9	7.9	114.3
50						26	101.6	11.9	7.9	133.3
65						28	111.1	13.4	9.5	149.2
80	35	136.5	11.9	7.9	168.2	32	127.0	13.4	9.5	168.2
100	39	161.9	11.9	7.9	193.6	38	157.1	16.6	11.1	203.2
125	44	193.6	11.9	7.9	228.6	42	190.5	19.8	12.7	241.3
150	46	211.1	13.4	9.5	247.6	47	228.6	19.8	12.7	279.4
200	50	269.8	16.6	11.1	317.5	51	279.4	23.0	14.2	339.7
250	54	323.8	16.6	11.1	371.4	55	342.9	30.1	17.4	425.4
300	58	381.0	23.0	14.2	438.1	60	406.4	33.3	17.4	495.3
350	63	419.1	26.9	15.8	488.9					
400	67	469.9	30.1	17.4	546.1					
450	71	533.4	30.1	17.4	612.7					
500	75	584.2	33.3	17.4	673.1					
600	79	692.1	36.5	20.6	793.7					



BORE DIAMETER FOR ANSI B16.5 FOR WELD NECK & SOCKET WELD FLANGES S10 TO XXS (ALL CLASSES 150 TO 2500)

WELD NECK RF DIMENSIONS (mm)

Size		Bore Diameter B1											
mm	inch	Sch 10	Sch 20	Sch 30	Sch 40	Sch 60	Sch 80	XS	Sch 100	Sch 120	Sch 140	Sch 160	XXS
15	½	---	---	---	15.80	---	13.87	13.87	---	---	---	11.84	6.40
20	¾	---	---	---	20.93	---	18.85	18.85	---	---	---	15.60	11.02
25	1	---	---	---	26.64	---	24.31	24.31	---	---	---	20.70	15.21
32	1¼	---	---	---	35.05	---	32.46	32.46	---	---	---	29.46	22.76
40	1½	---	---	---	40.89	---	38.10	38.10	---	---	---	33.99	27.94
50	2	---	---	---	52.50	---	49.25	49.25	---	---	---	42.90	38.18
65	2½	---	---	---	62.71	---	59.00	59.00	---	---	---	53.98	44.98
80	3	---	---	---	77.93	---	73.66	73.66	---	---	---	66.65	58.42
90	3½	---	---	---	90.12	---	85.45	85.45	---	---	---	76.20	69.29
100	4	---	---	---	102.26	---	97.18	97.18	---	92.05	---	87.33	80.06
125	5	---	---	---	128.19	---	122.25	122.25	---	115.90	---	109.55	103.20
150	6	---	---	---	154.05	---	146.33	146.33	---	139.73	---	131.80	124.38
200	8	---	206.38	205.00	202.72	198.45	193.68	193.68	188.95	182.60	177.83	173.05	174.63
250	10	---	260.35	257.45	254.51	247.65	242.93	247.65	236.58	230.23	222.25	215.90	---
300	12	---	311.15	307.09	303.23	295.30	288.95	298.45	281.03	273.05	266.70	257.20	---
350	14	342.90	339.73	336.55	333.35	325.48	317.50	330.20	308.00	300.08	292.10	284.18	---
400	16	393.70	390.53	387.35	381.00	373.08	363.58	381.00	354.03	344.53	333.35	325.48	---
450	18	444.50	441.33	434.95	428.65	419.10	409.60	431.80	398.48	387.35	377.85	366.73	---
500	20	495.30	488.95	482.60	477.88	466.75	455.63	482.60	442.93	431.80	419.10	408.03	---
600	24	596.90	590.55	581.03	574.70	560.43	547.73	584.20	531.83	517.55	504.85	490.58	---