

Flanges & Fittings

SHORT VERSION
EMERGENCY SUPPLY SOLUTIONS





INDEX - SHORT VERSION*



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*Refer to GSL website for complete version

INTRODUCTION



Flanges / Studs / Gaskets / Fittings

Flanges

Global Supply Line supplies all types of Forged Flanges such as Weldneck, Slip-on, Socket Weld, threaded and Blind as per ANSI B16.5 & ASA B-16.5 covering sizes from up to 52" (1300NB), pressure ratings from class 150 to 2500 and temperature rating -200° C to 815°C. Studs, Nuts, and Gaskets for these Flanges are also supplied.

Flanges to API specifications -6A such as 6B and 6BX (Threaded, Weldneck, Blind, Test, Integral, Adaptor & Companion Flanges) for any size & pressure rating from 2000 PSI to 20000 PSI can be catered for. Large diameter flanges to API 605 from size NPS 26" to 52" (650NB to 1300NB) and ratings 150 to 900 are also manufactured and supplied. Slip-on and Weldneck Flanges as per BS 3293 of class 150, 300, 400, 600 from size NPS 26" to 48" (650NB to 1300NB) can also be supplied. Ring joint Gaskets and Grooves are provided as per ASME B16.20, ANSI B16.5 & API-6A.

Orifice flanges/meter runs as per ANSI B16.36, API 2530 and AGA-3 specifications with orifice plates can also be provided for any class and size. Flanges to other standards such as JIS, BS, DIN, ISO, JIS, can also be manufactured to meet customer's requirements.

Studs & Nuts

Global Supply Line supplies Studs & Nuts to API 6A & ANSI B16.5 in various materials and sizes.

Gaskets

Global Supply Line supplies Ring Joint Gaskets in all sizes and materials to ASME B16.2 & API6A

Flanged Fittings

Flanged, Studded Crosses and Tees from sizes 1.13/16" to 4.1/16" and for pressure ratings from 2000 PSI to 20000 PSI are manufactured and supplied.

Pipe Fittings (Butt welded)

Global Supply Line supplies Pipe Fittings Butt-Welded such as Elbows, Returns, Tees, Reducers etc. as per ASME B-16.9. The Butt-Welded Ends are prepared as per ANSI B16.25.

Forged Socket Welded & Threaded Fittings

Forged, Socket Welded & Threaded Fittings can also be supplied to specifications ASME B-16.11 in pressure ratings of 2000, 3000 & 6000 PSI.

Steel Pipe Fittings, Screwed and Socket Welded Fittings as per BS 3799 for pressure rating of 3000 PSI and 6000 PSI and as per IS:1239, Bends to BS 534 & IS:1239 are also manufactured and supplied.

Seamless Pipe

Global Supply Line can also supply Line Pipe as per APISL, Seamless Tubing and Casing as per API 5CT and also Pipe as per ASTM standard in Carbon Steel, Alloy Steel and Stainless Steel.

Material

Carbon Steel, Low Alloy Steel, Alloy Steel, Super Alloys as 17-4 PH, MONEL, INCONEL etc., meeting International Standards e.g. ASTM, API, BIS, JIS, DIN, AISI, ISO, BS etc.

Sour Service

Flanges, Studs, Nuts, Ring Gaskets, Fittings & other Forged products are also manufactured adhering to NACE MR-01-75.

Low Temperature & High Temperature Service

Special materials for low temperature service can also be provided for retention of ductility and resistance to shock loading. Similarly, special materials can be provided to cater for high temperature in the creep range.

Quality Control

Our Manufacturers Quality assurance is controlled by ensuring quality right from raw material stage to finish stage. i.e. chemical analysis, micro & macro examinations, physical testing, ultrasonic examination, radiography, impact testing, magnetic particle inspection, D.P. Test, hydrotest, air/nitrogen testing, gauging and dimensional inspection etc. at various stages as applicable. Full certification to DIN 500439.1.

Our manufacturer's quality systems are in place as per API Q1 or/and ISO 9000 Standards. API specifications 5 L, 5 CT, 6A, 7, 11 VI & 16C can be provided where required.

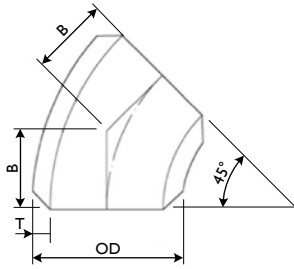
Third Party Inspection

Products can be offered under third party inspection from Det Norske Veritas, Lloyds, Bureau Veritas, American Bureau of Shipping or as required by the customer.

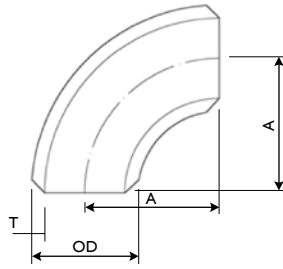




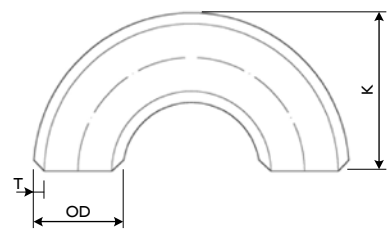
LONG AND SHORT RADIUS ELBOWS DIMENSIONS



45D Elbow
ANSI B16.9 / B16.28



90D Elbow
ANSI B16.9 / B16.28

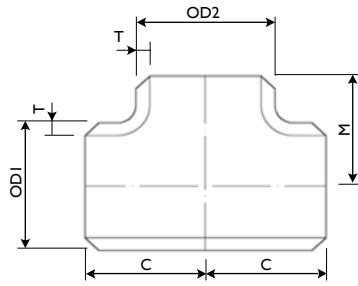


180D Elbow
ANSI B16.9 / B16.28

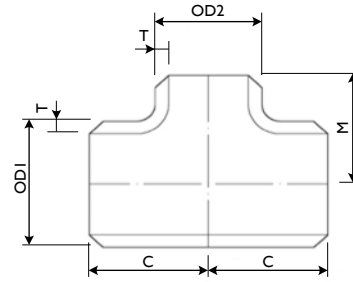
SIZE		OUTSIDE DIAMETER OD	LONG RADIUS (ANSI B16.9)			SHORT RADIUS (ANSI B16.28)		
			45D	90D	180D	45D	90D	180D
			Centre to End B	Centre to End A	Back to Face K	Centre to End B	Centre to End A	Back to Face K
mm	inch	mm	mm					
15	½	21.30	16.00	38.00	48.00	---	---	---
20	¾	26.70	19.00	38.00	51.00	---	---	---
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	614.40	---
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

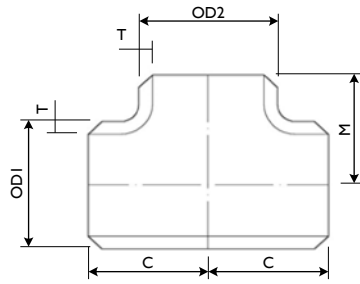
ANSI B16.9

SIZE		OUTSIDE DIAMETER		RUN	OUTLET
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

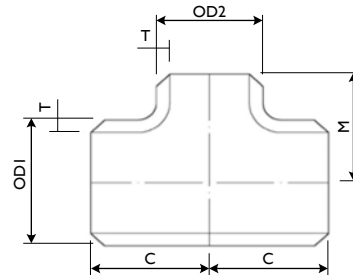
SIZE		OUTSIDE DIAMETER		RUN	OUTLET
mm	inch	OD1	OD2	C	M
125	5	141.30	141.30	124.00	124.00
125 x 125 x 100	5 x 5 x 4	141.30	114.30	124.00	117.00
125 x 125 x 90	5 x 5 x 3½	141.30	101.60	124.00	114.00
125 x 125 x 80	5 x 5 x 3	141.30	88.90	124.00	111.00
125 x 125 x 65	5 x 5 x 2½	141.30	73.00	124.00	108.00
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

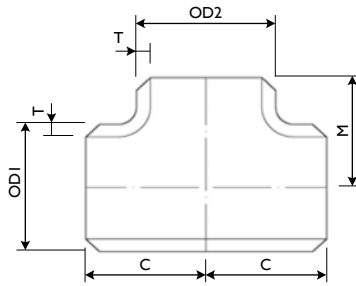
ANSI B16.9

SIZE		OUTSIDE DIAMETER		RUN	OUTLET
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

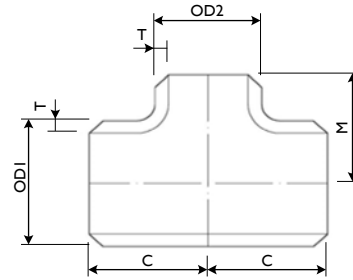
SIZE		OUTSIDE DIAMETER		RUN	OUTLET
mm	inch	OD1	OD2	C	M
800	32	812.80	812.80	597.00	597.00
800 x 800 x 750	32 x 32 x 30	812.80	762.00	597.00	584.00
800 x 800 x 700	32 x 32 x 28	812.80	711.20	597.00	572.00
800 x 800 x 650	32 x 32 x 26	812.80	660.40	597.00	572.00
800 x 800 x 600	32 x 32 x 24	812.80	609.40	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

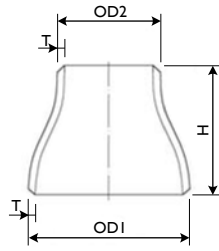
ANSI B16.9

SIZE		OUTSIDE DIAMETER		RUN	OUTLET
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

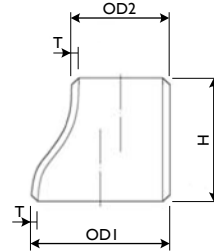
SIZE		OUTSIDE DIAMETER		RUN	OUTLET
mm	inch	OD1	OD2	C	M
1150	46	1168.40	1168.40	851.00	800.00
1150 x 1150 x 1100	46 x 46 x 44	1168.40	1117.60	851.00	800.00
1150 x 1150 x 1050	46 x 46 x 42	1168.40	1066.80	851.00	787.00
1150 x 1150 x 1000	46 x 46 x 40	1168.40	1016.00	851.00	775.00
1150 x 1150 x 950	46 x 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

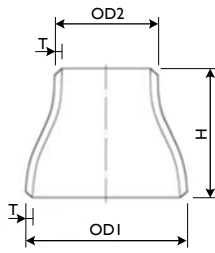
ANSI B16.9

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

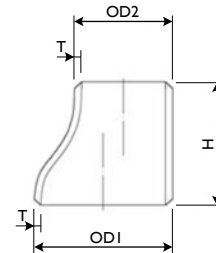
SIZE		OUTSIDE DIAMETER		HEIGHT
mm	inch	OD1	OD2	H
125 x 100	5 x 4	141.30	114.30	127.00
125 x 90	50 x 3½	141.30	101.60	127.00
125 x 80	5 x 3	141.30	88.90	127.00
125 x 65	5 x 2½	141.30	73.00	127.00
125 x 50	5 x 2	141.30	60.30	127.00
150 x 125	6 x 5	168.30	141.30	140.00
150 x 100	6 x 4	168.30	114.30	140.00
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

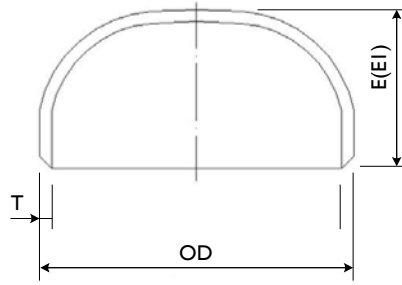
ANSI B16.9

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

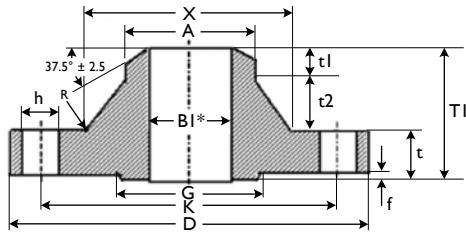


ANSI B16.9

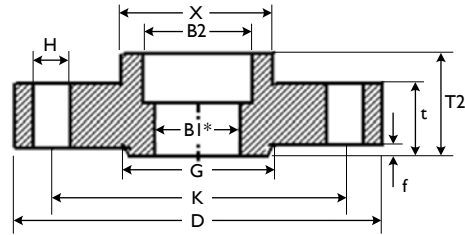
SIZE		OD	HEIGHT	
mm	inch		E	EI
15	½	21.30	25.40	25.40
20	¾	26.90	25.40	25.40
25	1	33.70	38.10	38.10
32	1¼	42.40	38.10	38.10
40	1½	48.30	38.10	38.10
50	2	60.30	38.10	44.40
65	2½	73.00	38.10	50.80
80	3	88.90	50.80	63.50
90	3½	101.60	63.50	76.20
100	4	114.30	63.50	76.20
125	5	139.70	76.20	88.90
150	6	168.30	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	---



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
mm	inch	D	BI*	t	TI	X	t2	t1	A		Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	115.33

*See page 48 for bore diameter all schedules (S10 to XXS)

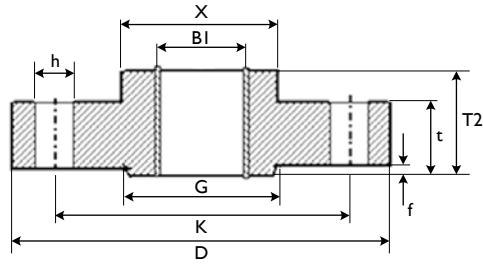
SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

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
mm	inch	D	B2	BI*	B2	BI*	t	Y	T2	X	Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	90.73

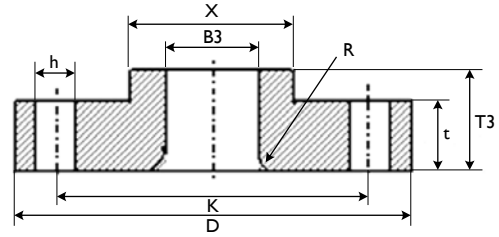
*See page 48 for bore diameter all schedules (S10 to XXS)



ANSI B16.5 CLASS 150 FLANGES



Threaded RD



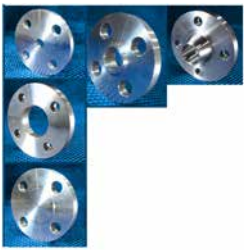
Lap Joint RF

THREADED RF DIMENSIONS (mm)

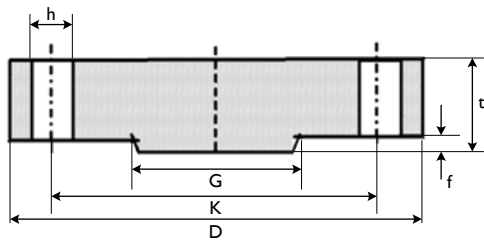
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Diam. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
mm	inch							Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	B2	t	T2	X	Q	h	n	K	G	f	kg
15	½	88.90	22.35	11.18	15.75	30.23	15.75	15.75	4	60.45	35.05	1.60	0.40
20	¾	98.55	27.69	12.70	15.75	38.10	15.75	15.75	4	69.85	42.93	1.60	0.57
25	1	107.95	34.54	14.22	17.53	49.28	17.53	15.75	4	79.25	50.80	1.60	0.78
32	1¼	117.35	43.18	15.75	20.57	58.67	20.57	15.75	4	88.90	63.50	1.60	1.02
40	1½	127.00	49.53	17.53	22.35	65.02	22.35	15.75	4	98.55	73.15	1.60	1.33
50	2	152.40	61.98	19.05	25.40	77.72	25.40	19.05	4	120.65	91.95	1.60	2.07
65	2½	177.80	74.68	22.35	28.45	90.42	28.45	19.05	4	139.70	104.65	1.60	3.31
80	3	190.50	90.68	23.88	30.23	107.95	30.23	19.05	4	152.40	127.00	1.60	3.88
90	3½	215.90	103.38	23.88	31.75	122.17	31.75	19.05	8	177.80	139.70	1.60	4.84
100	4	228.60	116.08	23.88	33.27	134.87	33.27	19.05	8	190.50	157.23	1.60	5.32
125	5	254.00	143.76	23.88	36.58	163.58	36.58	22.35	8	215.90	185.67	1.60	6.10
150	6	279.40	170.69	25.40	39.62	192.02	39.62	22.35	8	241.30	215.90	1.60	7.46
200	8	342.90	221.49	28.45	44.45	246.13	44.45	22.35	8	298.45	269.75	1.60	12.07
250	10	406.40	276.35	30.23	49.28	304.80	49.28	25.40	12	361.95	323.85	1.60	16.56
300	12	482.60	327.15	31.75	55.63	365.25	55.63	25.40	12	431.80	381.00	1.60	26.26
350	14	533.40	359.16	35.05	57.15	400.05	57.15	28.45	12	476.25	412.75	1.60	34.76
400	16	596.90	410.46	36.58	63.50	457.20	63.50	28.45	16	539.75	469.90	1.60	45.02
450	18	635.00	461.77	39.62	68.33	504.95	68.33	31.75	16	577.85	533.40	1.60	48.90
500	20	698.50	513.08	42.93	73.15	558.80	73.15	31.75	20	635.00	584.20	1.60	62.07
600	24	812.80	615.95	47.75	82.55	663.45	82.55	35.05	20	749.30	692.15	1.60	87.13

LAP JOINT RF DIMENSIONS (mm)

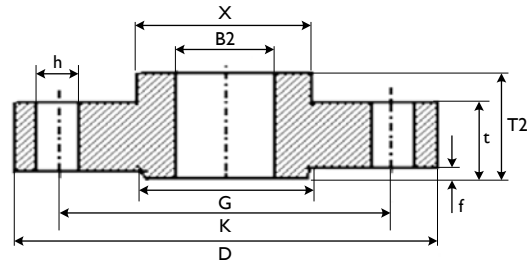
Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Diam. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
mm	inch						Diam.	No.	P.C.D		Outside Diam.	Thick-ness	
mm	inch	D	B3	t	T3	X	h	n	K	R	G	f	kg
15	½	88.90	22.86	11.18	15.75	30.23	15.75	4	60.45	3.05	35.05	1.60	0.40
20	¾	98.55	28.19	12.70	15.75	38.10	15.75	4	69.85	3.05	42.93	1.60	0.57
25	1	107.95	35.05	14.22	17.53	49.28	15.75	4	79.25	3.05	50.80	1.60	0.78
32	1¼	117.35	43.69	15.75	20.57	58.67	15.75	4	88.90	4.83	63.50	1.60	1.02
40	1½	127.00	50.04	17.53	22.35	65.02	15.75	4	98.55	6.35	73.15	1.60	1.33
50	2	152.40	62.48	19.05	25.40	77.72	19.05	4	120.65	7.87	91.95	1.60	2.06
65	2½	177.80	75.44	22.35	28.45	90.42	19.05	4	139.70	7.87	104.65	1.60	3.29
80	3	190.50	91.44	23.88	30.23	107.95	19.05	4	152.40	9.65	127.00	1.60	3.85
90	3½	215.90	104.14	23.88	31.75	122.17	19.05	8	177.80	9.65	139.70	1.60	4.81
100	4	228.60	116.84	23.88	33.27	134.87	19.05	8	190.50	11.18	157.23	1.60	5.29
125	5	254.00	144.53	23.88	36.58	163.58	22.35	8	215.90	11.18	185.67	1.60	6.05
150	6	279.40	171.45	25.40	39.62	192.02	22.35	8	241.30	12.70	215.90	1.60	7.39
200	8	342.90	222.25	28.45	44.45	246.13	22.35	8	298.45	12.70	269.75	1.60	11.98
250	10	406.40	277.37	30.23	49.28	304.80	25.40	12	361.95	12.70	323.85	1.60	16.38
300	12	482.60	328.17	31.75	55.63	365.25	25.40	12	431.80	12.70	381.00	1.60	26.03
350	14	533.40	360.17	35.05	57.15	400.05	28.45	12	476.25	12.70	412.75	1.60	38.63
400	16	596.90	411.23	36.58	63.50	457.20	28.45	16	539.75	12.70	469.90	1.60	50.65
450	18	635.00	462.28	39.62	68.33	504.95	31.75	16	577.85	12.70	533.40	1.60	55.94
500	20	698.50	514.35	42.93	73.15	558.80	31.75	20	635.00	12.70	584.20	1.60	70.30
600	24	812.80	615.95	47.75	82.55	663.45	35.05	20	749.30	12.70	692.15	1.60	97.89



ANSI B16.5 CLASS 150 FLANGES



Blind RF



Slip On

BLIND RF DIMENSIONS (mm)

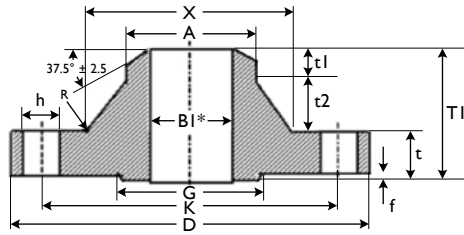
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
mm	inch			Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	kg
15	½	88.90	11.18	15.75	4	60.45	35.05	1.60	0.42
20	¾	98.55	12.70	15.75	4	69.85	42.93	1.60	0.62
25	1	107.95	14.22	15.75	4	79.25	50.80	1.60	0.86
32	1¼	117.35	15.75	15.75	4	88.90	63.50	1.60	1.16
40	1½	127.00	17.53	15.75	4	98.55	73.15	1.60	1.54
50	2	152.40	19.05	19.05	4	120.65	91.95	1.60	2.43
65	2½	177.80	22.35	19.05	4	139.70	104.65	1.60	3.98
80	3	190.50	23.88	19.05	4	152.40	127.00	1.60	4.95
90	3½	215.90	23.88	19.05	8	177.80	139.70	1.60	6.21
100	4	228.60	23.88	19.05	8	190.50	157.23	1.60	7.04
125	5	254.00	23.88	22.35	8	215.90	185.67	1.60	8.67
150	6	279.40	25.40	22.35	8	241.30	215.90	1.60	11.34
200	8	342.90	28.45	22.35	8	298.45	269.75	1.60	19.54
250	10	406.40	30.23	25.40	12	361.95	323.85	1.60	28.85
300	12	482.60	31.75	25.40	12	431.80	381.00	1.60	43.33
350	14	533.40	35.05	28.45	12	476.25	412.75	1.60	58.41
400	16	596.90	36.58	28.45	16	539.75	469.90	1.60	76.28
450	18	635.00	39.62	31.75	16	577.85	533.40	1.60	93.60
500	20	698.50	42.93	31.75	20	635.00	584.20	1.60	122.62
600	24	812.80	47.75	35.05	20	749.30	692.15	1.60	185.79

SLIP ON RF DIMENSIONS (mm)

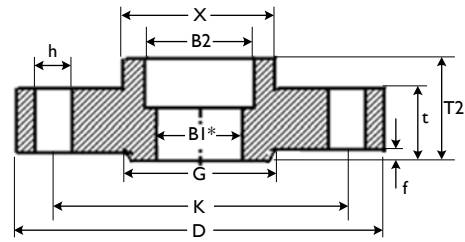
Size		Outside Diam.	Bore Diam.	Thickness	Total Thickness	Diam. of Base of Hub	Holes			Raised Face		Net Weight
mm	inch						Diam.	No.	P.C.D	Outside Diam.	Thickness	
mm	inch	D	B2	t	T2	X	h	n	K	G	f	kg
15	½	88.90	22.35	11.18	15.75	30.23	15.75	4	60.45	35.05	1.60	0.40
20	¾	98.55	27.69	12.70	15.75	38.10	15.75	4	69.85	42.93	1.60	0.57
25	1	107.95	34.54	14.22	17.53	49.28	15.75	4	79.25	50.80	1.60	0.78
32	1¼	117.35	43.18	15.75	20.57	58.67	15.75	4	88.90	63.50	1.60	1.02
40	1½	127.00	49.53	17.53	22.35	65.02	15.75	4	98.55	73.15	1.60	1.33
50	2	152.40	61.98	19.05	25.40	77.72	19.05	4	120.65	91.95	1.60	2.07
65	2½	177.80	74.68	22.35	28.45	90.42	19.05	4	139.70	104.65	1.60	3.31
80	3	190.50	90.68	23.88	30.23	107.95	19.05	4	152.40	127.00	1.60	3.88
90	3½	215.90	103.38	23.88	31.75	122.17	19.05	8	177.80	139.70	1.60	4.84
100	4	228.60	116.06	23.88	33.27	134.87	19.05	8	190.50	157.23	1.60	5.32
125	5	254.00	143.76	23.88	36.58	163.58	22.35	8	215.90	185.67	1.60	6.10
150	6	279.40	170.69	25.40	39.62	192.02	22.35	8	241.30	215.90	1.60	7.46
200	8	342.90	221.49	28.45	44.45	246.13	22.35	8	298.45	269.75	1.60	12.07
250	10	406.40	276.35	30.23	49.28	304.80	25.40	12	361.95	323.85	1.60	16.56
300	12	482.60	327.15	31.75	55.63	365.25	25.40	12	431.80	381.00	1.60	26.26
350	14	533.40	359.16	35.05	57.15	400.05	28.45	12	476.25	412.75	1.60	34.76
400	16	596.90	410.46	36.58	63.50	457.20	28.45	16	539.75	469.90	1.60	45.02
450	18	635.00	461.77	39.62	68.33	504.95	31.75	16	577.85	533.40	1.60	48.90
500	20	698.50	513.08	42.93	73.15	558.80	31.75	20	635.00	584.20	1.60	62.07
600	24	812.80	615.95	47.75	82.55	663.45	35.05	20	749.30	692.15	1.60	87.13



ANSI B16.5 CLASS 300 FLANGES



Welding Neck RF



Socket Welding RF

WELDING NECK RF STD* DIMENSIONS (mm)

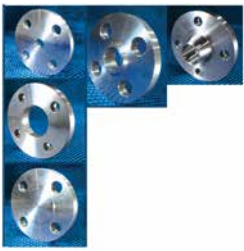
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
mm	inch					D	BI*	t	T1		X	t2	t1	A	R	
15	½	95.25	15.75	14.22	52.32	38.10	30.48	7.62	21.34	3.05	15.75	4.00	66.55	35.05	1.60	0.76
20	¾	117.35	20.83	15.75	57.15	47.75	33.12	8.28	26.67	3.05	19.05	4.00	82.55	42.93	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	6.98
90	3½	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	231.82

For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)

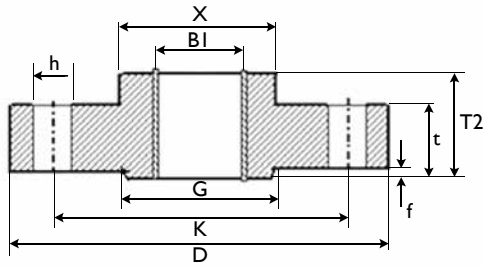
SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

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
mm	inch		D	B2	BI	B2					BI	t	Y	T2	X	
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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	6.13
90	3½	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	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	1.60	209.77

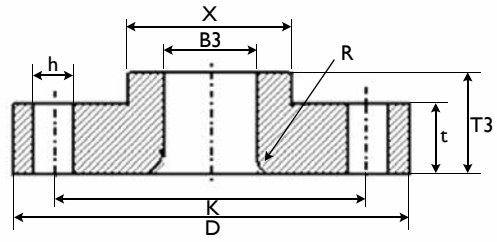
For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)



ANSI B16.5 CLASS 300 FLANGES



Threaded RF



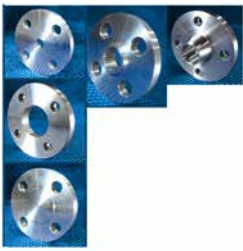
Lap Joint RF

THREADED RF DIMENSIONS (mm)

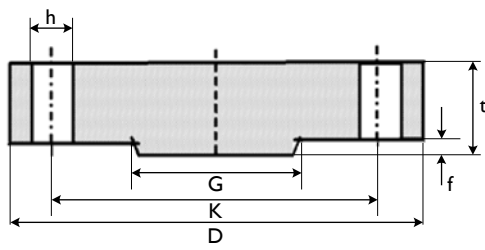
Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Diam. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
mm	inch							D	B2	t	T2	X	
15	½	95.25	22.35	14.22	22.35	38.10	15.75	15.75	4.00	66.55	35.05	1.60	0.65
20	¾	117.35	27.69	15.75	25.40	47.75	15.75	19.05	4.00	82.55	42.93	1.60	1.11
25	1	123.95	34.54	17.53	26.92	53.85	17.53	19.05	4.00	88.90	50.80	1.60	1.37
32	1¼	133.35	43.18	19.05	26.92	63.50	20.57	19.05	4.00	98.55	63.50	1.60	1.69
40	1½	155.45	49.53	20.57	30.23	69.85	22.35	22.35	4.00	114.30	73.15	1.60	2.49
50	2	165.10	61.98	22.35	33.27	84.07	28.45	19.05	8.00	127.00	91.95	1.60	2.89
65	2½	190.50	74.68	25.40	38.10	100.08	31.75	22.35	8.00	149.35	104.65	1.60	4.33
80	3	209.55	90.68	28.45	42.93	117.35	31.75	22.35	8.00	168.15	127.00	1.60	5.83
90	3½	228.60	103.38	30.23	44.45	133.35	36.58	22.35	8.00	184.15	139.70	1.60	7.36
100	4	254.00	116.08	31.75	47.75	146.05	36.58	22.35	8.00	200.15	157.53	1.60	9.65
125	5	279.40	143.76	35.05	50.80	177.80	42.93	22.35	8.00	234.95	185.67	1.60	12.23
150	6	317.50	170.69	36.58	52.32	206.25	45.97	22.35	12.00	269.75	215.90	1.60	15.66
200	8	381.00	221.49	41.15	61.98	260.35	50.80	25.40	12.00	330.20	269.75	1.60	24.22
250	10	444.50	276.35	47.75	66.55	320.55	55.63	28.45	16.00	387.35	323.85	1.60	34.18
300	12	520.70	327.15	50.80	73.15	374.65	60.45	31.75	16.00	450.85	381.00	1.60	49.91
350	14	584.20	359.16	53.85	76.20	425.45	63.50	31.75	20.00	514.35	412.75	1.60	69.54
400	16	647.70	410.46	57.15	82.55	482.60	68.33	35.05	20.00	571.50	469.90	1.60	88.25
450	18	711.20	461.77	60.45	88.90	533.40	69.85	35.05	24.00	628.65	533.40	1.60	108.76
500	20	774.70	513.08	63.50	95.25	587.25	73.15	35.05	24.00	685.80	584.20	1.60	134.18
600	24	914.40	615.95	69.85	106.43	701.55	82.55	41.15	24.00	812.80	692.15	1.60	201.66

LAP JOINT RF DIMENSIONS (mm)

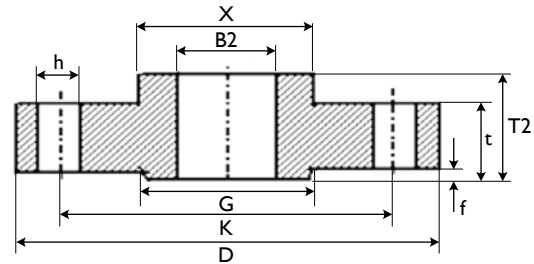
Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Diam. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
mm	inch						D	B3	t		T3	X	
15	½	95.25	22.86	14.22	22.35	38.10	15.75	4.00	66.55	3.05	35.05	1.60	0.64
20	¾	117.35	28.19	15.75	25.40	47.75	19.05	4.00	82.55	3.05	42.93	1.60	1.11
25	1	123.95	35.05	17.53	26.92	53.85	19.05	4.00	88.90	3.05	50.80	1.60	1.36
32	1¼	133.35	43.69	19.05	26.92	63.50	19.05	4.00	98.55	4.83	63.50	1.60	1.68
40	1½	155.45	50.04	20.57	30.23	69.85	22.35	4.00	114.30	6.35	73.15	1.60	2.48
50	2	165.10	62.48	22.35	33.27	84.07	19.05	8.00	127.00	7.87	91.95	1.60	2.88
65	2½	190.50	75.44	25.40	38.10	100.08	22.35	8.00	149.35	7.87	104.65	1.60	4.30
80	3	209.55	91.44	28.45	42.93	117.35	22.35	8.00	168.15	9.65	127.00	1.60	5.79
90	3½	228.60	104.14	30.23	44.45	133.35	22.35	8.00	184.15	9.65	139.70	1.60	7.31
100	4	254.00	116.84	31.75	47.75	146.05	22.35	8.00	200.15	11.18	157.53	1.60	9.60
125	5	279.40	144.53	35.05	50.80	177.80	22.35	8.00	234.95	11.18	185.67	1.60	12.16
150	6	317.50	171.45	36.58	52.32	206.25	22.35	12.00	269.75	12.70	215.90	1.60	15.58
200	8	381.00	222.25	41.15	61.98	260.35	25.40	12.00	330.20	12.70	269.75	1.60	24.09
250	10	444.50	277.37	47.75	66.55	320.55	28.45	16.00	387.35	12.70	323.85	1.60	38.52
300	12	520.70	328.17	50.80	73.15	374.65	31.75	16.00	450.85	12.70	381.00	1.60	55.34
350	14	584.20	360.17	53.85	76.20	425.45	31.75	20.00	514.35	12.70	412.75	1.60	80.28
400	16	647.70	411.23	57.15	82.55	482.60	35.05	20.00	571.50	12.70	469.90	1.60	102.92
450	18	711.20	462.28	60.45	88.90	533.40	35.05	24.00	628.65	12.70	533.40	1.60	126.47
500	20	774.70	514.35	63.50	95.25	587.25	35.05	24.00	685.80	12.70	584.20	1.60	155.43



ANSI B16.5 CLASS 300 FLANGES



Blind RF



Slip On

BLIND RF DIMENSIONS (mm)

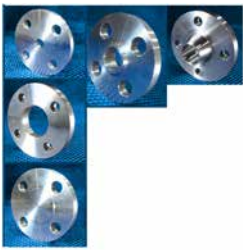
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
mm	inch			Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	kg
15	½	95.25	14.22	15.75	4.00	66.55	35.05	1.60	0.64
20	¾	117.35	15.75	19.05	4.00	82.55	42.93	1.60	1.10
25	1	123.95	17.53	19.05	4.00	88.90	50.80	1.60	1.40
32	1¼	133.35	19.05	19.05	4.00	98.55	63.50	1.60	1.80
40	1½	165.45	20.57	22.35	4.00	114.30	73.15	1.60	2.65
50	2	165.10	22.35	19.05	8.00	127.00	91.95	1.60	3.21
65	2½	190.50	25.40	22.35	8.00	149.35	104.65	1.60	4.86
80	3	209.55	28.45	22.35	8.00	168.15	127.00	1.60	6.78
90	3½	228.60	30.23	22.35	8.00	184.15	139.70	1.60	8.73
100	4	254.00	31.75	22.35	8.00	200.15	157.23	1.60	11.51
125	5	279.40	35.05	22.35	8.00	234.95	185.67	1.60	15.63
150	6	317.50	38.58	22.35	12.00	269.75	215.90	1.60	20.93
200	8	381.00	41.15	25.40	12.00	330.20	269.75	1.60	34.26
250	10	444.50	47.75	28.45	16.00	387.35	323.85	1.60	53.61
300	12	520.70	50.80	31.75	16.00	450.85	381.00	1.60	78.84
350	14	584.20	53.85	31.75	20.00	514.35	412.75	1.60	105.20
400	16	647.70	57.15	35.05	20.00	571.50	469.90	1.60	137.53
450	18	711.20	60.45	35.05	24.00	628.65	533.40	1.60	175.73
500	20	774.70	63.50	35.05	24.00	685.80	584.20	1.60	221.27
600	24	914.40	69.85	41.15	24.00	812.80	692.15	1.60	339.61

For Ring Groove face dimensions see Page 47.

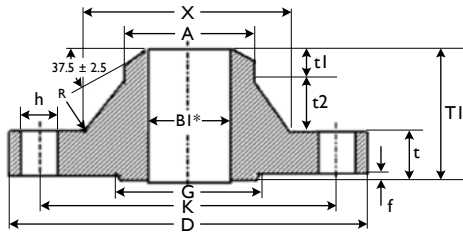
SLIP ON RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thickness	Total Thick-ness	Diam. of Base of Hub	Holes			Raised Face		Net Weight
mm	inch						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	1.60	0.65
20	¾	117.35	27.69	15.75	25.40	47.75	19.05	4.00	82.55	42.93	1.60	1.11
25	1	123.95	34.54	17.53	26.92	53.85	19.05	4.00	88.90	50.80	1.60	1.37
32	1¼	133.35	43.18	19.05	26.92	63.50	19.05	4.00	98.55	63.50	1.60	1.69
40	1½	165.45	49.53	20.57	30.23	69.85	22.35	4.00	114.30	73.15	1.60	2.49
50	2	165.10	61.98	22.35	33.27	84.07	19.05	8.00	127.00	91.95	1.60	2.89
65	2½	190.50	74.68	25.40	38.10	100.08	22.35	8.00	149.35	104.65	1.60	4.33
80	3	209.55	90.68	28.45	42.93	117.35	22.35	8.00	168.15	127.00	1.60	5.83
90	3½	228.60	103.38	30.23	44.45	133.35	22.35	8.00	184.15	139.70	1.60	7.36
100	4	254.00	116.08	31.75	47.75	146.05	22.35	8.00	200.15	157.23	1.60	9.65
125	5	279.40	143.76	35.05	50.80	177.80	22.35	8.00	234.95	185.67	1.60	12.23
150	6	317.50	170.69	38.58	52.32	206.25	22.35	12.00	269.75	215.90	1.60	15.66
200	8	381.00	221.49	41.15	61.98	260.35	25.40	12.00	330.20	269.75	1.60	24.22
250	10	444.50	276.35	47.75	66.55	320.55	28.45	16.00	387.35	323.85	1.60	34.18
300	12	520.70	327.15	50.80	73.15	374.65	31.75	16.00	450.85	381.00	1.60	49.91
350	14	584.20	359.16	53.85	76.20	425.45	31.75	20.00	514.35	412.75	1.60	69.54
400	16	647.70	410.46	57.15	82.55	482.60	35.05	20.00	571.50	469.90	1.60	88.25
450	18	711.20	461.77	60.45	88.90	533.40	35.05	24.00	628.65	533.40	1.60	108.76
500	20	774.70	513.08	63.50	95.25	587.25	35.05	24.00	685.80	584.20	1.60	134.18
600	24	914.40	615.95	69.85	106.43	701.55	41.15	24.00	812.80	692.15	1.60	201.66

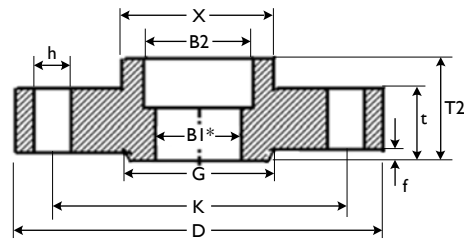
For Ring Groove face dimensions see Page 47.



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	T1	X	t2	t1	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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
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	6.40
400	16	685.80	387.35	76.20	177.80	495.30	81.28	20.32	406.40	12.70	41.15	20.00	603.25	469.90	6.40
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	6.40
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	6.40

For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)

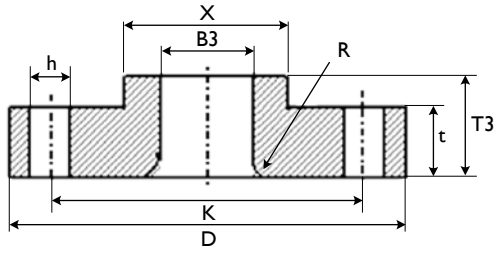
SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	328.13

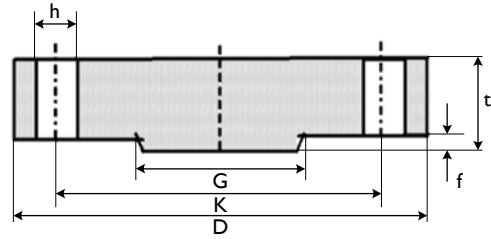
For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)



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
mm	inch						D	B3	t		T3	X	
15	½	95.25	22.86	14.22	22.35	38.10	15.75	4.00	66.55	3.05	35.05	6.40	0.74
20	¾	117.35	28.19	15.75	25.40	47.75	19.05	4.00	82.55	3.05	42.93	6.40	1.25
25	1	123.95	35.05	17.53	26.92	53.85	19.05	4.00	88.90	3.05	50.80	6.40	1.52
32	1¼	133.35	43.69	20.57	28.45	63.50	19.05	4.00	98.55	4.83	63.50	6.40	2.02
40	1½	155.45	50.04	22.35	31.75	69.85	22.35	4.00	114.30	6.35	73.15	6.40	2.96
50	2	165.10	62.48	25.40	36.58	84.07	19.05	8.00	127.00	7.87	91.95	6.40	3.60
65	2½	190.50	75.44	28.45	41.15	100.08	22.35	8.00	149.35	7.87	104.65	6.40	5.21
80	3	209.55	91.44	31.75	45.97	117.35	22.35	8.00	168.15	9.65	127.00	6.40	6.96
90	3½	228.60	104.14	35.05	49.28	133.35	25.40	8.00	184.15	9.65	139.70	6.40	8.78
100	4	273.05	116.84	38.10	53.85	152.40	25.40	8.00	215.90	11.18	157.53	6.40	14.46
125	5	330.20	144.53	44.45	60.45	188.98	28.45	8.00	266.70	11.18	185.67	6.40	24.38
150	6	355.60	171.45	47.75	66.55	222.25	28.45	12.00	292.10	12.70	215.90	6.40	28.71
200	8	419.10	222.25	55.63	76.20	273.05	31.75	12.00	349.25	12.70	269.75	6.40	43.26
250	10	508.00	277.37	63.50	111.25	342.90	35.05	16.00	431.80	12.70	323.85	6.40	76.28
300	12	558.80	328.17	66.55	117.35	400.05	35.05	20.00	488.95	12.70	381.00	6.40	91.71
350	14	603.25	360.17	69.85	127.00	431.80	38.10	20.00	527.05	12.70	412.75	6.40	109.93
400	16	685.80	411.23	76.20	139.70	495.30	41.15	20.00	603.25	12.70	469.90	6.40	157.46
450	18	742.95	462.28	82.55	152.40	546.10	44.45	20.00	654.05	12.70	533.40	6.40	191.22
500	20	812.80	514.35	88.90	165.10	609.60	44.45	24.00	723.90	12.70	584.20	6.40	244.41
600	24	939.90	615.95	101.60	184.15	717.55	50.80	24.00	838.20	12.70	692.15	6.40	349.66

For Ring Groove face dimensions see Page 47.

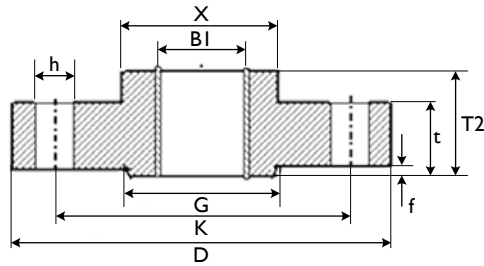
BLIND RF DIMENSIONS (mm)

Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
mm	inch			D	t	Diameter	Number	P.C.D	
15	½	95.25	14.22	15.75	4.00	66.55	35.05	6.40	0.76
20	¾	117.35	15.75	19.05	4.00	82.55	42.93	6.40	1.27
25	1	123.95	17.53	19.05	4.00	88.90	50.80	6.40	1.60
32	1¼	133.35	20.57	19.05	4.00	98.55	63.50	6.40	3.23
40	1½	155.45	22.35	22.35	4.00	114.30	73.15	6.40	3.26
50	2	165.10	25.40	19.05	8.00	127.00	91.95	6.40	4.14
65	2½	190.50	28.45	22.35	8.00	149.35	104.65	6.40	6.09
80	3	209.55	31.75	22.35	8.00	168.15	127.00	6.40	8.44
90	3½	228.60	35.05	25.40	8.00	169.15	139.70	6.40	10.94
100	4	273.05	38.10	25.40	8.00	200.15	157.53	6.40	17.27
125	5	330.20	44.45	28.45	8.00	234.95	185.67	6.40	29.46
150	6	355.60	47.75	28.45	12.00	269.75	215.90	6.40	36.19
200	8	419.10	55.63	31.75	12.00	330.20	269.75	6.40	58.94
250	10	508.00	63.50	35.05	16.00	387.35	323.85	6.40	97.44
300	12	558.80	66.55	35.05	20.00	450.85	381.00	6.40	123.72
350	14	603.25	69.85	38.10	20.00	514.35	412.75	6.40	150.89
400	16	685.80	76.20	41.15	20.00	571.50	469.90	6.40	213.69
450	18	742.95	82.55	44.45	24.00	628.65	533.40	6.40	267.93
500	20	812.80	88.90	44.45	24.00	685.80	584.20	6.40	349.47
600	24	939.90	101.60	50.80	24.00	812.80	692.15	6.40	533.21

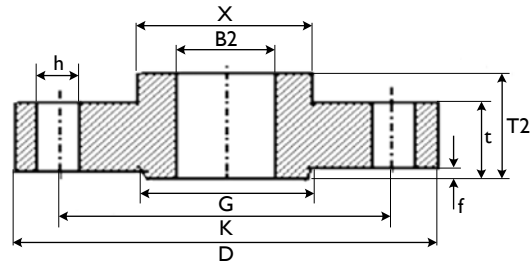
For Ring Groove face dimensions see Page 47.



ANSI B16.5 CLASS 600 FLANGES



Threaded RF



Slip On RF

THREADED RF DIMENSIONS (mm)

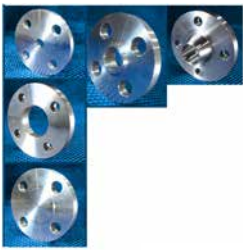
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Thread Length	Holes			Raised Face		Net Weight
mm	inch							Diam.	No.	P.C.D	Outside Diam.	Thick-ness	
mm	inch	D	BI	t	T2	X	Q	h	n	K	G	f	Kg
15	½	95.25	22.35	14.22	22.35	38.10	15.75	15.75	4.00	66.55	35.05	6.40	0.74
20	¾	117.35	27.69	15.75	25.40	47.75	15.75	19.05	4.00	82.55	42.93	6.40	1.25
25	1	123.95	34.54	17.53	26.92	53.85	17.53	19.05	4.00	88.90	50.80	6.40	1.53
32	1¼	133.35	43.18	20.57	28.45	63.50	20.57	19.05	4.00	98.55	63.50	6.40	2.02
40	1½	155.45	49.53	22.35	31.75	69.85	22.35	22.35	4.00	114.30	73.15	6.40	2.97
50	2	165.10	61.98	25.40	36.58	84.07	28.45	19.05	8.00	127.00	91.95	6.40	3.62
65	2½	190.50	74.68	28.45	41.15	100.08	31.75	22.35	8.00	149.35	104.65	6.40	5.24
80	3	209.55	90.68	31.75	45.97	117.35	35.05	22.35	8.00	168.15	127.00	6.40	7.00
90	3½	228.60	103.38	35.05	49.28	133.35	39.62	25.40	8.00	184.15	139.70	6.40	8.84
100	4	273.05	116.08	38.10	53.85	152.40	41.15	25.40	8.00	215.90	157.23	6.40	14.52
125	5	330.20	143.76	44.45	60.45	188.98	47.75	28.45	8.00	266.70	185.67	6.40	24.47
150	6	355.60	170.69	47.75	66.55	222.25	50.80	28.45	12.00	292.10	215.90	6.40	28.82
200	8	419.10	221.49	55.63	76.20	273.05	57.15	31.75	12.00	349.25	269.75	6.40	43.43
250	10	508.00	276.35	63.50	85.85	342.90	65.02	35.05	16.00	431.80	323.85	6.40	70.23
300	12	558.80	327.15	66.55	91.95	400.05	69.85	35.05	20.00	488.95	381.00	6.40	83.92
350	14	603.25	359.16	69.85	93.73	431.80	60.45	38.10	20.00	527.05	412.75	6.40	98.74
400	16	685.80	410.46	76.20	106.43	495.30	77.72	41.15	20.00	603.25	469.90	6.40	142.27
450	18	742.95	461.77	82.55	117.35	546.10	79.25	44.45	20.00	654.05	533.40	6.40	173.32
500	20	812.80	513.08	88.90	127.00	609.60	82.55	44.45	24.00	723.90	584.20	6.40	220.33
600	24	939.90	615.95	101.60	139.70	717.55	91.95	50.80	24.00	838.20	692.15	6.40	312.53

For Ring Groove face dimensions see Page 47.

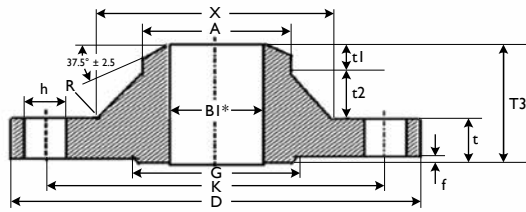
SLIP ON RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Holes			Raised Face		Net Weight
mm	inch						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	6.40	0.74
20	¾	117.35	27.69	15.75	25.40	47.75	19.05	4.00	82.55	42.93	6.40	1.25
25	1	123.95	34.54	17.53	26.92	53.85	19.05	4.00	88.90	50.80	6.40	1.53
32	1¼	133.35	43.18	20.57	28.45	63.50	19.05	4.00	98.55	63.50	6.40	2.02
40	1½	155.45	49.53	22.35	31.75	69.85	22.35	4.00	114.30	73.15	6.40	2.97
50	2	165.10	61.98	25.40	36.58	84.07	19.05	8.00	127.00	91.95	6.40	3.62
65	2½	190.50	74.68	28.45	41.15	100.08	22.35	8.00	149.35	104.65	6.40	5.24
80	3	209.55	90.68	31.75	45.97	117.35	22.35	8.00	168.15	127.00	6.40	7.00
90	3½	228.60	103.38	35.05	49.58	133.35	25.40	8.00	169.15	139.70	6.40	8.84
100	4	273.05	116.08	38.10	53.85	152.40	25.40	8.00	215.90	157.53	6.40	14.52
125	5	330.20	143.76	44.45	80.45	188.98	28.45	8.00	266.70	185.67	6.40	24.47
150	6	355.60	170.69	47.75	66.55	222.25	28.45	12.00	292.10	215.90	6.40	28.82
200	8	419.10	221.49	55.63	76.20	273.05	31.75	12.00	349.25	269.75	6.40	43.43
250	10	508.00	276.35	63.50	85.85	342.90	35.05	16.00	431.80	323.85	6.40	70.23
300	12	558.80	327.15	66.55	91.95	400.05	35.05	20.00	488.95	381.00	6.40	83.92
350	14	603.25	359.16	69.85	93.73	431.80	38.10	20.00	527.05	412.75	6.40	98.74
400	16	685.80	410.46	76.20	106.43	495.30	41.15	20.00	603.25	469.90	6.40	142.27
450	18	742.95	461.77	82.55	117.35	546.10	44.45	20.00	654.05	533.40	6.40	173.32
500	20	812.80	513.08	88.90	127.00	609.60	44.45	24.00	723.90	584.20	6.40	220.33
600	24	939.90	615.95	101.60	139.70	717.55	50.80	24.00	838.20	692.15	6.40	312.53

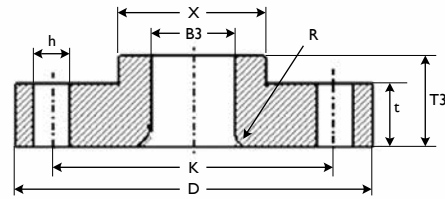
For Ring Groove face dimensions see Page 47.



ANSI B16.5 CLASS 900 FLANGES



Welding Neck RF



Lap Joint RF

WELDING NECK RF STD* DIMENSIONS (mm)

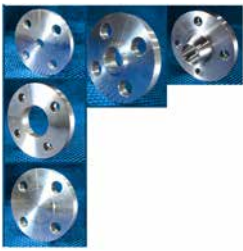
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
mm	inch					D	BI*	t	TI		X	t2	t1	A	R	
15	½	120.65	15.80	22.35	60.45	38.10	30.48	7.62	21.34	3.05	22.35	4.00	82.55	35.05	6.40	1.88
20	¾	130.05	20.93	25.40	69.85	44.45	35.56	8.89	26.67	3.05	22.35	4.00	88.90	42.93	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	666.57

For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)

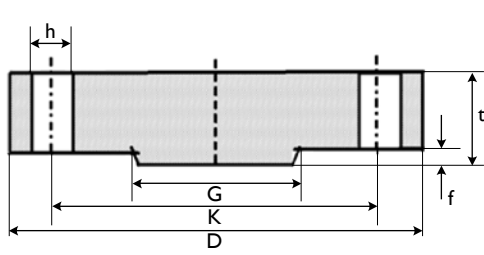
LAP JOINT RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Dia. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
mm	inch						D	B2	t		T3	X	
15	½	120.65	22.86	22.35	31.75	38.10	22.35	4.00	82.55	3.05	35.05	6.40	1.74
20	¾	130.05	28.19	25.40	35.05	44.45	22.35	4.00	88.90	3.05	42.93	6.40	2.32
25	1	149.35	35.05	28.45	41.15	52.32	25.40	4.00	101.60	3.05	50.80	6.40	3.42
32	1¼	158.75	43.69	28.45	41.15	63.50	25.40	4.00	111.25	4.83	63.50	6.40	3.88
40	1½	177.80	50.04	31.75	44.45	69.85	28.45	4.00	123.95	6.35	73.15	6.40	5.36
50	2	215.90	62.48	38.10	57.15	104.65	25.40	8.00	165.10	7.87	91.95	6.40	9.83
65	2½	244.35	75.44	41.15	63.50	123.95	28.45	8.00	190.50	7.87	104.65	6.40	13.60
80	3	241.30	91.44	38.10	53.85	127.00	25.40	8.00	190.50	9.65	127.00	6.40	11.56
100	4	292.10	116.84	44.45	69.85	158.75	31.75	8.00	234.95	11.18	157.23	6.40	19.67
125	5	349.25	144.53	50.80	79.25	190.50	35.05	8.00	279.40	11.18	185.67	6.40	31.82
150	6	381.00	171.45	55.63	85.85	234.95	31.75	8.00	317.50	12.70	215.90	6.40	41.04
200	8	469.90	222.25	63.50	114.30	298.45	38.10	12.00	393.70	12.70	269.75	6.40	73.63
250	10	546.10	277.37	69.85	127.00	368.30	38.10	16.00	469.90	12.70	323.85	6.40	107.08
300	12	609.60	328.17	79.25	142.75	419.10	38.10	20.00	533.40	12.70	381.00	6.40	142.84
350	14	641.35	360.17	85.85	155.45	450.85	41.15	20.00	558.80	12.70	412.75	6.40	164.28
400	16	704.85	411.23	88.90	165.10	508.00	44.45	20.00	615.95	12.70	469.90	6.40	201.77
450	18	787.40	462.28	101.60	190.50	565.15	50.80	20.00	685.80	12.70	533.40	6.40	282.88
500	20	857.25	514.35	107.95	209.55	622.30	53.85	24.00	749.30	12.70	584.20	6.40	354.29
600	24	1041.40	615.95	139.70	266.70	749.30	66.55	24.00	901.70	12.70	692.15	6.40	677.48

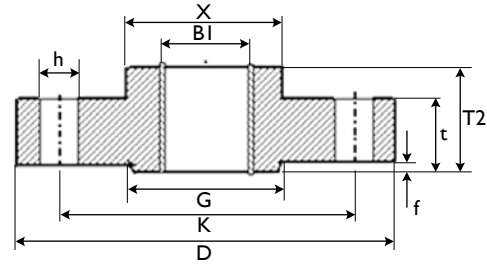
For Ring Groove face dimensions see Page 47.



ANSI B16.5 CLASS 900 FLANGES



Blind RF



Threaded RF

BLIND RF DIMENSIONS (mm)

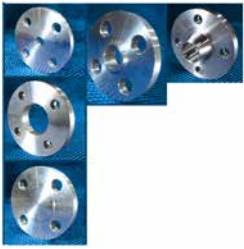
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
				Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	Kg
15	½	120.65	22.35	22.35	4.00	82.55	35.05	6.40	1.78
20	¾	130.05	25.40	22.35	4.00	88.90	42.93	6.40	2.41
25	1	149.35	28.45	25.40	4.00	101.60	50.80	6.40	3.56
32	1¼	158.75	28.45	25.40	4.00	111.25	63.50	6.40	4.13
40	1½	177.80	31.75	28.45	4.00	123.95	73.15	6.40	5.76
50	2	215.90	38.10	25.40	8.00	165.10	91.95	6.40	10.07
65	2½	244.35	41.15	28.45	8.00	190.50	104.65	6.40	13.93
80	3	241.30	38.10	25.40	8.00	190.50	127.00	6.40	13.10
100	4	292.10	44.45	31.75	8.00	234.95	157.23	6.40	22.14
125	5	349.25	50.80	35.05	8.00	279.40	185.67	6.40	36.47
150	6	381.00	55.63	31.75	12.00	317.50	215.90	6.40	47.46
200	8	469.90	63.50	38.10	12.00	393.70	269.75	6.40	82.47
250	10	546.10	69.85	38.10	16.00	469.90	323.85	6.40	122.54
300	12	609.60	79.25	38.10	20.00	533.40	381.00	6.40	173.07
350	14	641.35	85.85	41.15	20.00	558.80	412.75	6.40	206.46
400	16	704.85	88.90	44.45	20.00	615.95	469.90	6.40	259.29
450	18	787.40	101.60	50.80	20.00	685.80	533.40	6.40	367.18
500	20	857.25	107.95	53.85	20.00	749.30	584.20	6.40	463.86
600	24	1041.40	139.70	66.55	20.00	901.70	692.15	6.40	876.56

For Ring Groove face dimensions see Page 47.

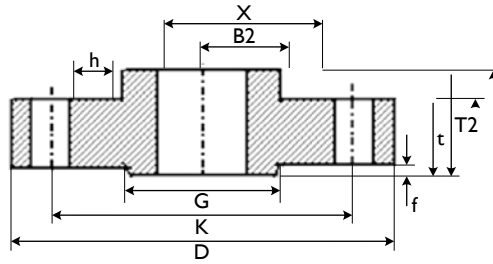
THREADED RF DIMENSIONS (mm)

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	6.40	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	25.40	22.35	4.00	88.90	42.93	6.40	2.33
25	1	149.35	34.54	28.45	41.15	52.32	28.45	25.40	4.00	101.60	50.80	6.40	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	30.23	25.40	4.00	111.25	63.50	6.40	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	31.75	28.45	4.00	123.95	73.15	6.40	5.38
50	2	215.90	61.98	38.10	57.15	104.65	38.10	25.40	8.00	165.10	91.95	6.40	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	47.75	28.45	8.00	190.50	104.65	6.40	13.65
80	3	241.30	90.68	38.10	53.85	127.00	41.15	25.40	8.00	190.50	127.00	6.40	11.61
100	4	292.10	116.08	44.45	69.85	158.75	47.75	31.75	8.00	234.95	157.23	6.40	19.76
125	5	349.25	143.76	50.80	79.25	190.50	53.85	35.05	8.00	279.40	185.67	6.40	31.93
150	6	381.00	170.69	55.63	85.85	234.95	57.15	31.75	8.00	317.50	215.90	6.40	41.19
200	8	469.90	221.49	63.50	101.60	298.45	63.50	38.10	12.00	393.70	269.75	6.40	70.75
250	10	546.10	276.35	69.85	107.95	368.30	71.37	38.10	16.00	469.90	323.85	6.40	100.58
300	12	609.60	327.15	79.25	117.35	419.10	76.20	38.10	20.00	533.40	381.00	6.40	132.70
350	14	641.35	359.16	85.85	130.05	450.85	82.55	41.15	20.00	558.80	412.75	6.40	153.37
400	16	704.85	410.46	88.90	133.35	508.00	85.85	44.45	20.00	615.95	469.90	6.40	184.90
450	18	787.40	461.77	101.60	152.40	565.15	88.90	50.80	20.00	685.80	533.40	6.40	258.51
500	20	857.25	513.08	107.95	158.75	622.30	91.95	53.85	24.00	749.30	584.20	6.40	317.19
600	24	1041.40	615.95	139.70	203.20	749.30	101.60	66.55	24.00	901.70	692.15	6.40	606.21

For Ring Groove face dimensions see Page 47.



ANSI B16.5 CLASS 900 FLANGES



Slip On RF

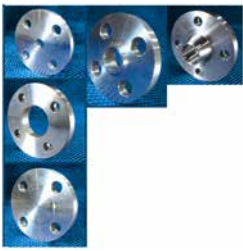
SLIP ON RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Holes			Raised Face		Net Weight
mm	inch						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	6.40	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	22.35	4.00	88.90	42.93	6.40	2.33
25	1	149.35	34.54	28.45	41.15	52.32	25.40	4.00	101.60	50.80	6.40	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	25.40	4.00	111.25	63.50	6.40	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	28.45	4.00	123.95	73.15	6.40	5.38
50	2	215.90	61.98	38.10	57.15	104.65	25.40	8.00	165.10	91.95	6.40	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	28.45	8.00	190.50	104.65	6.40	13.65
80	3	241.30	90.68	38.10	53.85	127.00	25.40	8.00	190.50	127.00	6.40	11.61
100	4	292.10	116.08	44.45	69.85	158.75	31.75	8.00	234.95	157.23	6.40	19.76
125	5	349.25	143.76	50.80	79.25	190.50	35.05	8.00	279.40	185.67	6.40	31.93
150	6	381.00	170.69	55.63	85.85	234.95	31.75	8.00	317.50	215.90	6.40	41.19
200	8	469.90	221.49	63.50	101.60	298.45	38.10	12.00	393.70	269.75	6.40	70.75
250	10	546.10	276.35	69.85	107.95	368.30	38.10	16.00	469.90	323.85	6.40	100.58
300	12	609.60	327.15	79.25	117.35	419.10	38.10	20.00	533.40	381.00	6.40	132.70
350	14	641.35	359.16	85.85	130.05	450.85	41.15	20.00	558.80	412.75	6.40	153.37
400	16	704.85	410.46	88.90	133.35	508.00	44.45	20.00	615.95	469.90	6.40	184.90
450	18	787.40	461.77	101.60	152.40	565.15	50.80	20.00	685.80	533.40	6.40	258.51
500	20	857.25	513.08	107.95	158.75	622.30	53.85	20.00	749.30	584.20	6.40	317.19
600	24	1041.40	615.95	139.70	203.20	749.30	66.55	20.00	901.70	692.15	6.40	606.21

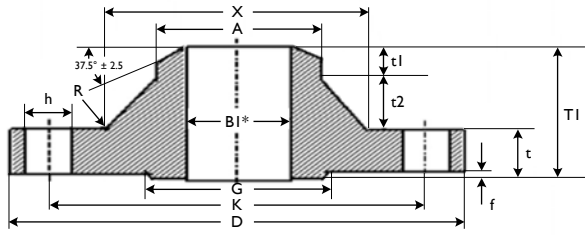
For Ring Groove face dimensions see Page 47.

SOCKET WELD

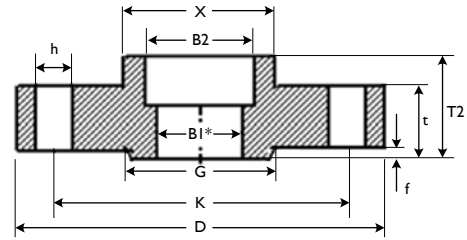
See Class 1500, is same up to 65NB



ANSI B16.5 CLASS 150 FLANGES



Welding Neck RF



Socket Welding RF

WELDING NECK RF STD* DIMENSIONS (mm)

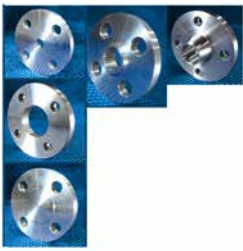
Size		Outside Diam.	Bore Diam. STD	Thick-ness	Total Thick-ness	Neck		Hub		Radius	Holes			Raised Face		Net Weight
mm	inch					D	BI*	t	T1		X	t2	t1	A	R	
15	½	120.65	15.80	22.35	60.45	38.10	30.48	7.62	21.34	3.05	22.35	4.00	82.55	35.05	6.40	1.88
20	¾	130.05	20.93	25.40	69.85	44.45	35.56	8.89	26.67	3.05	22.35	4.00	88.90	42.93	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	788.50

For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)

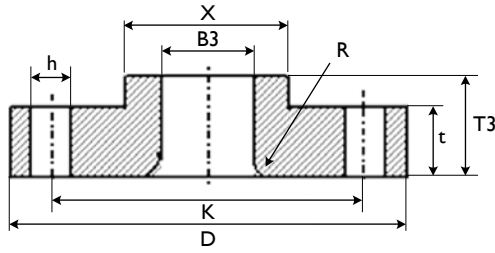
SOCKET WELDING RF (STD* and XS*) DIMENSIONS (mm)

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
mm	inch		D	B2	BI	B2					BI	t	Y	T2	X	
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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	18.73

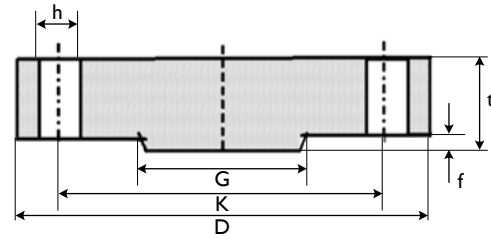
For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)



ANSI B16.5 CLASS 1500 FLANGES



Lap Joint RF



Blind RF

LAP JOINT RF DIMENSIONS (mm)

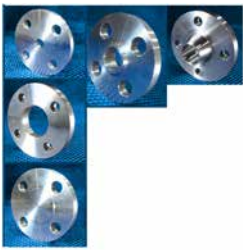
Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Diam. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
mm	inch						D	B3	t		T3	X	
15	½	120.65	22.86	22.35	31.75	38.10	22.35	4.00	82.55	3.05	35.05	6.40	1.74
20	¾	130.05	28.19	25.40	35.05	44.45	22.35	4.00	88.90	3.05	42.93	6.40	2.32
25	1	149.35	35.05	28.45	41.15	52.32	25.40	4.00	101.60	3.05	50.80	6.40	3.42
32	1¼	158.75	43.69	28.45	41.15	63.50	25.40	4.00	111.25	4.83	63.50	6.40	3.88
40	1½	177.80	50.04	31.75	44.45	69.85	28.45	4.00	123.95	6.35	73.15	6.40	5.36
50	2	215.90	62.48	38.10	57.15	104.65	25.40	8.00	165.10	7.87	91.95	6.40	9.83
65	2½	244.35	75.44	41.15	63.50	123.95	28.45	8.00	190.50	7.87	104.65	6.40	13.60
80	3	266.70	91.44	47.75	73.15	133.35	31.75	8.00	203.20	9.65	127.00	6.40	17.88
100	4	311.15	116.84	53.85	90.42	162.05	35.05	8.00	241.30	11.18	157.23	6.40	27.62
125	5	374.65	144.53	73.15	104.65	196.85	41.15	8.00	292.10	11.18	185.67	6.40	51.77
150	6	393.70	171.45	82.55	119.13	228.60	38.10	12.00	317.50	12.70	215.90	6.40	60.89
200	8	482.60	222.25	91.95	142.75	292.10	44.45	12.00	393.70	12.70	269.75	6.40	102.76
250	10	584.20	277.37	107.95	177.80	368.30	50.80	12.00	482.60	12.70	323.85	6.40	181.71
300	12	673.10	328.17	123.95	218.95	450.85	53.85	16.00	571.50	12.70	381.00	6.40	285.92
350	14	749.30	360.17	133.35	241.30	495.30	60.45	16.00	635.00	12.70	412.75	6.40	385.41
400	16	825.50	411.23	146.05	260.35	552.45	66.55	16.00	704.85	12.70	469.90	6.40	495.46
450	18	914.40	462.28	162.05	276.35	596.90	73.15	16.00	774.70	12.70	533.40	6.40	639.58
500	20	984.25	514.35	177.80	292.10	641.35	79.25	16.00	831.85	12.70	584.20	6.40	768.22
600	24	1168.40	615.95	203.20	330.20	762.00	91.95	16.00	990.60	12.70	692.15	6.40	1226.98

For Ring Groove face dimensions see Page 47.

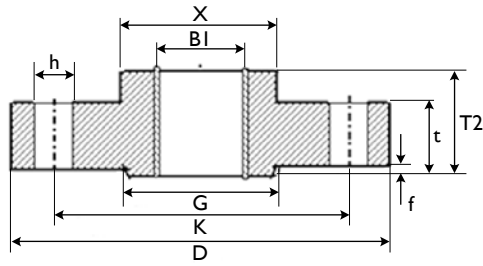
BLIND RF DIMENSIONS (mm)

Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
mm	inch			D	t	Diameter	Number	P.C.D	
15	½	120.65	22.35	22.35	4.00	82.55	35.05	6.40	1.78
20	¾	130.05	25.40	22.35	4.00	88.90	42.93	6.40	2.41
25	1	149.35	28.45	25.40	4.00	101.60	50.80	6.40	3.56
32	1¼	158.75	28.45	25.40	4.00	111.25	63.50	6.40	4.13
40	1½	177.80	31.75	28.45	4.00	123.95	73.15	6.40	5.76
50	2	215.90	38.10	25.40	8.00	165.10	91.95	6.40	10.07
65	2½	244.35	41.15	28.45	8.00	190.50	104.65	6.40	13.93
80	3	266.70	47.75	31.75	8.00	203.20	127.00	6.40	19.20
100	4	311.15	53.85	35.05	8.00	241.30	157.23	6.40	29.85
125	5	374.65	73.15	41.15	8.00	292.10	185.67	6.40	58.54
150	6	393.70	82.55	38.10	12.00	317.50	215.90	6.40	71.85
200	8	482.60	91.95	44.45	12.00	393.70	269.75	6.40	121.44
250	10	584.20	107.95	50.80	12.00	482.60	323.85	6.40	210.64
300	12	673.10	123.95	53.85	16.00	571.50	381.00	6.40	316.46
350	14	749.30	133.35	60.45	16.00	635.00	412.75	6.40	420.20
400	16	825.50	146.05	66.55	16.00	704.85	469.90	6.40	558.45
450	18	914.40	162.05	73.15	16.00	774.70	533.40	6.40	760.98
500	20	984.25	177.80	79.25	16.00	831.85	584.20	6.40	965.15
600	24	1168.40	203.20	91.95	16.00	990.60	692.15	6.40	1559.56

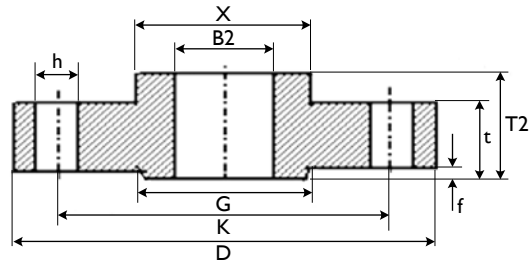
For Ring Groove face dimensions see Page 47.



ANSI B16.5 CLASS 150 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
mm	inch							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	120.65	22.35	22.35	31.75	38.10	22.35	22.35	4.00	82.55	35.05	6.40	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	25.40	22.35	4.00	88.90	42.93	6.40	2.33
25	1	149.35	34.54	28.45	41.15	52.32	28.45	25.40	4.00	101.60	50.80	6.40	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	30.23	25.40	4.00	111.25	63.50	6.40	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	31.75	28.45	4.00	123.95	73.15	6.40	5.38
50	2	215.90	61.98	38.10	57.15	104.65	38.10	25.40	8.00	165.10	91.95	6.40	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	47.75	28.45	8.00	190.50	104.65	6.40	13.65
80	3	266.70	90.68	47.75	73.15	133.35	50.80	31.75	8.00	203.20	127.00	6.40	17.95
100	4	311.15	116.08	53.85	90.42	162.05	57.15	35.05	8.00	241.30	157.23	6.40	27.73
125	5	374.65	143.76	73.15	104.65	196.85	63.50	41.15	8.00	292.10	185.67	6.40	51.93
150	6	393.70	170.69	82.55	119.13	228.60	69.85	38.10	12.00	317.50	215.90	6.40	61.09
200	8	482.60	221.49	91.95	142.75	292.10	76.20	44.45	12.00	393.70	269.75	6.40	103.07
250	10	584.20	276.35	107.95	158.75	368.30	84.07	50.80	12.00	482.60	323.85	6.40	175.39
300	12	673.10	327.15	123.95	180.85	450.85	91.95	53.85	16.00	571.50	381.00	6.40	264.24

For Ring Groove face dimensions see Page 47.

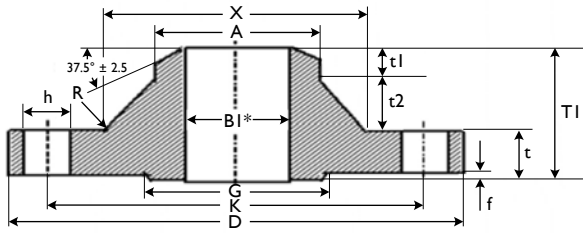
SLIP ON RF DIMENSIONS (mm)

Size		Outside Diameter	Bore Diameter	Thickness	Total Thick-ness	Diam. of Base of Hub	Holes			Raised Face		Net Weight
mm	inch						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	6.40	1.75
20	¾	130.05	27.69	25.40	35.05	44.45	22.35	4.00	88.90	42.93	6.40	2.33
25	1	149.35	34.54	28.45	41.15	52.32	25.40	4.00	101.60	50.80	6.40	3.43
32	1¼	158.75	43.18	28.45	41.15	63.50	25.40	4.00	111.25	63.50	6.40	3.90
40	1½	177.80	49.53	31.75	44.45	69.85	28.45	4.00	123.95	73.15	6.40	5.38
50	2	215.90	61.98	38.10	57.15	104.65	25.40	8.00	165.10	91.95	6.40	9.85
65	2½	244.35	74.68	41.15	63.50	123.95	28.45	8.00	190.50	104.65	6.40	13.65
80	3	266.70	90.68	47.75	73.15	133.35	31.75	8.00	203.20	127.00	6.40	17.95
100	4	311.15	116.08	53.85	90.42	162.05	35.05	8.00	241.30	157.23	6.40	27.73
125	5	374.65	143.76	73.15	104.65	196.85	41.15	8.00	292.10	185.67	6.40	51.93
150	6	393.70	170.69	82.55	119.13	228.60	38.10	12.00	317.50	215.90	6.40	61.09
200	8	482.60	221.49	91.95	142.75	292.10	44.45	12.00	393.70	269.75	6.40	103.07
250	10	584.20	276.35	107.95	158.75	368.30	50.80	12.00	482.60	323.85	6.40	175.39
300	12	673.10	327.15	123.95	180.85	450.85	53.85	16.00	571.50	381.00	6.40	264.24

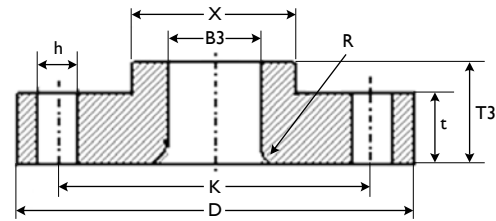
For Ring Groove face dimensions see Page 47.



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
mm	inch					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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	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	6.40	566.01

For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)

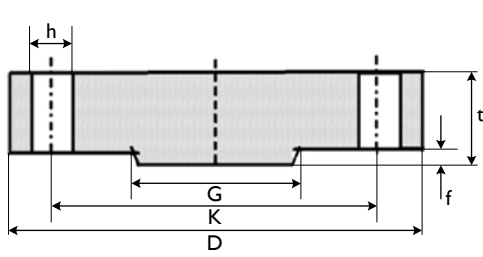
LAP JOINT RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Length thru Hub	Dia. at Base of Hub	Holes			Radius of Fillet	Raised Face		Net Weight
mm	inch						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	6.40	2.95
20	¾	139.70	28.19	31.75	42.93	50.80	22.35	4.00	95.25	3.05	42.93	6.40	3.44
25	1	158.75	35.05	35.05	47.75	57.15	25.40	4.00	107.95	3.05	50.80	6.40	4.84
32	1¼	184.15	43.69	38.10	52.32	73.15	28.45	4.00	130.05	4.83	63.50	6.40	7.14
40	1½	203.20	50.04	44.45	60.45	79.25	31.75	4.00	146.05	6.35	73.15	6.40	10.01
50	2	234.95	62.48	50.80	69.85	95.25	28.45	8.00	171.45	7.87	91.95	6.40	14.82
65	2½	266.70	75.44	57.15	79.25	114.30	31.75	8.00	196.85	7.87	104.65	6.40	21.43
80	3	304.80	91.44	66.55	91.95	133.35	35.05	8.00	228.60	9.65	127.00	6.40	32.43
100	4	355.60	116.84	76.20	107.95	165.10	41.15	8.00	273.05	11.18	157.23	6.40	49.73
125	5	419.10	144.53	91.95	130.05	203.20	47.75	8.00	323.85	11.18	185.67	6.40	82.72
150	6	482.60	171.45	107.95	152.40	234.95	53.85	12.00	368.30	12.70	215.90	6.40	120.03
200	8	552.45	222.25	127.00	177.80	304.80	53.85	12.00	438.15	12.70	269.75	6.40	187.59
250	10	673.10	277.37	165.10	228.60	374.65	66.55	16.00	539.75	12.70	323.85	6.40	336.66
300	12	762.00	328.17	184.15	254.00	441.45	73.15	16.00	619.25	12.70	381.00	6.40	478.77

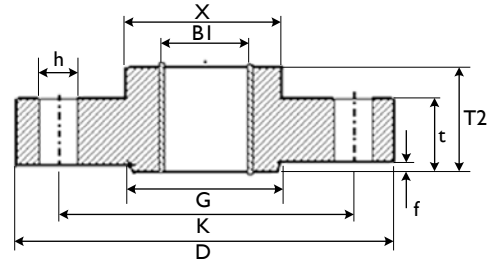
For Ring Groove face dimensions see Page 47. *See page 48 for bore diameter all schedules (S10 to XXS)



ANSI B16.5 CLASS 2500 FLANGES



Blind RF



Threaded RF

BLIND RF DIMENSIONS (mm)

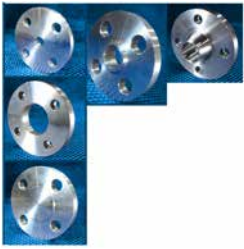
Size		Outside Diameter	Thickness	Holes			Raised Face		Net Weight
mm	inch			Diameter	Number	P.C.D	Outside Diameter	Thickness	
mm	inch	D	t	h	n	K	G	f	Kg
15	½	133.35	30.23	22.35	4.00	66.55	35.05	6.40	2.99
20	¾	139.70	31.75	22.35	4.00	82.55	42.93	6.40	3.50
25	1	158.75	35.05	25.40	4.00	88.90	50.80	6.40	4.99
32	1¼	184.15	38.10	28.45	4.00	98.55	63.50	6.40	7.36
40	1½	203.20	44.45	31.75	4.00	114.30	73.15	6.40	10.42
50	2	234.95	50.80	28.45	8.00	127.00	91.95	6.40	15.59
65	2½	266.70	57.15	31.75	8.00	149.35	104.65	6.40	22.65
80	3	304.80	66.55	35.05	8.00	168.15	127.00	6.40	34.72
100	4	355.60	76.20	41.15	8.00	200.15	157.23	6.40	54.01
125	5	419.10	91.95	47.75	8.00	234.95	185.67	6.40	90.58
150	6	482.60	107.95	53.85	12.00	269.75	215.90	6.40	133.67
200	8	552.45	127.00	53.85	12.00	330.20	269.75	6.40	214.58
250	10	673.10	165.10	66.55	16.00	387.35	323.85	6.40	393.15
300	12	762.00	184.15	73.15	16.00	450.85	381.00	6.40	567.72

For Ring Groove face dimensions see Page 47.

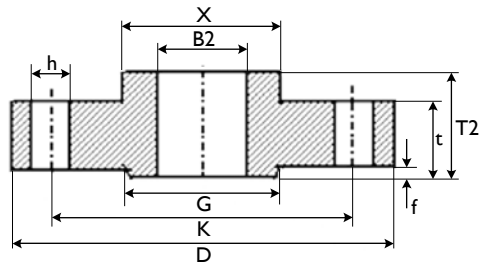
THREADED RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Thread length	Holes			Raised Face		Net Weight
mm	inch							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	6.40	2.96
20	¾	139.70	27.69	31.75	42.93	50.80	31.75	22.35	4.00	95.25	42.93	6.40	3.45
25	1	158.75	34.54	35.05	47.75	57.15	35.05	25.40	4.00	107.95	50.80	6.40	4.85
32	1¼	184.15	43.18	38.10	52.32	73.15	38.10	28.45	4.00	130.05	63.50	6.40	7.16
40	1½	203.20	49.53	44.45	60.45	79.25	44.45	31.75	4.00	146.05	73.15	6.40	10.03
50	2	234.95	61.98	50.80	69.85	95.25	50.80	28.45	8.00	171.45	91.95	6.40	14.85
65	2½	266.70	74.68	57.15	79.25	114.30	57.15	31.75	8.00	196.85	104.65	6.40	21.49
80	3	304.80	90.68	66.55	91.95	133.35	63.50	35.05	8.00	228.60	127.00	6.40	32.52
100	4	355.60	118.08	76.20	107.95	165.10	69.85	41.15	8.00	273.05	157.23	6.40	49.85
125	5	419.10	143.76	91.95	130.05	203.20	76.20	47.75	8.00	323.85	185.67	6.40	82.90
150	6	482.60	170.69	107.95	152.40	234.95	82.55	53.85	8.00	368.30	215.90	6.40	128.01
200	8	552.45	221.49	127.00	177.80	304.80	95.25	53.85	12.00	438.15	269.75	6.40	187.97
250	10	673.10	276.35	165.10	228.60	374.65	107.95	66.55	12.00	539.75	323.85	6.40	355.51
300	12	762.00	327.15	184.15	254.00	441.45	120.65	73.15	12.00	619.25	381.00	6.40	504.15

For Ring Groove face dimensions see Page 47.



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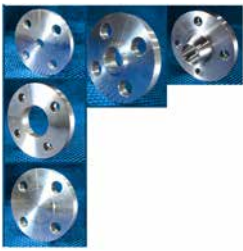


Slip On RF

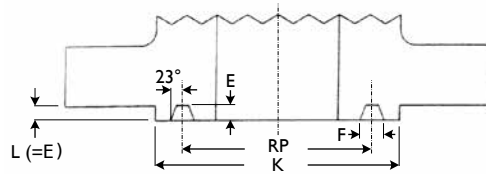
SLIP ON RF DIMENSIONS (mm)

Size		Outside Diam.	Bore Diam.	Thick-ness	Total Thick-ness	Dia. at Base of Hub	Holes			Raised Face		Net Weight
mm	inch						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	6.40	2.96
20	¾	139.70	27.69	31.75	42.93	50.80	22.35	4.00	95.25	42.93	6.40	3.45
25	1	158.75	34.54	35.05	47.75	57.15	25.40	4.00	107.95	50.80	6.40	4.85
32	1¼	184.15	43.18	38.10	52.32	73.15	28.45	4.00	130.05	63.50	6.40	7.16
40	1½	203.20	49.53	44.45	60.45	79.25	31.75	4.00	146.05	73.15	6.40	10.03
50	2	234.95	61.98	50.80	69.85	95.25	28.45	8.00	171.45	91.95	6.40	14.85
65	2½	266.70	74.68	57.15	79.25	114.30	31.75	8.00	196.85	104.65	6.40	21.49
80	3	304.80	90.68	66.55	91.95	133.35	35.05	8.00	228.60	127.00	6.40	32.52
100	4	355.60	116.08	76.20	107.95	165.10	41.15	8.00	273.05	157.23	6.40	49.85
125	5	419.10	143.76	91.95	130.05	203.20	47.75	8.00	323.85	185.67	6.40	82.90
150	6	482.60	170.69	107.95	152.40	234.95	53.85	8.00	368.30	215.90	6.40	128.01
200	8	552.45	221.49	127.00	177.80	304.80	53.85	12.00	438.15	269.75	6.40	187.97
250	10	673.10	276.35	165.10	228.60	374.65	66.55	12.00	539.75	323.85	6.40	355.51
300	12	762.00	327.15	184.15	254.00	441.45	73.15	12.00	619.25	381.00	6.40	504.15

For Ring Groove face dimensions see Page 47.



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						13	42.8	8.7	6.3	65.0
20	25NB TO 65NB ARE IDENTICAL TO ANSI 900					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										
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					

MONOLITHIC JOINTS FOR ELECTRICALLY ISOLATING PIPELINES

Global Supply Line can supply monolithic insulating joints from stock in ANSI 150 to 2500 up to 300 NB (12"). Special configurations can be supplied ex our European and USA manufacturers in short delivery times.

Insulated Joints

Triple Protection

- 1) Insulated gaskets prevent metal-to-metal contact across the insulated joint.
- 2) All internal cavities of the insulated joints are filled with a special dielectric compound to provide an additional electrical barrier.
- 3) Each metal component is individually coated with two coats of epoxy paint.

Standard Material

ASTM A694/ASME SA105 or SA 106 Gr.C (Minimum Yield 52,000 psi) High Yield X52, X60, X65, ASTM 707, etc. on request.

Elastomer O-rings

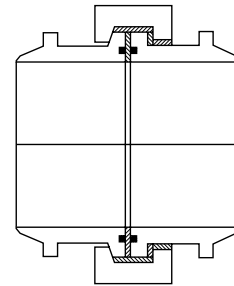
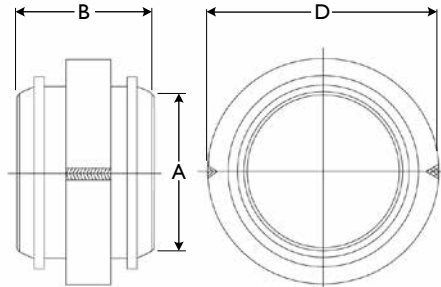
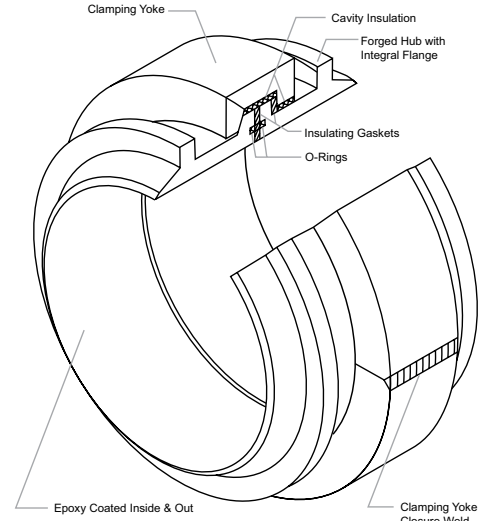
Viton O-rings are standard in each insulated joint. Other O-ring compounds are available upon request.

Insulated Gasket Material

Epoxy base/glass fibre reinforced high strength laminate.

Coating

Epoxy base paint. Coal tar epoxy available upon request.



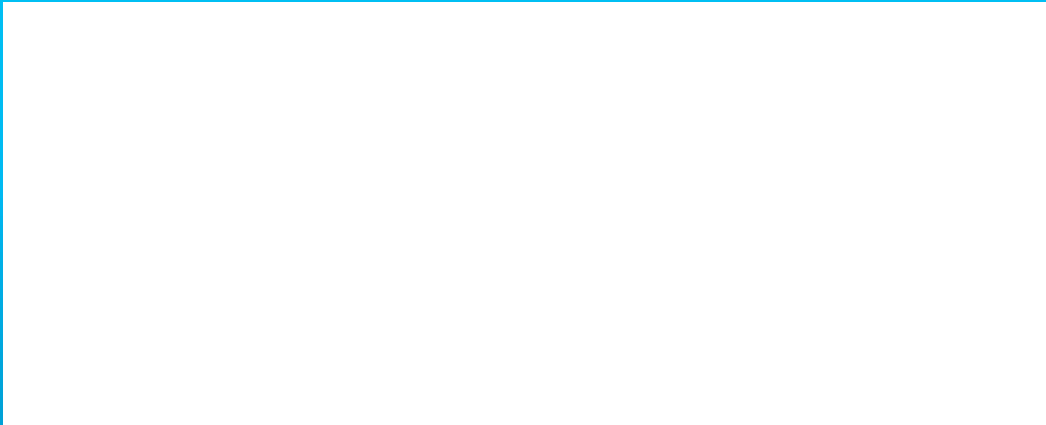
Nominal Pipe Size	**Diameter at Weld Bevel A	CL 600 W			CL 900 W		
		Overall Length B	Maximum Diameter D	Approximate Weight Lbs. (kg)	Overall Length B	Maximum Diameter D	Approximate Weight Lbs. (kg)
4 (100)	4.500 (114.3)	7.88 (200.2)	7.75 (196.9)	40 (18.1)	10.250 (260.4)	8.725 (221.6)	65 (29.4)
6 (150)	6.625 (168.3)	10.00 (254.0)	10.50 (266.7)	70 (31.8)	12.250 (311.2)	11.812 (300.00)	138 (62.6)
8 (200)	8.625 (219.1)	11.13 (282.7)	13.25 (336.6)	150 (68.0)	13.750 (349.3)	14.625 (371.5)	235 (107.0)
10 (250)	10.750 (273.1)	13.00 (330.2)	16.25 (412.8)	250 (113.4)	16.750 (425.5)	17.375 (441.3)	366 (166.3)
12 (300)	12.750 (323.9)	13.88 (352.6)	19.00 (482.6)	350 (158.8)	17.250 (428.2)	20.062 (509.6)	533 (242.2)
14 (350)	14.000 (355.6)	14.63 (371.6)	20.69 (525.5)	425 (192.8)	19.250 (489.0)	21.688 (550.9)	671 (305.1)
16 (400)	16.000 (406.4)	15.88 (403.4)	23.00 (584.2)	525 (238.1)	21.500 (546.1)	24.688 (627.1)	963 (437.9)
18 (450)	18.000 (457.2)	16.63 (422.4)	25.69 (652.5)	675 (306.2)	23.250 (590.6)	27.375 (695.3)	1276 (579.8)
20 (500)	20.000 (508.0)	17.75 (450.9)	27.75 (704.9)	850 (385.6)	24.500 (622.3)	30.125 (765.2)	1634 (742.6)
22 (550)	22.000 (558.8)	19.13 (485.9)	31.00 (787.4)	1150 (521.6)	26.500 (673.1)	32.750 (831.9)	2060 (936.3)
24 (600)	24.000 (609.6)	20.50 (520.7)	34.00 (863.6)	1450 (657.7)	29.500 (749.3)	35.750 (908.1)	2689 (1222.2)
26 (650)	26.000 (660.4)	21.88 (555.8)	36.00 (914.4)	1675 (759.8)	31.250 (793.8)	38.500 (977.9)	3183 (1446.7)
28 (700)	28.000 (711.2)	23.13 (587.5)	38.38 (974.9)	2000 (907.2)	33.000 (838.2)	41.125 (1044.6)	3835 (1743.4)
30 (750)	30.000 (762.0)	24.13 (612.9)	41.25 (1047.8)	2425 (1100.0)	35.000 (889.0)	44.125 (1120.8)	4682 (2128.3)
32 (800)	32.000 (812.8)	26.25 (666.8)	43.75 (1111.3)	2900 (1315.4)	36.500 (927.1)	46.750 (1187.5)	5438 (2471.7)
34 (850)	34.000 (863.6)	27.38 (695.5)	46.56 (1182.6)	3450 (1564.9)	38.250 (971.6)	49.500 (1257.3)	6435 (2925.0)
36 (900)	36.000 (914.4)	28.63 (727.2)	49.75 (1263.7)	3700 (1678.3)	41.000 (1041.4)	52.938 (1344.6)	7910 (3595.6)
38 (950)	38.000 (965.2)	28.13 (714.5)	52.75 (1339.9)	4650 (2109.2)	42.750 (1085.9)	55.688 (1414.5)	9095 (4134.2)
40 (1000)	40.000 (1016.0)	29.25 (743.0)	55.50 (1409.7)	5325 (2415.4)	44.500 (1130.3)	58.375 (1482.7)	10443 (4746.7)
42 (1050)	42.000 (1066.8)	30.00 (762.0)	57.88 (1470.2)	6000 (2721.6)	43.750 (1111.3)	61.125 (1552.6)	11476 (5216.5)

Diameters shown are based on matching pipe with yield strength of 52,000 psi or less. When matching higher yield strength pipe, diameter at weld bevel can be increased to meet piping code requirements such as ASME B31.8 Figure 15 or higher yield materials can be used.

Welded Insulated Joint Dimensions

When ordering, please specify bore required. Insulated joints are normally thru bored to the same ID as the matching pipe. One or both ends can be taper bored at customer request. Joints also available in sizes not listed and for higher pressure ratings.

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QUALITY ASSURANCE

Our quality assurance system ensures full chemical, mechanical and test certificates are supplied. We operate an ISO 9001 quality assurance program.



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