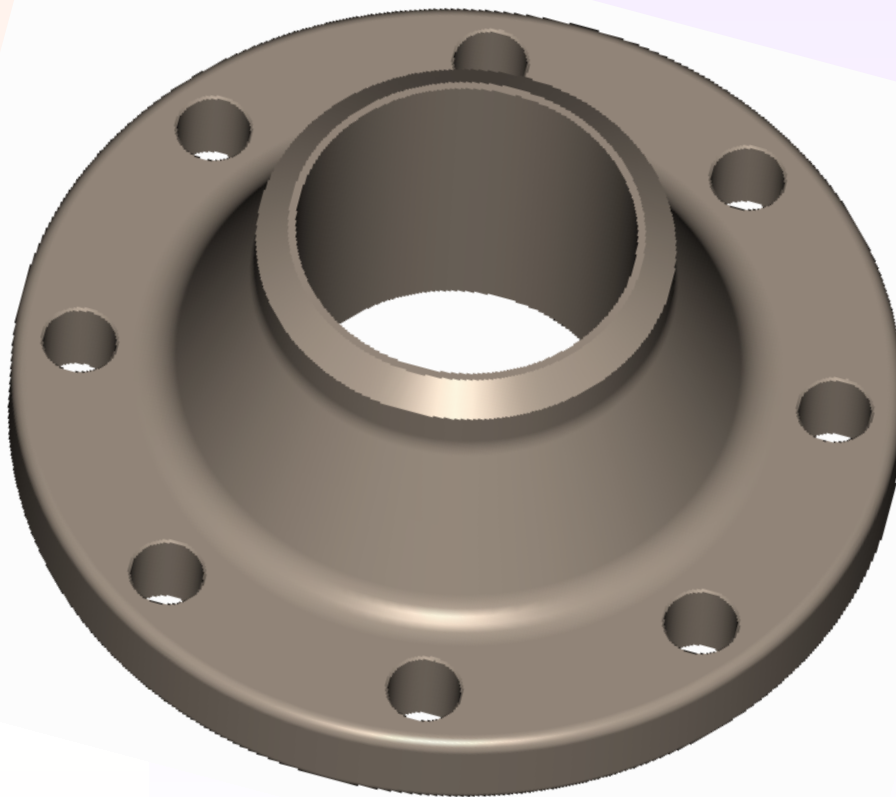


PRECISION FORGINGS

For Flanges and Pipe Accessories



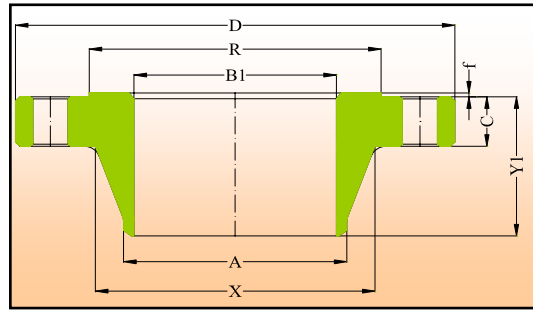
PIPE FLANGES NPS 1/2" THROUGH NPS 24"
METRIC STANDARD



AS PER AMERICAN NATIONAL STANDARD ASME B16.5-2003
(Revision of ASME B16.5-1996)

P.O. Box 704, Al-Khobar 31952, KSA; Factory: Dammam Industrial City 2, Makkah Street, Road # 139.
Tel: (966) 3-8123700, Fax: (966) 3-8123088

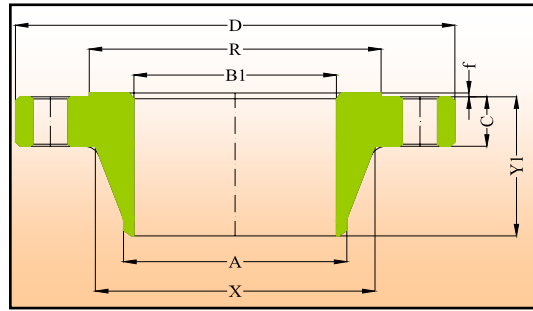
WELD NECK FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Bore Size	Length Through Hub	Dia of Hub at Bevel	Hub Dia	Drilling		
		D	C	R	f	B1	Y1	A	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
0.5	150	90.0	9.6	34.9	2.0	Refer Bore Chart	46.0	21.3	30.0	60.3	15.9	4
	300	95.0	12.7	34.9	2.0		51.0	21.3	38.0	66.7	15.9	4
	400	95.0	14.3	34.9	7.0		52.0	21.3	38.0	66.7	15.9	4
	600	95.0	14.3	34.9	7.0		52.0	21.3	38.0	66.7	15.9	4
	900	120.0	22.3	34.9	7.0		60.0	21.3	38.0	82.6	22.2	4
	1500	120.0	22.3	34.9	7.0		60.0	21.3	38.0	82.6	22.2	4
	2500	135.0	30.2	34.9	7.0		73.0	21.3	43.0	88.9	22.2	4
0.75	150	100.0	11.2	42.9	2.0	Refer Bore Chart	51.0	26.7	38.0	69.9	15.9	4
	300	115.0	14.3	42.9	2.0		56.0	26.7	48.0	82.6	19.1	4
	400	115.0	15.9	42.9	7.0		57.0	26.7	48.0	82.6	19.1	4
	600	115.0	15.9	42.9	7.0		57.0	26.7	48.0	82.6	19.1	4
	900	130.0	25.4	42.9	7.0		70.0	26.7	44.0	88.9	22.2	4
	1500	130.0	25.4	42.9	7.0		70.0	26.7	44.0	88.9	22.2	4
	2500	140.0	31.8	42.9	7.0		79.0	26.7	51.0	95.2	22.2	4
1	150	110.0	12.7	50.8	2.0	Refer Bore Chart	54.0	33.4	49.0	79.4	15.9	4
	300	125.0	15.9	50.8	2.0		60.0	33.4	54.0	88.9	19.1	4
	400	125.0	17.5	50.8	7.0		62.0	33.4	54.0	88.9	19.1	4
	600	125.0	17.5	50.8	7.0		62.0	33.4	54.0	88.9	19.1	4
	900	150.0	28.6	50.8	7.0		73.0	33.4	52.0	101.6	25.4	4
	1500	150.0	28.6	50.8	7.0		73.0	33.4	52.0	101.6	25.4	4
	2500	160.0	35.0	50.8	7.0		89.0	33.4	57.0	108.0	25.4	4
1.25	150	115.0	14.3	63.5	2.0	Refer Bore Chart	56.0	42.2	59.0	88.9	15.9	4
	300	135.0	17.5	63.5	2.0		64.0	42.2	64.0	98.4	19.1	4
	400	135.0	20.7	63.5	7.0		67.0	42.2	64.0	98.4	19.1	4
	600	135.0	20.7	63.5	7.0		67.0	42.2	64.0	98.4	19.1	4
	900	160.0	28.6	63.5	7.0		73.0	42.2	64.0	111.1	25.4	4
	1500	160.0	28.6	63.5	7.0		73.0	42.2	64.0	111.1	25.4	4
	2500	185.0	38.1	63.5	7.0		95.0	42.2	73.0	130.2	28.6	4
1.5	150	125.0	15.9	73.0	2.0	Refer Bore Chart	60.0	48.3	65.0	98.4	15.9	4
	300	155.0	19.1	73.0	2.0		67.0	48.3	70.0	114.3	22.2	4
	400	155.0	22.3	73.0	7.0		70.0	48.3	70.0	114.3	22.2	4
	600	155.0	22.3	73.0	7.0		70.0	48.3	70.0	114.3	22.2	4
	900	180.0	31.8	73.0	7.0		83.0	48.3	70.0	123.8	28.6	4
	1500	180.0	31.8	73.0	7.0		83.0	48.3	70.0	123.8	28.6	4
	2500	205.0	44.5	73.0	7.0		111.0	48.3	79.0	146.0	31.8	4

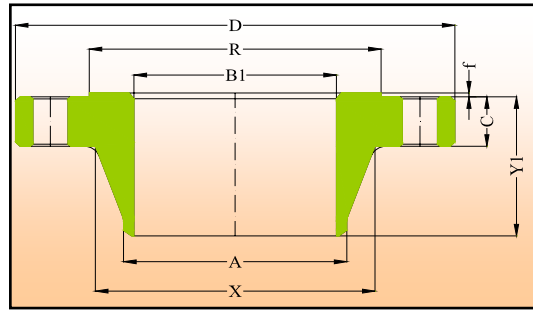
WELD NECK FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Bore Size	Length Through Hub	Dia of Hub at Bevel	Hub Dia	Drilling		
		D	C	R	f	B1	Y1	A	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
2	150	150.0	17.5	92.1	2.0	Refer Bore Chart	62.0	60.3	78.0	120.7	19.1	4
	300	165.0	20.7	92.1	2.0		68.0	60.3	84.0	127.0	19.1	8
	400	165.0	25.4	92.1	7.0		73.0	60.3	84.0	127.0	19.1	8
	600	165.0	25.4	92.1	7.0		73.0	60.3	84.0	127.0	19.1	8
	900	215.0	38.1	92.1	7.0		102.0	60.3	105.0	165.1	25.4	8
	1500	215.0	38.1	92.1	7.0		102.0	60.3	105.0	165.1	25.4	8
	2500	235.0	50.9	92.1	7.0		127.0	60.3	95.0	171.4	28.6	8
2.5	150	180.0	20.7	104.8	2.0	Refer Bore Chart	68.0	73.0	90.0	139.7	19.1	4
	300	190.0	23.9	104.8	2.0		75.0	73.0	100.0	149.2	22.2	8
	400	190.0	28.6	104.8	7.0		79.0	73.0	100.0	149.2	22.2	8
	600	190.0	28.6	104.8	7.0		79.0	73.0	100.0	149.2	22.2	8
	900	245.0	41.3	104.8	7.0		105.0	73.0	124.0	190.5	28.6	8
	1500	245.0	41.3	104.8	7.0		105.0	73.0	124.0	190.5	28.6	8
	2500	265.0	57.2	104.8	7.0		143.0	73.0	114.0	196.8	31.8	8
3	150	190.0	22.3	127.0	2.0	Refer Bore Chart	68.0	88.9	108.0	152.4	19.1	4
	300	210.0	27.0	127.0	2.0		78.0	88.9	117.0	168.3	22.2	8
	400	210.0	31.8	127.0	7.0		83.0	88.9	117.0	168.3	22.2	8
	600	210.0	31.8	127.0	7.0		83.0	88.9	117.0	168.3	22.2	8
	900	240.0	38.1	127.0	7.0		102.0	88.9	127.0	190.5	25.4	8
	1500	265.0	47.7	127.0	7.0		117.0	88.9	133.0	203.2	31.8	8
	2500	305.0	66.7	127.0	7.0		168.0	88.9	133.0	228.6	34.9	8
3 1/2	150	215.0	22.3	139.7	2.0	Refer Bore Chart	70.0	101.6	122.0	177.8	19.1	8
	300	230.0	28.6	139.7	2.0		79.0	101.6	133.0	184.2	22.2	8
	400	230.0	35.0	139.7	7.0		86.0	101.6	133.0	184.2	25.4	8
	600	230.0	35.0	139.7	7.0		86.0	101.6	133.0	184.2	25.4	8
4	150	230.0	22.3	157.2	2.0	Refer Bore Chart	75.0	114.3	135.0	190.5	19.1	8
	300	255.0	30.2	157.2	2.0		84.0	114.3	146.0	200.0	22.2	8
	400	255.0	35.0	157.2	7.0		89.0	114.3	146.0	200.0	25.4	8
	600	275.0	38.1	157.2	7.0		102.0	114.3	152.0	215.9	25.4	8
	900	290.0	44.5	157.2	7.0		114.0	114.3	159.0	235.0	31.8	8
	1500	310.0	54.0	157.2	7.0		124.0	114.3	162.0	241.3	34.9	8
	2500	355.0	76.2	157.2	7.0		190.0	114.3	165.0	273.0	41.3	8
5	150	255.0	22.3	185.7	2.0	Refer Bore Chart	87.0	141.3	164.0	215.9	22.2	8
	300	280.0	33.4	185.7	2.0		97.0	141.3	178.0	235.0	22.2	8
	400	280.0	38.1	185.7	7.0		102.0	141.3	178.0	235.0	25.4	8

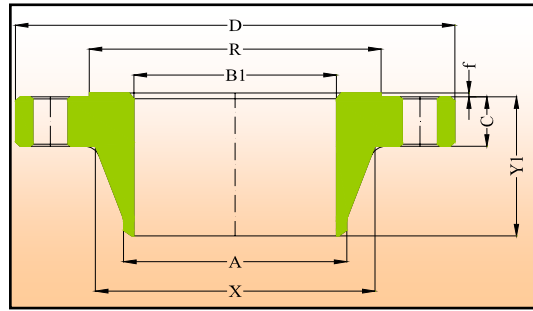
WELD NECK FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Bore Size	Length Through Hub	Dia of Hub at Bevel	Hub Dia	Drilling		
		D	C	R	f	B1	Y1	A	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
5	600	330.0	44.5	185.7	7.0	Refer Bore Chart	114.0	141.3	189.0	266.7	28.6	8
	900	350.0	50.8	185.7	7.0		127.0	141.3	190.0	279.4	34.9	8
	1500	375.0	73.1	185.7	7.0		156.0	141.3	197.0	292.1	41.3	8
	2500	420.0	92.1	185.7	7.0		229.0	141.3	203.0	323.8	47.6	8
6	150	280.0	23.9	215.9	2.0	Refer Bore Chart	87.0	168.3	192.0	241.3	22.2	8
	300	320.0	35.0	215.9	2.0		97.0	168.3	206.0	269.9	22.2	12
	400	320.0	41.3	215.9	7.0		103.0	168.3	206.0	269.9	25.4	12
	600	355.0	47.7	215.9	7.0		117.0	168.3	222.0	292.1	28.6	12
	900	380.0	55.6	215.9	7.0		140.0	168.3	235.0	317.5	31.8	12
	1500	395.0	82.6	215.9	7.0		171.0	168.3	229.0	317.5	38.1	12
8	2500	485.0	108.0	215.9	7.0	273.0	168.3	235.0	368.3	54.0	8	
	150	345.0	27.0	269.9	2.0	Refer Bore Chart	100.0	219.1	246.0	298.5	22.2	8
	300	380.0	39.7	269.9	2.0		110.0	219.1	260.0	330.2	25.4	12
	400	380.0	47.7	269.9	7.0		117.0	219.1	260.0	330.2	28.6	12
	600	420.0	55.6	269.9	7.0		133.0	219.1	273.0	349.2	31.8	12
	900	470.0	63.5	269.9	7.0		162.0	219.1	298.0	393.7	38.1	12
1500	485.0	92.1	269.9	7.0	213.0		219.1	292.0	393.7	44.5	12	
10	2500	550.0	127.0	269.9	7.0	318.0	219.1	305.0	438.2	54.0	12	
	150	405.0	28.6	323.8	2.0	Refer Bore Chart	100.0	273.0	305.0	362.0	25.4	12
	300	445.0	46.1	323.8	2.0		116.0	273.0	321.0	387.4	28.6	16
	400	445.0	54.0	323.8	7.0		124.0	273.0	321.0	387.4	31.8	16
	600	510.0	63.5	323.8	7.0		152.0	273.0	343.0	431.8	34.9	16
	900	545.0	69.9	323.8	7.0		184.0	273.0	368.0	469.9	38.1	16
1500	585.0	108.0	323.8	7.0	254.0		273.0	368.0	482.6	50.8	12	
12	2500	675.0	165.1	323.8	7.0	419.0	273.0	375.0	539.8	66.7	12	
	150	485.0	30.2	381.0	2.0	Refer Bore Chart	113.0	323.8	365.0	431.8	25.4	12
	300	520.0	49.3	381.0	2.0		129.0	323.8	375.0	450.8	31.8	16
	400	520.0	57.2	381.0	7.0		137.0	323.8	375.0	450.8	34.9	16
	600	560.0	66.7	381.0	7.0		156.0	323.8	400.0	489.0	34.9	20
	900	610.0	79.4	381.0	7.0		200.0	323.8	419.0	533.4	38.1	20
1500	675.0	123.9	381.0	7.0	283.0		323.8	451.0	571.5	54.0	16	
14	2500	760.0	184.2	381.0	7.0	464.0	323.8	441.0	619.1	73.0	12	
	150	535.0	33.4	412.8	2.0	Refer Bore Chart	125.0	355.6	400.0	476.3	28.6	12
	300	585.0	52.4	412.8	2.0		141.0	355.6	425.0	514.4	31.8	20
400	585.0	60.4	412.8	7.0	149.0		355.6	425.0	514.4	34.9	20	

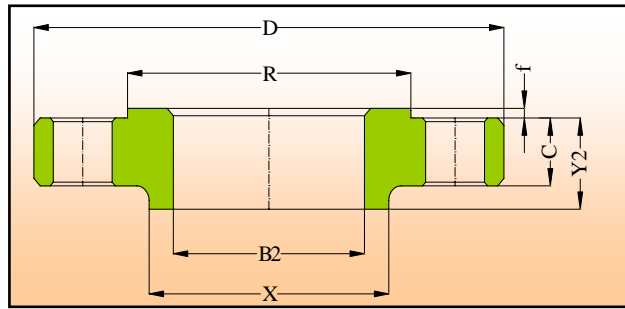
WELD NECK FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Bore Size	Length Through Hub	Dia of Hub at Bevel	Hub Dia	Drilling		
		D	C	R	f	B1	Y1	A	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
14	600	605.0	69.9	412.8	7.0	Refer Bore Chart	165.0	355.6	432.0	527.0	38.1	20
	900	640.0	85.8	412.8	7.0		213.0	355.6	451.0	558.8	41.3	20
	1500	750.0	133.4	412.8	7.0		298.0	355.6	495.0	635.0	60.3	16
16	150	595.0	35.0	469.9	2.0	Refer Bore Chart	125.0	406.4	457.0	539.8	28.6	16
	300	650.0	55.6	469.9	2.0		144.0	406.4	483.0	571.5	34.9	20
	400	650.0	63.5	469.9	7.0		152.0	406.4	483.0	571.5	38.1	20
	600	685.0	76.2	469.9	7.0		178.0	406.4	495.0	603.2	41.3	20
	900	705.0	88.9	469.9	7.0		216.0	406.4	508.0	616.0	44.5	20
	1500	825.0	146.1	469.9	7.0		311.0	406.4	552.0	704.8	66.7	16
18	150	635.0	38.1	533.4	2.0	Refer Bore Chart	138.0	457.0	505.0	577.9	31.8	16
	300	710.0	58.8	533.4	2.0		157.0	457.0	533.0	628.6	34.9	24
	400	710.0	66.7	533.4	7.0		165.0	457.0	533.0	628.6	38.1	24
	600	745.0	82.6	533.4	7.0		184.0	457.0	546.0	654.0	44.5	20
	900	785.0	101.6	533.4	7.0		229.0	457.0	565.0	685.8	50.8	20
	1500	915.0	162.0	533.4	7.0		327.0	457.0	597.0	774.7	73.0	16
20	150	700.0	41.3	584.2	2.0	Refer Bore Chart	143.0	508.0	559.0	635.0	31.8	20
	300	775.0	62.0	584.2	2.0		160.0	508.0	587.0	685.8	34.9	24
	400	775.0	69.9	584.2	7.0		168.0	508.0	587.0	685.8	41.3	24
	600	815.0	88.9	584.2	7.0		190.0	508.0	610.0	723.9	44.5	24
	900	855.0	108.0	584.2	7.0		248.0	508.0	622.0	749.3	54.0	20
	1500	985.0	177.8	584.2	7.0		356.0	508.0	641.0	831.8	79.4	16
24	150	815.0	46.1	692.2	2.0	Refer Bore Chart	151.0	610.0	663.0	749.3	34.9	20
	300	915.0	68.3	692.2	2.0		167.0	610.0	702.0	812.8	41.3	24
	400	915.0	76.2	692.2	7.0		175.0	610.0	702.0	812.8	47.6	24
	600	940.0	101.6	692.2	7.0		203.0	610.0	718.0	838.2	50.8	24
	900	1040.0	139.7	692.2	7.0		292.0	610.0	749.0	901.7	66.7	20
	1500	1170.0	203.2	692.2	7.0		406.0	610.0	762.0	990.6	92.1	16

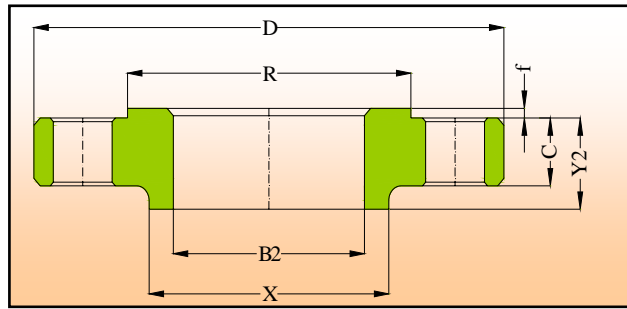
SLIP ON FLANGES



ALL DIMENSIONS ARE IN mm

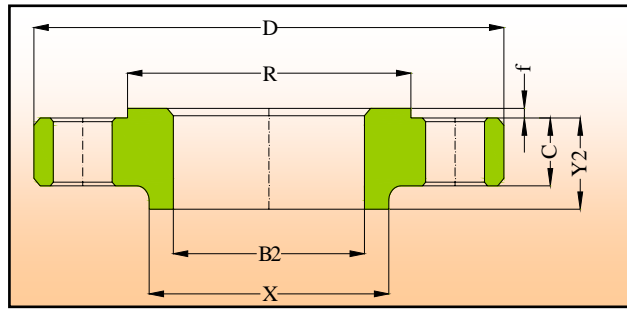
NPS (inch)	Rating	OD	Thk.	RF Dia	RF Thk	Bore Size	Length Through Hub	Hub Dia	Drilling		
		D	C	R	f	B2	Y2	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
0.5	150	90.0	9.6	34.9	2.0	22.2	14.0	30.0	60.3	15.9	4
	300	95.0	12.7	34.9	2.0	22.2	21.0	38.0	66.7	15.9	4
	400	95.0	14.3	34.9	7.0	22.2	22.0	38.0	66.7	15.9	4
	600	95.0	14.3	34.9	7.0	22.2	22.0	38.0	66.7	15.9	4
	900	120.0	22.3	34.9	7.0	22.2	32.0	38.0	82.6	22.2	4
	1500	120.0	22.3	34.9	7.0	22.2	32.0	38.0	82.6	22.2	4
0.75	150	100.0	11.2	42.9	2.0	27.7	14.0	38.0	69.9	15.9	4
	300	115.0	14.3	42.9	2.0	27.7	24.0	48.0	82.6	19.1	4
	400	115.0	15.9	42.9	7.0	27.7	25.0	48.0	82.6	19.1	4
	600	115.0	15.9	42.9	7.0	27.7	25.0	48.0	82.6	19.1	4
	900	130.0	25.4	42.9	7.0	27.7	35.0	44.0	88.9	22.2	4
	1500	130.0	25.4	42.9	7.0	27.7	35.0	44.0	88.9	22.2	4
1	150	110.0	12.7	50.8	2.0	34.5	16.0	49.0	79.4	15.9	4
	300	125.0	15.9	50.8	2.0	34.5	25.0	54.0	88.9	19.1	4
	400	125.0	17.5	50.8	7.0	34.5	27.0	54.0	88.9	19.1	4
	600	125.0	17.5	50.8	7.0	34.5	27.0	54.0	88.9	19.1	4
	900	150.0	28.6	50.8	7.0	34.5	41.0	52.0	101.6	25.4	4
	1500	150.0	28.6	50.8	7.0	34.5	41.0	52.0	101.6	25.4	4
1.25	150	115.0	14.3	63.5	2.0	43.2	19.0	59.0	88.9	15.9	4
	300	135.0	17.5	63.5	2.0	43.2	25.0	64.0	98.4	19.1	4
	400	135.0	20.7	63.5	7.0	43.2	29.0	64.0	98.4	19.1	4
	600	135.0	20.7	63.5	7.0	43.2	29.0	64.0	98.4	19.1	4
	900	160.0	28.6	63.5	7.0	43.2	41.0	64.0	111.1	25.4	4
	1500	160.0	28.6	63.5	7.0	43.2	41.0	64.0	111.1	25.4	4
1.5	150	125.0	15.9	73.0	2.0	49.5	21.0	65.0	98.4	15.9	4
	300	155.0	19.1	73.0	2.0	49.5	29.0	70.0	114.3	22.2	4
	400	155.0	22.3	73.0	7.0	49.5	32.0	70.0	114.3	22.2	4
	600	155.0	22.3	73.0	7.0	49.5	32.0	70.0	114.3	22.2	4
	900	180.0	31.8	73.0	7.0	49.5	44.0	70.0	123.8	28.6	4
	1500	180.0	31.8	73.0	7.0	49.5	44.0	70.0	123.8	28.6	4
2	150	150.0	17.5	92.1	2.0	61.9	24.0	78.0	120.7	19.1	4
	300	165.0	20.7	92.1	2.0	61.9	32.0	84.0	127.0	19.1	8
	400	165.0	25.4	92.1	7.0	61.9	37.0	84.0	127.0	19.1	8
	600	165.0	25.4	92.1	7.0	61.9	37.0	84.0	127.0	19.1	8
	900	215.0	38.1	92.1	7.0	61.9	57.0	105.0	165.1	25.4	8
	1500	215.0	38.1	92.1	7.0	61.9	57.0	105.0	165.1	25.4	8

SLIP ON FLANGES



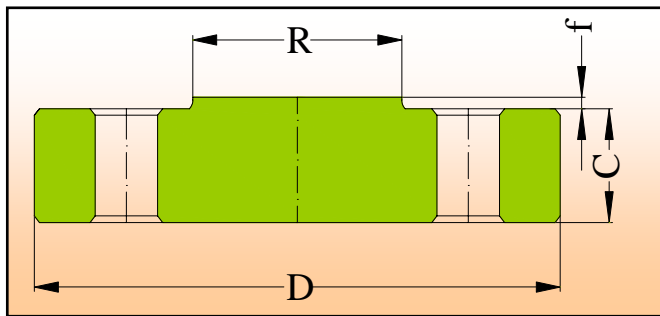
NPS (inch)	Rating	OD	Thk.	RF Dia	RF Thk	Bore Size	Length Through Hub	Hub Dia	Drilling		
		D	C	R	f	B2	Y2	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
2.5	150	180.0	20.7	104.8	2.0	74.6	27.0	90.0	139.7	19.1	4
	300	190.0	23.9	104.8	2.0	74.6	37.0	100.0	149.2	22.2	8
	400	190.0	28.6	104.8	7.0	74.6	41.0	100.0	149.2	22.2	8
	600	190.0	28.6	104.8	7.0	74.6	41.0	100.0	149.2	22.2	8
	900	245.0	41.3	104.8	7.0	74.6	64.0	124.0	190.5	28.6	8
	1500	245.0	41.3	104.8	7.0	74.6	64.0	124.0	190.5	28.6	8
3	150	190.0	22.3	127.0	2.0	90.7	29.0	108.0	152.4	19.1	4
	300	210.0	27.0	127.0	2.0	90.7	41.0	117.0	168.3	22.2	8
	400	210.0	31.8	127.0	7.0	90.7	46.0	117.0	168.3	22.2	8
	600	210.0	31.8	127.0	7.0	90.7	46.0	117.0	168.3	22.2	8
	900	240.0	38.1	127.0	7.0	90.7	54.0	127.0	190.5	25.4	8
3 1/2	150	215.0	22.3	139.7	2.0	103.4	30.0	122.0	177.8	19.1	8
	300	230.0	28.6	139.7	2.0	103.4	43.0	133.0	184.2	22.2	8
	400	230.0	35.0	139.7	7.0	103.4	49.0	133.0	184.2	25.4	8
	600	230.0	35.0	139.7	7.0	103.4	49.0	133.0	184.2	25.4	8
4	150	230.0	22.3	157.2	2.0	116.1	32.0	135.0	190.5	19.1	8
	300	255.0	30.2	157.2	2.0	116.1	46.0	146.0	200.0	22.2	8
	400	255.0	35.0	157.2	7.0	116.1	51.0	146.0	200.0	25.4	8
	600	275.0	38.1	157.2	7.0	116.1	54.0	152.0	215.9	25.4	8
	900	290.0	44.5	157.2	7.0	116.1	70.0	159.0	235.0	31.8	8
5	150	255.0	22.3	185.7	2.0	143.8	35.0	164.0	215.9	22.2	8
	300	280.0	33.4	185.7	2.0	143.8	49.0	178.0	235.0	22.2	8
	400	280.0	38.1	185.7	7.0	143.8	54.0	178.0	235.0	25.4	8
	600	330.0	44.5	185.7	7.0	143.8	60.0	189.0	266.7	28.6	8
	900	350.0	50.8	185.7	7.0	143.8	79.0	190.0	279.4	34.9	8
6	150	280.0	23.9	215.9	2.0	170.7	38.0	192.0	241.3	22.2	8
	300	320.0	35.0	215.9	2.0	170.7	51.0	206.0	269.9	22.2	12
	400	320.0	41.3	215.9	7.0	170.7	57.0	206.0	269.9	25.4	12
	600	355.0	47.7	215.9	7.0	170.7	67.0	222.0	292.1	28.6	12
	900	380.0	55.6	215.9	7.0	170.7	86.0	235.0	317.5	31.8	12
8	150	345.0	27.0	269.9	2.0	221.5	43.0	246.0	298.5	22.2	8
	300	380.0	39.7	269.9	2.0	221.5	60.0	260.0	330.2	25.4	12
	400	380.0	47.7	269.9	7.0	221.5	68.0	260.0	330.2	28.6	12
	600	420.0	55.6	269.9	7.0	221.5	76.0	273.0	349.2	31.8	12
	900	470.0	63.5	269.9	7.0	221.5	102.0	298.0	393.7	38.1	12
NPS	Rating	OD	Thk.	RF Dia	RF Thk	Bore	Length		Drilling		

SLIP ON FLANGES



(inch)		D	C	R	f	Size	Through Hub	Hub Dia	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
						B2	Y2	X			
10	150	405.0	28.6	323.8	2.0	276.2	48.0	305.0	362.0	25.4	12
	300	445.0	46.1	323.8	2.0	276.2	65.0	321.0	387.4	28.6	16
	400	445.0	54.0	323.8	7.0	276.2	73.0	321.0	387.4	31.8	16
	600	510.0	63.5	323.8	7.0	276.2	86.0	343.0	431.8	34.9	16
	900	545.0	69.9	323.8	7.0	276.2	108.0	368.0	469.9	38.1	16
12	150	485.0	30.2	381.0	2.0	327.0	54.0	365.0	431.8	25.4	12
	300	520.0	49.3	381.0	2.0	327.0	71.0	375.0	450.8	31.8	16
	400	520.0	57.2	381.0	7.0	327.0	79.0	375.0	450.8	34.9	16
	600	560.0	66.7	381.0	7.0	327.0	92.0	400.0	489.0	34.9	20
	900	610.0	79.4	381.0	7.0	327.0	117.0	419.0	533.4	38.1	20
14	150	535.0	33.4	412.8	2.0	359.2	56.0	400.0	476.3	28.6	12
	300	585.0	52.4	412.8	2.0	359.2	75.0	425.0	514.4	31.8	20
	400	585.0	60.4	412.8	7.0	359.2	84.0	425.0	514.4	34.9	20
	600	605.0	69.9	412.8	7.0	359.2	94.0	432.0	527.0	38.1	20
	900	640.0	85.8	412.8	7.0	359.2	130.0	451.0	558.8	41.3	20
16	150	595.0	35.0	469.9	2.0	410.5	62.0	457.0	539.8	28.6	16
	300	650.0	55.6	469.9	2.0	410.5	81.0	483.0	571.5	34.9	20
	400	650.0	63.5	469.9	7.0	410.5	94.0	483.0	571.5	38.1	20
	600	685.0	76.2	469.9	7.0	410.5	106.0	495.0	603.2	41.3	20
	900	705.0	88.9	469.9	7.0	410.5	133.0	508.0	616.0	44.5	20
18	150	635.0	38.1	533.4	2.0	461.8	67.0	505.0	577.9	31.8	16
	300	710.0	58.8	533.4	2.0	461.8	87.0	533.0	628.6	34.9	24
	400	710.0	66.7	533.4	7.0	461.8	98.0	533.0	628.6	38.1	24
	600	745.0	82.6	533.4	7.0	461.8	117.0	546.0	654.0	44.5	20
	900	785.0	101.6	533.4	7.0	461.8	152.0	565.0	685.8	50.8	20
20	150	700.0	41.3	584.2	2.0	513.1	71.0	559.0	635.0	31.8	20
	300	775.0	62.0	584.2	2.0	513.1	94.0	587.0	685.8	34.9	24
	400	775.0	69.9	584.2	7.0	513.1	102.0	587.0	685.8	41.3	24
	600	815.0	88.9	584.2	7.0	513.1	127.0	610.0	723.9	44.5	24
	900	855.0	108.0	584.2	7.0	513.1	159.0	622.0	749.3	54.0	20
24	150	815.0	46.1	692.2	2.0	616.0	81.0	663.0	749.3	34.9	20
	300	915.0	68.3	692.2	2.0	616.0	105.0	702.0	812.8	41.3	24
	400	915.0	76.2	692.2	7.0	616.0	114.0	702.0	812.8	47.6	24
	600	940.0	101.6	692.2	7.0	616.0	140.0	718.0	838.2	50.8	24
	900	1040.0	139.7	692.2	7.0	616.0	203.0	749.0	901.7	66.7	20

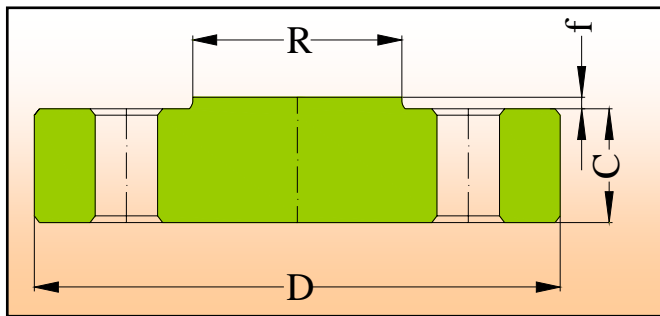
BLIND FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Drilling		
		D	C	R	f	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
0.5	150	90.0	9.6	34.9	2.0	60.3	15.9	4
	300	95.0	12.7	34.9	2.0	66.7	15.9	4
	400	95.0	14.3	34.9	7.0	66.7	15.9	4
	600	95.0	14.3	34.9	7.0	66.7	15.9	4
	900	120.0	22.3	34.9	7.0	82.6	22.2	4
	1500	120.0	22.3	34.9	7.0	82.6	22.2	4
	2500	135.0	30.2	34.9	7.0	88.9	22.2	4
0.75	150	100.0	11.2	42.9	2.0	69.9	15.9	4
	300	115.0	14.3	42.9	2.0	82.6	19.1	4
	400	115.0	15.9	42.9	7.0	82.6	19.1	4
	600	115.0	15.9	42.9	7.0	82.6	19.1	4
	900	130.0	25.4	42.9	7.0	88.9	22.2	4
	1500	130.0	25.4	42.9	7.0	88.9	22.2	4
	2500	140.0	31.8	42.9	7.0	95.2	22.2	4
1	150	110.0	12.7	50.8	2.0	79.4	15.9	4
	300	125.0	15.9	50.8	2.0	88.9	19.1	4
	400	125.0	17.5	50.8	7.0	88.9	19.1	4
	600	125.0	17.5	50.8	7.0	88.9	19.1	4
	900	150.0	28.6	50.8	7.0	101.6	25.4	4
	1500	150.0	28.6	50.8	7.0	101.6	25.4	4
	2500	160.0	35.0	50.8	7.0	108.0	25.4	4
1.25	150	115.0	14.3	63.5	2.0	88.9	15.9	4
	300	135.0	17.5	63.5	2.0	98.4	19.1	4
	400	135.0	20.7	63.5	7.0	98.4	19.1	4
	600	135.0	20.7	63.5	7.0	98.4	19.1	4
	900	160.0	28.6	63.5	7.0	111.1	25.4	4
	1500	160.0	28.6	63.5	7.0	111.1	25.4	4
	2500	185.0	38.1	63.5	7.0	130.2	28.6	4
1.5	150	125.0	15.9	73.0	2.0	98.4	15.9	4
	300	155.0	19.1	73.0	2.0	114.3	22.2	4
	400	155.0	22.3	73.0	7.0	114.3	22.2	4
	600	155.0	22.3	73.0	7.0	114.3	22.2	4
	900	180.0	31.8	73.0	7.0	123.8	28.6	4
	1500	180.0	31.8	73.0	7.0	123.8	28.6	4
	2500	205.0	44.5	73.0	7.0	146.0	31.8	4

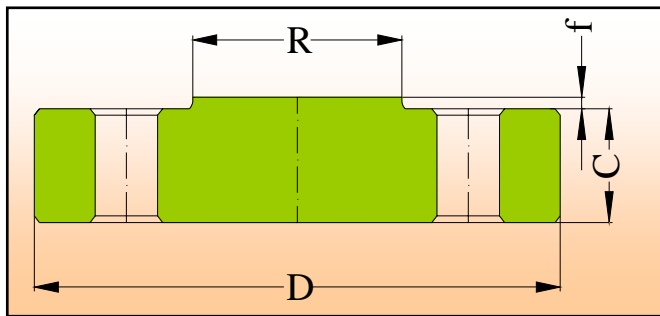
BLIND FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Drilling		
		D	C	R	f	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
2	150	150.0	17.5	92.1	2.0	120.7	19.1	4
	300	165.0	20.7	92.1	2.0	127.0	19.1	8
	400	165.0	25.4	92.1	7.0	127.0	19.1	8
	600	165.0	25.4	92.1	7.0	127.0	19.1	8
	900	215.0	38.1	92.1	7.0	165.1	25.4	8
	1500	215.0	38.1	92.1	7.0	165.1	25.4	8
	2500	235.0	50.9	92.1	7.0	171.4	28.6	8
2.5	150	180.0	20.7	104.8	2.0	139.7	19.1	4
	300	190.0	23.9	104.8	2.0	149.2	22.2	8
	400	190.0	28.6	104.8	7.0	149.2	22.2	8
	600	190.0	28.6	104.8	7.0	149.2	22.2	8
	900	245.0	41.3	104.8	7.0	190.5	28.6	8
	1500	245.0	41.3	104.8	7.0	190.5	28.6	8
	2500	265.0	57.2	104.8	7.0	196.8	31.8	8
3	150	190.0	22.3	127.0	2.0	152.4	19.1	4
	300	210.0	27.0	127.0	2.0	168.3	22.2	8
	400	210.0	31.8	127.0	7.0	168.3	22.2	8
	600	210.0	31.8	127.0	7.0	168.3	22.2	8
	900	240.0	38.1	127.0	7.0	190.5	25.4	8
	1500	265.0	47.7	127.0	7.0	203.2	31.8	8
	2500	305.0	66.7	127.0	7.0	228.6	34.9	8
3 1/2	150	215.0	22.3	139.7	2.0	177.8	19.1	8
	300	230.0	28.6	139.7	2.0	184.2	22.2	8
	400	230.0	35.0	139.7	7.0	184.2	25.4	8
	600	230.0	35.0	139.7	7.0	184.2	25.4	8
4	150	230.0	22.3	157.2	2.0	190.5	19.1	8
	300	255.0	30.2	157.2	2.0	200.0	22.2	8
	400	255.0	35.0	157.2	7.0	200.0	25.4	8
	600	275.0	38.1	157.2	7.0	215.9	25.4	8
	900	290.0	44.5	157.2	7.0	235.0	31.8	8
	1500	310.0	54.0	157.2	7.0	241.3	34.9	8
	2500	355.0	76.2	157.2	7.0	273.0	41.3	8
5	150	255.0	22.3	185.7	2.0	215.9	22.2	8
	300	280.0	33.4	185.7	2.0	235.0	22.2	8
	400	280.0	38.1	185.7	7.0	235.0	25.4	8

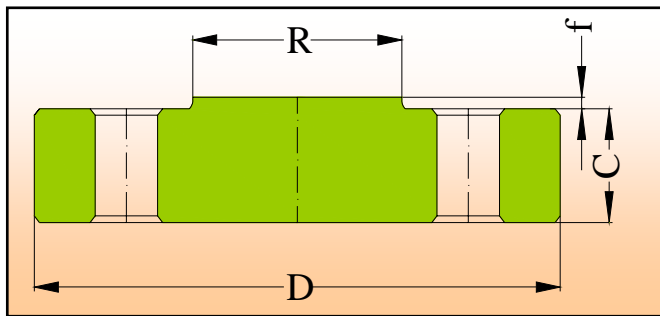
BLIND FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Drilling		
		D	C	R	f	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
5	600	330.0	44.5	185.7	7.0	266.7	28.6	8
	900	350.0	50.8	185.7	7.0	279.4	34.9	8
	1500	375.0	73.1	185.7	7.0	292.1	41.3	8
	2500	420.0	92.1	185.7	7.0	323.8	47.6	8
6	150	280.0	23.9	215.9	2.0	241.3	22.2	8
	300	320.0	35.0	215.9	2.0	269.9	22.2	12
	400	320.0	41.3	215.9	7.0	269.9	25.4	12
	600	355.0	47.7	215.9	7.0	292.1	28.6	12
	900	380.0	55.6	215.9	7.0	317.5	31.8	12
	1500	395.0	82.6	215.9	7.0	317.5	38.1	12
8	2500	485.0	108.0	215.9	7.0	368.3	54.0	8
	150	345.0	27.0	269.9	2.0	298.5	22.2	8
	300	380.0	39.7	269.9	2.0	330.2	25.4	12
	400	380.0	47.7	269.9	7.0	330.2	28.6	12
	600	420.0	55.6	269.9	7.0	349.2	31.8	12
	900	470.0	63.5	269.9	7.0	393.7	38.1	12
	1500	485.0	92.1	269.9	7.0	393.7	44.5	12
10	2500	550.0	127.0	269.9	7.0	438.2	54.0	12
	150	405.0	28.6	323.8	2.0	362.0	25.4	12
	300	445.0	46.1	323.8	2.0	387.4	28.6	16
	400	445.0	54.0	323.8	7.0	387.4	31.8	16
	600	510.0	63.5	323.8	7.0	431.8	34.9	16
	900	545.0	69.9	323.8	7.0	469.9	38.1	16
	1500	585.0	108.0	323.8	7.0	482.6	50.8	12
12	2500	675.0	165.1	323.8	7.0	539.8	66.7	12
	150	485.0	30.2	381.0	2.0	431.8	25.4	12
	300	520.0	49.3	381.0	2.0	450.8	31.8	16
	400	520.0	57.2	381.0	7.0	450.8	34.9	16
	600	560.0	66.7	381.0	7.0	489.0	34.9	20
	900	610.0	79.4	381.0	7.0	533.4	38.1	20
	1500	675.0	123.9	381.0	7.0	571.5	54.0	16
14	2500	760.0	184.2	381.0	7.0	619.1	73.0	12
	150	535.0	33.4	412.8	2.0	476.3	28.6	12
	300	585.0	52.4	412.8	2.0	514.4	31.8	20
	400	585.0	60.4	412.8	7.0	514.4	34.9	20

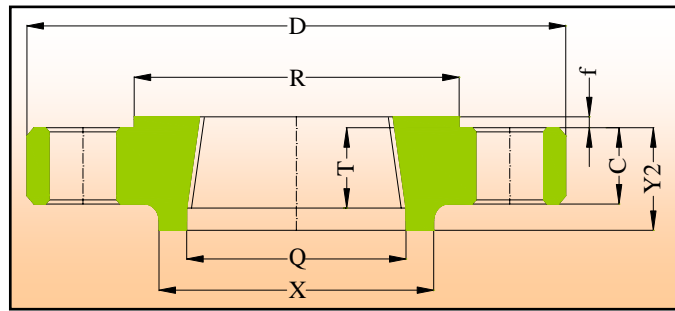
BLIND FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Drilling		
		D	C	R	f	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
14	600	605.0	69.9	412.8	7.0	527.0	38.1	20
	900	640.0	85.8	412.8	7.0	558.8	41.3	20
	1500	750.0	133.4	412.8	7.0	635.0	60.3	16
16	150	595.0	35.0	469.9	2.0	539.8	28.6	16
	300	650.0	55.6	469.9	2.0	571.5	34.9	20
	400	650.0	63.5	469.9	7.0	571.5	38.1	20
	600	685.0	76.2	469.9	7.0	603.2	41.3	20
	900	705.0	88.9	469.9	7.0	616.0	44.5	20
	1500	825.0	146.1	469.9	7.0	704.8	66.7	16
18	150	635.0	38.1	533.4	2.0	577.9	31.8	16
	300	710.0	58.8	533.4	2.0	628.6	34.9	24
	400	710.0	66.7	533.4	7.0	628.6	38.1	24
	600	745.0	82.6	533.4	7.0	654.0	44.5	20
	900	785.0	101.6	533.4	7.0	685.8	50.8	20
	1500	915.0	162.0	533.4	7.0	774.7	73.0	16
20	150	700.0	41.3	584.2	2.0	635.0	31.8	20
	300	775.0	62.0	584.2	2.0	685.8	34.9	24
	400	775.0	69.9	584.2	7.0	685.8	41.3	24
	600	815.0	88.9	584.2	7.0	723.9	44.5	24
	900	855.0	108.0	584.2	7.0	749.3	54.0	20
	1500	985.0	177.8	584.2	7.0	831.8	79.4	16
24	150	815.0	46.1	692.2	2.0	749.3	34.9	20
	300	915.0	68.3	692.2	2.0	812.8	41.3	24
	400	915.0	76.2	692.2	7.0	812.8	47.6	24
	600	940.0	101.6	692.2	7.0	838.2	50.8	24
	900	1040.0	139.7	692.2	7.0	901.7	66.7	20
	1500	1170.0	203.2	692.2	7.0	990.6	92.1	16

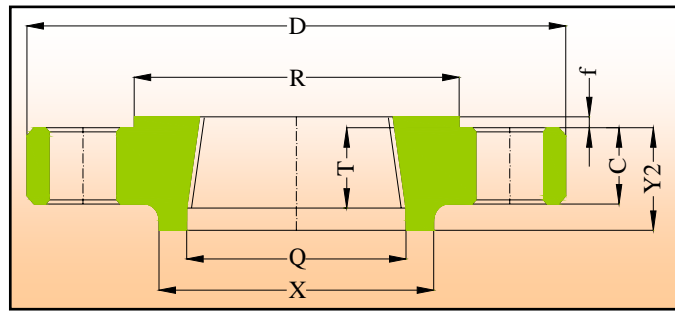
THREADED FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Counter Bore Dia.	Length Through Hub	Thread Length Min.	Hub Dia	Drilling		
		D	C	R	f	Q	Y2	T	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
0.5	150	90.0	9.6	34.9	2.0	--	14.0	16.0	30.0	60.3	15.9	4
	300	95.0	12.7	34.9	2.0	23.6	21.0	16.0	38.0	66.7	15.9	4
	400	95.0	14.3	34.9	7.0	23.6	22.0	16.0	38.0	66.7	15.9	4
	600	95.0	14.3	34.9	7.0	23.6	22.0	16.0	38.0	66.7	15.9	4
	900	120.0	22.3	34.9	7.0	23.6	32.0	23.0	38.0	82.6	22.2	4
	1500	120.0	22.3	34.9	7.0	23.6	32.0	23.0	38.0	82.6	22.2	4
	2500	135.0	30.2	34.9	7.0	23.6	40.0	29.0	43.0	88.9	22.2	4
0.75	150	100.0	11.2	42.9	2.0	--	14.0	16.0	38.0	69.9	15.9	4
	300	115.0	14.3	42.9	2.0	29.0	24.0	16.0	48.0	82.6	19.1	4
	400	115.0	15.9	42.9	7.0	29.0	25.0	16.0	48.0	82.6	19.1	4
	600	115.0	15.9	42.9	7.0	29.0	25.0	16.0	48.0	82.6	19.1	4
	900	130.0	25.4	42.9	7.0	29.0	35.0	26.0	44.0	88.9	22.2	4
	1500	130.0	25.4	42.9	7.0	29.0	35.0	26.0	44.0	88.9	22.2	4
	2500	140.0	31.8	42.9	7.0	29.0	43.0	32.0	51.0	95.2	22.2	4
1	150	110.0	12.7	50.8	2.0	--	16.0	17.0	49.0	79.4	15.9	4
	300	125.0	15.9	50.8	2.0	35.8	25.0	18.0	54.0	88.9	19.1	4
	400	125.0	17.5	50.8	7.0	35.8	27.0	18.0	54.0	88.9	19.1	4
	600	125.0	17.5	50.8	7.0	35.8	27.0	18.0	54.0	88.9	19.1	4
	900	150.0	28.6	50.8	7.0	35.8	41.0	29.0	52.0	101.6	25.4	4
	1500	150.0	28.6	50.8	7.0	35.8	41.0	29.0	52.0	101.6	25.4	4
	2500	160.0	35.0	50.8	7.0	35.8	48.0	35.0	57.0	108.0	25.4	4
1.25	150	115.0	14.3	63.5	2.0	--	19.0	21.0	59.0	88.9	15.9	4
	300	135.0	17.5	63.5	2.0	44.4	25.0	21.0	64.0	98.4	19.1	4
	400	135.0	20.7	63.5	7.0	44.4	29.0	21.0	64.0	98.4	19.1	4
	600	135.0	20.7	63.5	7.0	44.4	29.0	21.0	64.0	98.4	19.1	4
	900	160.0	28.6	63.5	7.0	44.4	41.0	31.0	64.0	111.1	25.4	4
	1500	160.0	28.6	63.5	7.0	44.4	41.0	31.0	64.0	111.1	25.4	4
	2500	185.0	38.1	63.5	7.0	44.4	52.0	39.0	73.0	130.2	28.6	4
1.5	150	125.0	15.9	73.0	2.0	--	21.0	22.0	65.0	98.4	15.9	4
	300	155.0	19.1	73.0	2.0	50.6	29.0	23.0	70.0	114.3	22.2	4
	400	155.0	22.3	73.0	7.0	50.6	32.0	23.0	70.0	114.3	22.2	4
	600	155.0	22.3	73.0	7.0	50.6	32.0	23.0	70.0	114.3	22.2	4
	900	180.0	31.8	73.0	7.0	50.6	44.0	32.0	70.0	123.8	28.6	4
	1500	180.0	31.8	73.0	7.0	50.6	44.0	32.0	70.0	123.8	28.6	4
	2500	205.0	44.5	73.0	7.0	50.6	60.0	45.0	79.0	146.0	31.8	4
2	150	150.0	17.5	92.1	2.0	--	24.0	25.0	78.0	120.7	19.1	4
	300	165.0	20.7	92.1	2.0	63.5	32.0	29.0	84.0	127.0	19.1	8
	400	165.0	25.4	92.1	7.0	63.5	37.0	29.0	84.0	127.0	19.1	8
	600	165.0	25.4	92.1	7.0	63.5	37.0	29.0	84.0	127.0	19.1	8

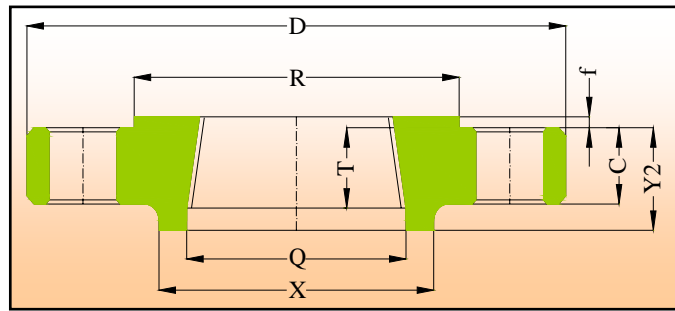
THREADED FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Counter Bore Dia.	Length Through Hub	Thread Length Min.	Hub Dia	Drilling		
		D	C	R	f	Q	Y2	T	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
2	900	215.0	38.1	92.1	7.0	63.6	57.0	39.0	105.0	165.1	25.4	8
	1500	215.0	38.1	92.1	7.0	63.6	57.0	39.0	105.0	165.1	25.4	8
	2500	235.0	50.9	92.1	7.0	63.6	70.0	51.0	95.0	171.4	28.6	8
2.5	150	180.0	20.7	104.8	2.0	--	27.0	29.0	90.0	139.7	19.1	4
	300	190.0	23.9	104.8	2.0	76.2	37.0	32.0	100.0	149.2	22.2	8
	400	190.0	28.6	104.8	7.0	76.2	41.0	32.0	100.0	149.2	22.2	8
	600	190.0	28.6	104.8	7.0	76.2	41.0	32.0	100.0	149.2	22.2	8
	900	245.0	41.3	104.8	7.0	76.2	64.0	48.0	124.0	190.5	28.6	8
	1500	245.0	41.3	104.8	7.0	76.2	64.0	48.0	124.0	190.5	28.6	8
	2500	265.0	57.2	104.8	7.0	76.2	79.0	58.0	114.0	196.8	31.8	8
3	150	190.0	22.3	127.0	2.0	--	29.0	30.0	108.0	152.4	19.1	4
	300	210.0	27.0	127.0	2.0	92.2	41.0	32.0	117.0	168.3	22.2	8
	400	210.0	31.8	127.0	7.0	92.2	46.0	35.0	117.0	168.3	22.2	8
	600	210.0	31.8	127.0	7.0	92.2	46.0	35.0	117.0	168.3	22.2	8
	900	240.0	38.1	127.0	7.0	92.2	54.0	42.0	127.0	190.5	25.4	8
3 1/2	150	215.0	22.3	139.7	2.0	--	30.0	32.0	122.0	177.8	19.1	8
	300	230.0	28.6	139.7	2.0	104.9	43.0	37.0	133.0	184.2	22.2	8
	400	230.0	35.0	139.7	7.0	104.9	49.0	40.0	133.0	184.2	25.4	8
	600	230.0	35.0	139.7	7.0	104.9	49.0	40.0	133.0	184.2	25.4	8
4	150	230.0	22.3	157.2	2.0	--	32.0	33.0	135.0	190.5	19.1	8
	300	255.0	30.2	157.2	2.0	117.6	46.0	37.0	146.0	200.0	22.2	8
	400	255.0	35.0	157.2	7.0	117.6	51.0	37.0	146.0	200.0	25.4	8
	600	275.0	38.1	157.2	7.0	117.6	54.0	42.0	152.0	215.9	25.4	8
	900	290.0	44.5	157.2	7.0	117.6	70.0	48.0	159.0	235.0	31.8	8
5	150	255.0	22.3	185.7	2.0	--	35.0	36.0	164.0	215.9	22.2	8
	300	280.0	33.4	185.7	2.0	144.4	49.0	43.0	178.0	235.0	22.2	8
	400	280.0	38.1	185.7	7.0	144.4	54.0	43.0	178.0	235.0	25.4	8
	600	330.0	44.5	185.7	7.0	144.4	60.0	48.0	189.0	266.7	28.6	8
	900	350.0	50.8	185.7	7.0	144.4	79.0	54.0	190.0	279.4	34.9	8
6	150	280.0	23.9	215.9	2.0	--	38.0	40.0	192.0	241.3	22.2	8
	300	320.0	35.0	215.9	2.0	171.4	51.0	47.0	206.0	269.9	22.2	12
	400	320.0	41.3	215.9	7.0	171.4	57.0	46.0	206.0	269.9	25.4	12
	600	355.0	47.7	215.9	7.0	171.4	67.0	51.0	222.0	292.1	28.6	12
	900	380.0	55.6	215.9	7.0	171.4	86.0	58.0	235.0	317.5	31.8	12
8	150	345.0	27.0	269.9	2.0	--	43.0	44.0	246.0	298.5	22.2	8
	300	380.0	39.7	269.9	2.0	222.2	60.0	51.0	260.0	330.2	25.4	12
	400	380.0	47.7	269.9	7.0	222.2	68.0	51.0	260.0	330.2	28.6	12

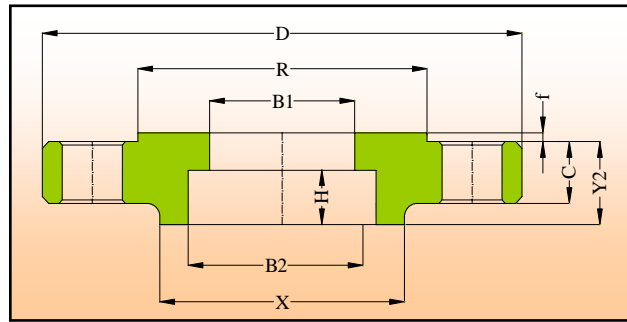
THREADED FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Counter Bore Dia.	Length Through Hub	Thread Length Min.	Hub Dia	Drilling	NPS	Rating
		D	C	R	f	Q	Y2	T	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
8	600	420.0	55.6	269.9	7.0	222.2	76.0	58.0	273.0	349.2	31.8	12
	900	470.0	63.5	269.9	7.0	222.2	102.0	64.0	298.0	393.7	38.1	12
10	150	405.0	28.6	323.8	2.0	--	48.0	49.0	305.0	362.0	25.4	12
	300	445.0	46.1	323.8	2.0	276.2	65.0	56.0	321.0	387.4	28.6	16
	400	445.0	54.0	323.8	7.0	276.2	73.0	56.0	321.0	387.4	31.8	16
	600	510.0	63.5	323.8	7.0	276.2	86.0	66.0	343.0	431.8	34.9	16
	900	545.0	69.9	323.8	7.0	276.2	108.0	72.0	368.0	469.9	38.1	16
12	150	485.0	30.2	381.0	2.0	--	54.0	56.0	365.0	431.8	25.4	12
	300	520.0	49.3	381.0	2.0	328.6	71.0	61.0	375.0	450.8	31.8	16
	400	520.0	57.2	381.0	7.0	328.6	79.0	61.0	375.0	450.8	34.9	16
	600	560.0	66.7	381.0	7.0	328.6	92.0	70.0	400.0	489.0	34.9	20
	900	610.0	79.4	381.0	7.0	328.6	117.0	77.0	419.0	533.4	38.1	20
14	150	535.0	33.4	412.8	2.0	--	56.0	57.0	400.0	476.3	28.6	12
	300	585.0	52.4	412.8	2.0	360.4	75.0	64.0	425.0	514.4	31.8	20
	400	585.0	60.4	412.8	7.0	360.4	84.0	64.0	425.0	514.4	34.9	20
	600	605.0	69.9	412.8	7.0	360.4	94.0	74.0	432.0	527.0	38.1	20
	900	640.0	85.8	412.8	7.0	360.4	130.0	83.0	451.0	558.8	41.3	20
16	150	595.0	35.0	469.9	2.0	--	62.0	64.0	457.0	539.8	28.6	16
	300	650.0	55.6	469.9	2.0	411.2	81.0	69.0	483.0	571.5	34.9	20
	400	650.0	63.5	469.9	7.0	411.2	94.0	69.0	483.0	571.5	38.1	20
	600	685.0	76.2	469.9	7.0	411.2	106.0	78.0	495.0	603.2	41.3	20
	900	705.0	88.9	469.9	7.0	411.2	133.0	86.0	508.0	616.0	44.5	20
18	150	635.0	38.1	533.4	2.0	--	67.0	68.0	505.0	577.9	31.8	16
	300	710.0	58.8	533.4	2.0	462.0	87.0	70.0	533.0	628.6	34.9	24
	400	710.0	66.7	533.4	7.0	462.0	98.0	70.0	533.0	628.6	38.1	24
	600	745.0	82.6	533.4	7.0	462.0	117.0	80.0	546.0	654.0	44.5	20
	900	785.0	101.6	533.4	7.0	462.0	152.0	89.0	565.0	685.8	50.8	20
20	150	700.0	41.3	584.2	2.0	--	71.0	73.0	559.0	635.0	31.8	20
	300	775.0	62.0	584.2	2.0	512.8	94.0	74.0	587.0	685.8	34.9	24
	400	775.0	69.9	584.2	7.0	512.8	102.0	74.0	587.0	685.8	41.3	24
	600	815.0	88.9	584.2	7.0	512.8	127.0	83.0	610.0	723.9	44.5	24
	900	855.0	108.0	584.2	7.0	512.8	159.0	93.0	622.0	749.3	54.0	20
24	150	815.0	46.1	692.2	2.0	--	81.0	83.0	663.0	749.3	34.9	20
	300	915.0	68.3	692.2	2.0	614.4	105.0	83.0	702.0	812.8	41.3	24
	400	915.0	76.2	692.2	7.0	614.4	114.0	83.0	702.0	812.8	47.6	24
	600	940.0	101.6	692.2	7.0	614.4	140.0	93.0	718.0	838.2	50.8	24
	900	1040.0	139.7	692.2	7.0	614.4	203.0	102.0	749.0	901.7	66.7	20

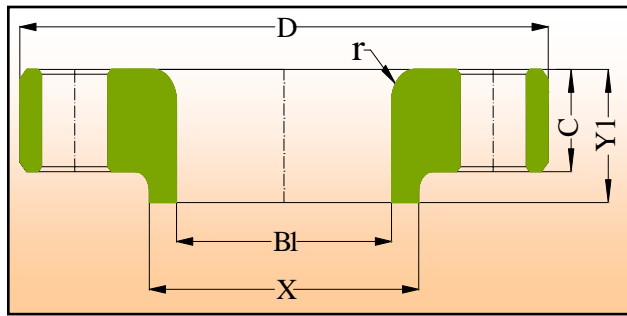
SOCKET WELD FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	RF Thk	Bore Size	Bore Size	Length Through Hub	Depth of Socket	Hub Dia	Drilling		
		D	C	R	f	B1	B2	Y2	H	X	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
0.5	150	90.0	9.6	34.9	2.0	15.8	22.2	14.0	10.0	30.0	60.3	15.9	4
	300	95.0	12.7	34.9	2.0	15.8	22.2	21.0	10.0	38.0	66.7	15.9	4
	600	95.0	14.3	34.9	7.0	15.8	22.2	22.0	10.0	38.0	66.7	15.9	4
	1500	120.0	22.3	34.9	7.0	15.8	22.2	32.0	10.0	38.0	82.6	22.2	4
0.75	150	100.0	11.2	42.9	2.0	20.9	27.7	14.0	11.0	38.0	69.9	15.9	4
	300	115.0	14.3	42.9	2.0	20.9	27.7	24.0	11.0	48.0	82.6	19.1	4
	600	115.0	15.9	42.9	7.0	20.9	27.7	25.0	11.0	48.0	82.6	19.1	4
	1500	130.0	25.4	42.9	7.0	20.9	27.7	35.0	11.0	44.0	88.9	22.2	4
1	150	110.0	12.7	50.8	2.0	26.6	34.5	16.0	13.0	49.0	79.4	15.9	4
	300	125.0	15.9	50.8	2.0	26.6	34.5	25.0	13.0	54.0	88.9	19.1	4
	600	125.0	17.5	50.8	7.0	26.6	34.5	27.0	13.0	54.0	88.9	19.1	4
	1500	150.0	28.6	50.8	7.0	26.6	34.5	41.0	13.0	52.0	101.6	25.4	4
1.25	150	115.0	14.3	63.5	2.0	35.1	43.2	19.0	14.0	59.0	88.9	15.9	4
	300	135.0	17.5	63.5	2.0	35.1	43.2	25.0	14.0	64.0	98.4	19.1	4
	600	135.0	20.7	63.5	7.0	35.1	43.2	29.0	14.0	64.0	98.4	19.1	4
	1500	160.0	28.6	63.5	7.0	35.1	43.2	41.0	14.0	64.0	111.1	25.4	4
1.5	150	125.0	15.9	73.0	2.0	40.9	49.5	21.0	16.0	65.0	98.4	15.9	4
	300	155.0	19.1	73.0	2.0	40.9	49.5	29.0	16.0	70.0	114.3	22.2	4
	600	155.0	22.3	73.0	7.0	40.9	49.5	32.0	16.0	70.0	114.3	22.2	4
	1500	180.0	31.8	73.0	7.0	40.9	49.5	44.0	16.0	70.0	123.8	28.6	4
2	150	150.0	17.5	92.1	2.0	52.5	61.9	24.0	17.0	78.0	120.7	19.1	4
	300	165.0	20.7	92.1	2.0	52.5	61.9	32.0	17.0	84.0	127.0	19.1	8
	600	165.0	25.4	92.1	7.0	52.5	61.9	37.0	17.0	84.0	127.0	19.1	8
	1500	215.0	38.1	92.1	7.0	52.5	61.9	57.0	17.0	105.0	165.1	25.4	8
2.5	150	180.0	20.7	104.8	2.0	62.7	74.6	27.0	19.0	90.0	139.7	19.1	4
	300	190.0	23.9	104.8	2.0	62.7	74.6	37.0	19.0	100.0	149.2	22.2	8
	600	190.0	28.6	104.8	7.0	62.7	74.6	41.0	19.0	100.0	149.2	22.2	8
	1500	245.0	41.3	104.8	7.0	62.7	74.6	64.0	19.0	124.0	190.5	28.6	8
3	150	190.0	22.3	127.0	2.0	77.9	90.7	29.0	21.0	108.0	152.4	19.1	4
	300	210.0	27.0	127.0	2.0	77.9	90.7	41.0	21.0	117.0	168.3	22.2	8
	600	210.0	31.8	127.0	7.0	77.9	90.7	46.0	21.0	117.0	168.3	22.2	8

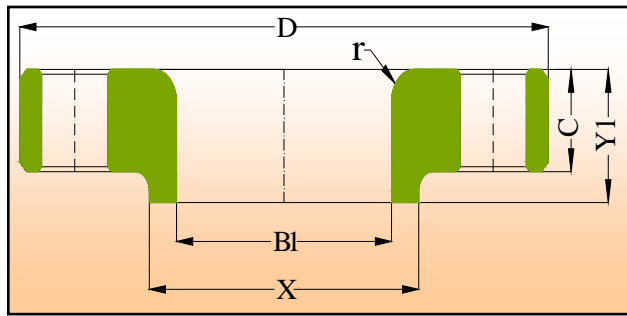
LAP JOINT FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	Bore Size	Length Through Hub	Hub Dia	Corner Radius	Drilling		
		D	C	R	B1	Y1	X	r	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
0.5	150	90.0	11.2	34.9	22.9	16.0	30.0	3.0	60.3	15.9	4
	300	95.0	14.3	34.9	22.9	22.0	38.0	3.0	66.7	15.9	4
	400	95.0	14.3	34.9	22.9	22.0	38.0	3.0	66.7	15.9	4
	600	95.0	14.3	34.9	22.9	22.0	38.0	3.0	66.7	15.9	4
	900	120.0	22.3	34.9	22.9	32.0	38.0	3.0	82.6	22.2	4
	1500	120.0	22.3	34.9	22.9	32.0	38.0	3.0	82.6	22.2	4
0.75	2500	135.0	30.2	34.9	22.9	40.0	43.0	3.0	88.9	22.2	4
	150	100.0	12.7	42.9	28.2	16.0	38.0	3.0	69.9	15.9	4
	300	115.0	15.9	42.9	28.2	25.0	48.0	3.0	82.6	19.1	4
	400	115.0	15.9	42.9	28.2	25.0	48.0	3.0	82.6	19.1	4
	600	115.0	15.9	42.9	28.2	25.0	48.0	3.0	82.6	19.1	4
	900	130.0	25.4	42.9	28.2	35.0	44.0	3.0	88.9	22.2	4
1	1500	130.0	25.4	42.9	28.2	35.0	44.0	3.0	88.9	22.2	4
	2500	140.0	31.8	42.9	28.2	43.0	51.0	3.0	95.2	22.2	4
	150	110.0	14.3	50.8	34.9	17.0	49.0	3.0	79.4	15.9	4
	300	125.0	17.5	50.8	34.9	27.0	54.0	3.0	88.9	19.1	4
	400	125.0	17.5	50.8	34.9	27.0	54.0	3.0	88.9	19.1	4
	600	125.0	17.5	50.8	34.9	27.0	54.0	3.0	88.9	19.1	4
1.25	900	150.0	28.6	50.8	34.9	41.0	52.0	3.0	101.6	25.4	4
	1500	150.0	28.6	50.8	34.9	41.0	52.0	3.0	101.6	25.4	4
	2500	160.0	35.0	50.8	34.9	48.0	57.0	3.0	108.0	25.4	4
	150	115.0	15.9	63.5	43.7	21.0	59.0	5.0	88.9	15.9	4
	300	135.0	19.1	63.5	43.7	27.0	64.0	5.0	98.4	19.1	4
	400	135.0	20.7	63.5	43.7	29.0	64.0	5.0	98.4	19.1	4
1.5	600	135.0	20.7	63.5	43.7	29.0	64.0	5.0	98.4	19.1	4
	900	160.0	28.6	63.5	43.7	41.0	64.0	5.0	111.1	25.4	4
	1500	160.0	28.6	63.5	43.7	41.0	64.0	5.0	111.1	25.4	4
	2500	185.0	38.1	63.5	43.7	52.0	73.0	5.0	130.2	28.6	4
	150	125.0	17.5	73.0	50.0	22.0	65.0	6.0	98.4	15.9	4
	300	155.0	20.7	73.0	50.0	30.0	70.0	6.0	114.3	22.2	4
1.5	400	155.0	22.3	73.0	50.0	32.0	70.0	6.0	114.3	22.2	4
	600	155.0	22.3	73.0	50.0	32.0	70.0	6.0	114.3	22.2	4
	900	180.0	31.8	73.0	50.0	44.0	70.0	6.0	123.8	28.6	4
	1500	180.0	31.8	73.0	50.0	44.0	70.0	6.0	123.8	28.6	4
	2500	205.0	44.5	73.0	50.0	60.0	79.0	6.0	146.0	31.8	4

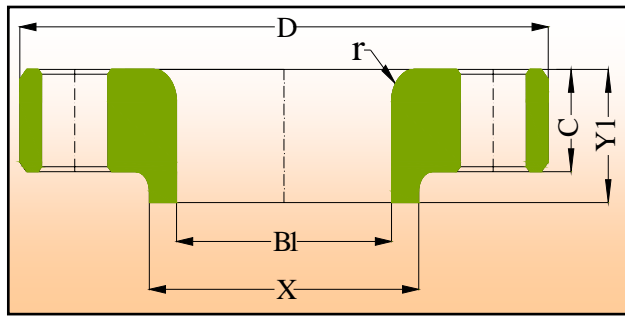
LAP JOINT FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	Bore Size	Length Through Hub	Hub Dia	Corner Radius	Drilling		
		D	C	R	B1	Y1	X	r	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
2	150	150.0	19.1	92.1	62.5	25	78.0	8.0	120.7	19.1	4
	300	165.0	22.3	92.1	62.5	33	84.0	8.0	127.0	19.1	8
	400	165.0	25.4	92.1	62.5	37	84.0	8.0	127.0	19.1	8
	600	165.0	25.4	92.1	62.5	37	84.0	8.0	127.0	19.1	8
	900	215.0	38.1	92.1	62.5	57	105.0	8.0	165.1	25.4	8
	1500	215.0	38.1	92.1	62.5	57	105.0	8.0	165.1	25.4	8
	2500	235.0	50.9	92.1	62.5	70	95.0	8.0	171.4	28.6	8
2.5	150	180.0	22.3	104.8	75.4	29	90.0	8.0	139.7	19.1	4
	300	190.0	25.4	104.8	75.4	38	100.0	8.0	149.2	22.2	8
	400	190.0	28.6	104.8	75.4	41	100.0	8.0	149.2	22.2	8
	600	190.0	28.6	104.8	75.4	41	100.0	8.0	149.2	22.2	8
	900	245.0	41.3	104.8	75.4	64	124.0	8.0	190.5	28.6	8
	1500	245.0	41.3	104.8	75.4	64	124.0	8.0	190.5	28.6	8
	2500	265.0	57.2	104.8	75.4	79	114.0	8.0	196.8	31.8	8
3	150	190.0	23.9	127.0	91.4	30	108.0	10.0	152.4	19.1	4
	300	210.0	28.6	127.0	91.4	43	117.0	10.0	168.3	22.2	8
	400	210.0	31.8	127.0	91.4	46	117.0	10.0	168.3	22.2	8
	600	210.0	31.8	127.0	91.4	46	117.0	10.0	168.3	22.2	8
	900	240.0	38.1	127.0	91.4	54	127.0	10.0	190.5	25.4	8
	1500	265.0	47.7	127.0	91.4	73	133.0	10.0	203.2	31.8	8
	2500	305.0	66.7	127.0	91.4	92	133.0	10.0	228.6	34.9	8
3 1/2	150	215.0	23.9	139.7	104.1	32	122.0	10.0	177.8	19.1	8
	300	230.0	30.2	139.7	104.1	44	133.0	10.0	184.2	22.2	8
	400	230.0	35.0	139.7	104.1	49	133.0	10.0	184.2	25.4	8
	600	230.0	35.0	139.7	104.1	49	133.0	10.0	184.2	25.4	8
4	150	230.0	23.9	157.2	116.8	33	135.0	11.0	190.5	19.1	8
	300	255.0	31.8	157.2	116.8	48	146.0	11.0	200.0	22.2	8
	400	255.0	35.0	157.2	116.8	51	146.0	11.0	200.0	25.4	8
	600	275.0	38.1	157.2	116.8	54	152.0	11.0	215.9	25.4	8
	900	290.0	44.5	157.2	116.8	70	159.0	11.0	235.0	31.8	8
	1500	310.0	54.0	157.2	116.8	90	162.0	11.0	241.3	34.9	8
	2500	355.0	76.2	157.2	116.8	108	165.0	11.0	273.0	41.3	8
5	150	255.0	23.9	185.7	144.4	36	164.0	11.0	215.9	22.2	8
	300	280.0	35.0	185.7	144.4	51	178.0	11.0	235.0	22.2	8
	400	280.0	38.1	185.7	144.4	54	178.0	11.0	235.0	25.4	8

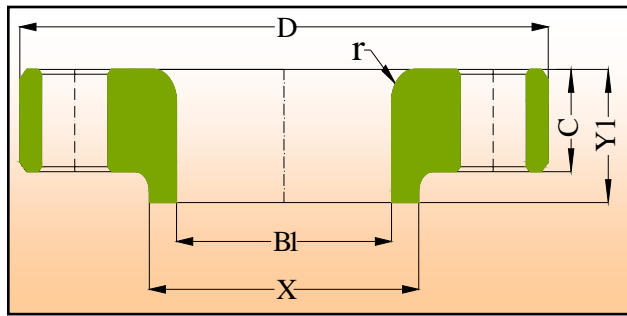
LAP JOINT FLANGES



ALL DIMENSIONARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	Bore Size	Length Through Hub	Hub Dia	Corner Radius	Drilling		
		D	C	R	B1	Y1	X	r	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
5	600	330.0	44.5	185.7	144.4	60	189.0	11.0	266.7	28.6	8
	900	350.0	50.8	185.7	144.4	79	190.0	11.0	279.4	34.9	8
	1500	375.0	73.1	185.7	144.4	105	197.0	11.0	292.1	41.3	8
	2500	420.0	92.1	185.7	144.4	130	203.0	11.0	323.8	47.6	8
6	150	280.0	25.4	215.9	171.4	40	192.0	13.0	241.3	22.2	8
	300	320.0	36.6	215.9	171.4	52	206.0	13.0	269.9	22.2	12
	400	320.0	41.3	215.9	171.4	57	206.0	13.0	269.9	25.4	12
	600	355.0	47.7	215.9	171.4	67	222.0	13.0	292.1	28.6	12
	900	380.0	55.6	215.9	171.4	86	235.0	13.0	317.5	31.8	12
	1500	395.0	82.6	215.9	171.4	119	229.0	13.0	317.5	38.1	12
8	2500	485.0	108.0	215.9	171.4	152	235.0	13.0	368.3	54.0	8
	150	345.0	28.6	269.9	222.2	44	246.0	13.0	298.5	22.2	8
	300	380.0	41.3	269.9	222.2	62	260.0	13.0	330.2	25.4	12
	400	380.0	47.7	269.9	222.2	68	260.0	13.0	330.2	28.6	12
	600	420.0	55.6	269.9	222.2	76	273.0	13.0	349.2	31.8	12
	900	470.0	63.5	269.9	222.2	114	298.0	13.0	393.7	38.1	12
	1500	485.0	92.1	269.9	222.2	143	292.0	13.0	393.7	44.5	12
10	2500	550.0	127.0	269.9	222.2	178	305.0	13.0	438.2	54.0	12
	150	405.0	30.2	323.8	277.4	49	305.0	13.0	362.0	25.4	12
	300	445.0	47.7	323.8	277.4	95	321.0	13.0	387.4	28.6	16
	400	445.0	54.0	323.8	277.4	102	321.0	13.0	387.4	31.8	16
	600	510.0	63.5	323.8	277.4	111	343.0	13.0	431.8	34.9	16
	900	545.0	69.9	323.8	277.4	127	368.0	13.0	469.9	38.1	16
	1500	585.0	108.0	323.8	277.4	178	368.0	13.0	482.6	50.8	12
12	2500	675.0	165.1	323.8	277.4	229	375.0	13.0	539.8	66.7	12
	150	485.0	31.8	381.0	328.2	56	365.0	13.0	431.8	25.4	12
	300	520.0	50.8	381.0	328.2	102	375.0	13.0	450.8	31.8	16
	400	520.0	57.2	381.0	328.2	108	375.0	13.0	450.8	34.9	16
	600	560.0	66.7	381.0	328.2	117	400.0	13.0	489.0	34.9	20
	900	610.0	79.4	381.0	328.2	143	419.0	13.0	533.4	38.1	20
	1500	675.0	123.9	381.0	328.2	219	451.0	13.0	571.5	54.0	16
14	2500	760.0	184.2	381.0	328.2	254	441.0	13.0	619.1	73.0	12
	150	535.0	35.0	412.8	360.2	79	400.0	13.0	476.3	28.6	12
	300	585.0	54.0	412.8	360.2	111	425.0	13.0	514.4	31.8	20
	400	585.0	60.4	412.8	360.2	117	425.0	13.0	514.4	34.9	20

LAP JOINT FLANGES



ALL DIMENSIONS ARE IN mm

NPS (Inch)	Rating	OD	Thk.	RF Dia	Bore Size	Length Through Hub	Hub Dia	Corner Radius	Drilling		
		D	C	R	B1	Y1	X	r	Bolt Circle Dia	Dia of Bolt Holes	No. of Holes
14	600	605.0	69.9	412.8	360.2	127	432.0	13.0	527.0	38.1	20
	900	640.0	85.8	412.8	360.2	156	451.0	13.0	558.8	41.3	20
	1500	750.0	133.4	412.8	360.2	241	495.0	13.0	635.0	60.3	16
16	150	595.0	36.6	469.9	411.2	87	457.0	13.0	539.8	28.6	16
	300	650.0	57.2	469.9	411.2	121	483.0	13.0	571.5	34.9	20
	400	650.0	63.5	469.9	411.2	127	483.0	13.0	571.5	38.1	20
	600	685.0	76.2	469.9	411.2	140	495.0	13.0	603.2	41.3	20
	900	705.0	88.9	469.9	411.2	165	508.0	13.0	616.0	44.5	20
	1500	825.0	146.1	469.9	411.2	260	552.0	13.0	704.8	66.7	16
18	150	635.0	39.7	533.4	462.3	97	505.0	13.0	577.9	31.8	16
	300	710.0	60.4	533.4	462.3	130	533.0	13.0	628.6	34.9	24
	400	710.0	66.7	533.4	462.3	137	533.0	13.0	628.6	38.1	24
	600	745.0	82.6	533.4	462.3	152	546.0	13.0	654.0	44.5	20
	900	785.0	101.6	533.4	462.3	190	565.0	13.0	685.8	50.8	20
	1500	915.0	162.0	533.4	462.3	276	597.0	13.0	774.7	73.0	16
20	150	700.0	42.9	584.2	514.4	103	559.0	13.0	635.0	31.8	20
	300	775.0	63.5	584.2	514.4	140	587.0	13.0	685.8	34.9	24
	400	775.0	69.9	584.2	514.4	146	587.0	13.0	685.8	41.3	24
	600	815.0	88.9	584.2	514.4	165	610.0	13.0	723.9	44.5	24
	900	855.0	108.0	584.2	514.4	210	622.0	13.0	749.3	54.0	20
	1500	985.0	177.8	584.2	514.4	292	641.0	13.0	831.8	79.4	16
24	150	815.0	47.7	692.2	616.0	111	663.0	13.0	749.3	34.9	20
	300	915.0	69.9	692.2	616.0	152	702.0	13.0	812.8	41.3	24
	400	915.0	76.2	692.2	616.0	159	702.0	13.0	812.8	47.6	24
	600	940.0	101.6	692.2	616.0	184	718.0	13.0	838.2	50.8	24
	900	1040.0	139.7	692.2	616.0	267	749.0	13.0	901.7	66.7	20
	1500	1170.0	203.2	692.2	616.0	330	762.0	13.0	990.6	92.1	16