

Forged/Cast Steel Flanges

ANSI RF & RTJ: CLASS 150/300/600/1500/2500
DIN: PN6/10/1625/40/64/100/160



DIE ERSTE offers flange products made by forged steel and stainless steel for connecting and assembling pipeline systems. All of DIE ERSTE flanges are produced with one-body steel construction to ensure the effectiveness. To achieve every customer's need, DIE ERSTE flanges are in accordance with major international, such as ASME B16.5 standard, DIN 2631 ~ 2638, and others. DIE ERSTE flanges are also designed and manufactured with different structures, pressure ratings, and sizes to be used in different applications. In addition, customized flanges can be manufactured according to client's design and drawing.

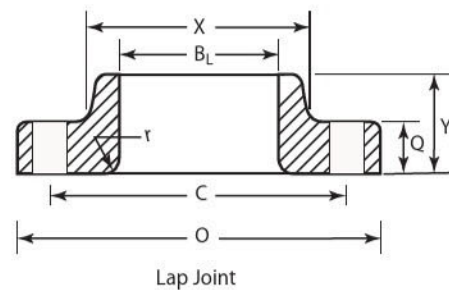
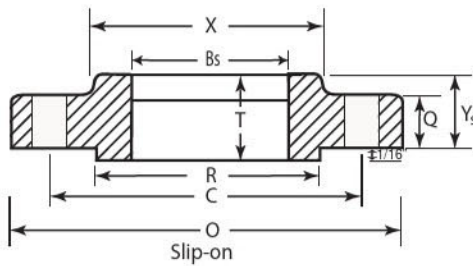
- **Flange Structures Provided:**
 - Slip-on Flange
 - Lap- joint Flange
 - Welding neck Flange
 - Blind Flange
 - Screwed end Flange
 - Socket- welding Flange
- **Flange Faces Provided:**
 - Raised Face
 - Flat Face
 - Ring Type Joint
 - Tongue and Groove
 - Male and Female

• **DIN Flange Summary Chart**

Description	Rated Pressure (in bar) (1 bar = 14.5 psi)						
	DIN						
	6	10	16	25	40	64	100
Welding neck flanges	2631	2632	2633	2634	2635	2636	2637
Flat flange for welding (slip-on)	2573	2576	2543	2544	2545	-	-
Blind Flanges	2527	2527	2527	2527	2527		

- | | |
|--|---|
| 1 Raised Face ANSI CLASS 150 Forged/Cast Steel Flanges | 20 DIN PN 6 Welding Neck/Slip-on/Blind Flanges |
| 4 Raised Face ANSI CLASS 300 Forged/Cast Steel Flanges | 21 DIN PN 10 Welding Neck/Slip-on/Blind Flanges |
| 7 Raised Face ANSI CLASS 600 Forged/Cast Steel Flanges | 22 DIN PN 16 Welding Neck/Slip-on/Blind Flanges |
| 10 Raised Face ANSI CLASS 1500 Forged/Cast Steel Flanges | 23 DIN PN 25 Welding Neck/Slip-on/Blind Flanges |
| 13 Raised Face ANSI CLASS 2500 Forged/Cast Steel Flanges | 24 DIN PN 40 Welding Neck/Slip-on/Blind Flanges |
| 16 RTJ ANSI CLASS 150-2500 Forged/Cast Steel Flanges | 25 DIN PN 64 Welding Neck Flanges |
| | 26 DIN PN 100 Welding Neck Flanges |
| | 27 DIN PN 160 Welding Neck Flanges |

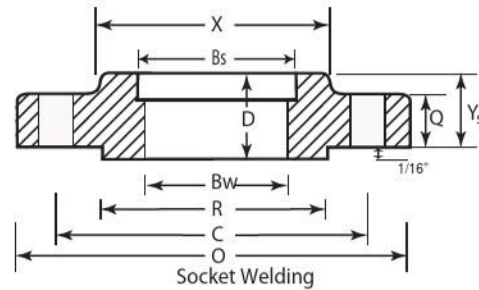
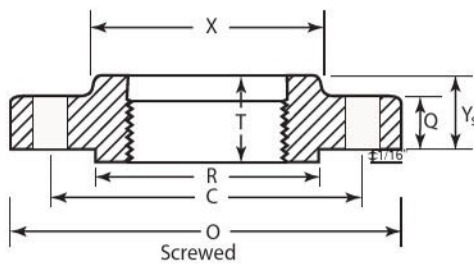
Raised Face ANSI Forged/Cast Steel Flanges CLASS 150



Unit: mm

Nominal Pipe Size (Inches)	Common Dimensions				Dia. of hub at bevel H	Length thru hub			Dia. of bore		
	Outside dia. of flange O	Thickness of flange Q	Diameter of hub at face X	Diameter of raised face R		Welding neck Y _w	Slip-on, screwed, socket Y _s	Lap joint Y _L	Welding neck B _w	Slip-on socket B _s	Lap joint B _L
	O	Q	X	R		Y _w	Y _s	Y _L	B _w	B _s	B _L
1/2	88.9	11.1	30.2	34.9	21.3	47.6	15.9	15.9	15.7	22.4	22.9
3/4	98.4	12.7	38.1	42.9	26.7	52.4	15.9	15.9	20.8	27.7	28.2
1	108.0	14.3	49.3	50.8	33.5	55.9	17.5	17.5	26.7	34.5	35.1
1-1/4	117.5	15.9	58.7	63.5	42.2	57.2	20.6	20.6	35.1	43.2	43.7
1-1/2	127.0	17.5	63.5	73.0	48.3	61.7	22.2	22.2	40.9	49.5	50.0
2	152.4	19.1	77.7	92.1	60.5	63.5	25.4	25.4	52.6	62.0	62.5
2-1/2	177.8	22.2	90.4	104.8	73.2	69.9	28.6	28.6	65.3	74.7	75.4
3	190.5	23.8	108.0	127.0	88.9	69.9	30.2	30.5	78.0	90.7	91.4
3-1/2	215.9	23.8	122.2	139.7	101.6	71.1	31.8	35.6	90.2	103.4	104.1
4	228.6	23.8	134.9	157.2	114.3	76.2	33.3	33.3	101.6	116.1	116.8
5	254.0	23.8	163.3	185.4	141.2	88.9	36.5	36.6	128.3	143.8	144.8
6	279.4	25.4	192.0	215.9	168.4	88.9	39.6	39.6	154.2	170.7	171.5
8	342.9	28.6	246.1	269.9	219.2	101.6	44.5	44.5	202.7	221.5	222.3
10	406.4	30.2	304.8	323.9	273.1	101.6	49.3	49.3	254.0	276.4	277.4
12	482.6	31.8	365.1	381.0	323.9	114.3	55.6	55.9	304.8	327.2	328.2
14	533.4	34.9	400.1	412.8	355.6	127.0	57.2	79.4	336.6	359.2	360.7
16	596.9	36.5	457.2	469.9	406.4	127.0	63.5	87.3	387.4	410.5	411.5
18	635.0	39.6	504.8	533.4	457.2	139.7	68.3	97.0	436.2	462.3	462.3
20	698.5	43.2	558.8	584.2	508.0	144.5	73.0	103.1	489.0	513.1	514.4
24	812.8	47.6	663.6	692.2	609.6	152.4	82.6	111.1	590.6	616.0	616.0

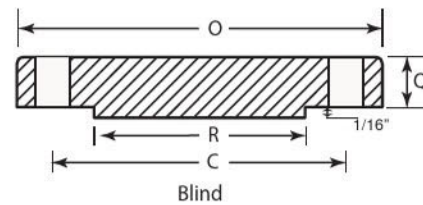
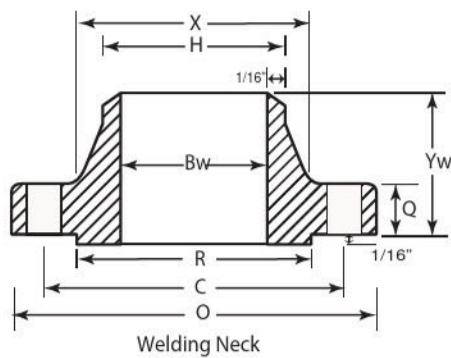
Raised Face ANSI Forged/Cast Steel Flanges CLASS 150



Unit: mm

Nominal Pipe Size (inches)	Radius of fillet	Minimum thread length	Depth of socket	Drilling				Length of bolts		
				Dia. of bolt circle	Number of bolts	Diameter of bolts	Diameter of bolt holes	Stud bolts		Machine bolts
								1/16" raised face	Ring joint	1/16" R.F.
r	T	D	C							
1/2	3.2	15.9	9.5	60.3	4	12.7	15.9	57.2	N/A	44.5
3/4	3.2	15.9	11.1	69.9	4	12.7	15.9	57.2	N/A	50.8
1	3.2	17.5	12.7	79.4	4	12.7	15.9	63.5	76.2	50.8
1-1/4	4.8	20.6	14.3	88.9	4	12.7	15.9	63.5	76.2	57.2
1-1/2	6.4	22.2	15.9	98.4	4	12.7	15.9	69.9	82.6	57.2
2	7.9	25.4	17.5	120.7	4	15.9	19.1	76.2	88.9	57.2
2-1/2	7.9	28.6	19.1	139.7	4	15.9	19.1	82.6	95.3	76.2
3	9.5	30.2	20.6	152.4	4	15.9	19.1	88.9	101.6	76.2
3-1/2	9.5	31.8	22.2	177.8	8	15.9	19.1	88.9	101.6	76.2
4	11.1	33.3	23.8	190.5	8	15.9	19.1	88.9	101.6	76.2
5	11.1	36.5	23.8	215.9	8	19.1	22.2	95.3	108.0	82.6
6	12.7	39.7	27.0	241.3	8	19.1	22.2	95.3	108.0	82.6
8	12.7	44.5	31.8	298.5	8	19.1	22.2	101.6	114.3	88.9
10	12.7	49.2	33.3	362.0	12	22.2	25.4	114.3	127.0	88.9
12	12.7	55.6	39.7	431.8	12	22.2	25.4	114.3	127.0	101.6
14	12.7	57.2	41.3	476.3	12	25.4	28.6	127.0	139.7	108.0
16	12.7	63.5	44.5	539.8	16	25.4	28.6	133.4	146.1	114.3
18	12.7	68.3	49.2	577.9	16	28.6	31.8	146.1	158.8	120.7
20	12.7	73.0	54.0	635.0	20	28.6	31.8	152.4	165.1	133.4
24	12.7	82.6	63.5	749.3	20	31.8	34.9	171.5	184.2	146.1

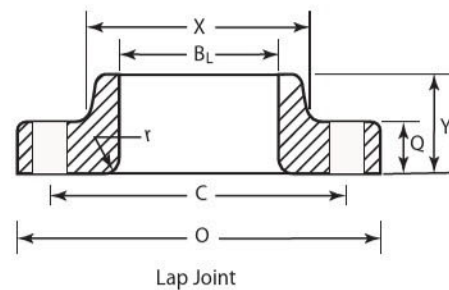
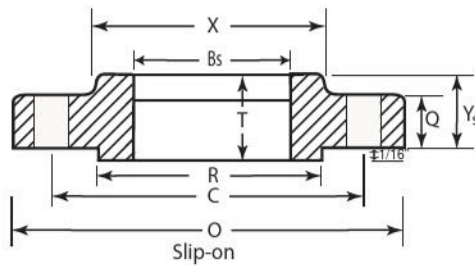
Raised Face ANSI Forged/Cast Steel Flanges CLASS 150



Unit: kg

Nominal Pipe Size (inches)	Approximate weights					
	Welding neck	Slip on	Screwed	Socket welding	Lap joint	Blind
1/2	0.9	0.5	0.5	0.9	0.5	0.9
3/4	0.9	0.7	0.7	0.9	0.7	0.9
1	1.0	0.9	0.9	0.9	0.9	0.9
1-1/4	1.0	1.1	1.1	1.4	1.1	1.4
1-1/2	1.8	1.4	1.4	1.4	1.4	1.4
2	2.7	2.3	2.3	2.3	2.3	1.8
2-1/2	4.5	3.6	3.6	3.2	3.6	3.2
3	5.2	4.1	4.5	3.6	4.1	4.1
3-1/2	5.4	5.0	5.4	5.0	5.0	5.9
4	7.5	5.9	5.9	5.9	5.4	7.7
5	9.5	6.8	6.8	6.8	5.9	9.1
6	11.8	7.7	8.9	8.6	8.2	12.3
8	19.1	12.7	13.6	13.6	12.7	21.3
10	24.5	18.2	18.6	19.5	16.3	30.4
12	40.0	27.7	29.5	29.1	27.2	55.8
14	51.8	37.7	38.6	38.6	35.0	63.1
16	64.5	48.1	42.2	42.2	47.2	84.9
18	74.9	49.5	54.5	54.5	66.3	98.5
20	89.4	67.2	70.4	70.4	72.2	128.5
24	121.7	92.6	95.3	95.3	88.5	188.4

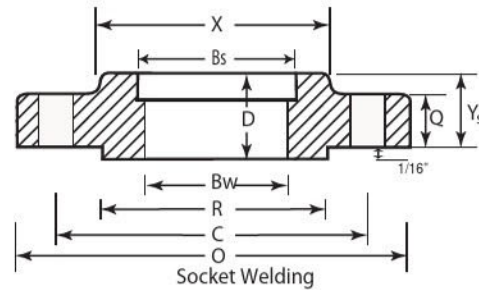
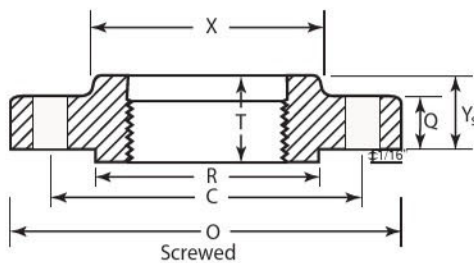
Raised Face ANSI Forged/Cast Steel Flanges CLASS 300



Unit: mm

Nominal Pipe Size (Inches)	Common Dimensions				Dia. of hub at bevel H	Length thru hub			Dia. of bore		
	Outside dia. of flange O	Thickness of flange Q	Diameter of hub at face X	Diameter of raised face R		Welding neck Y _w	Slip-on, screwed, socket Y _s	Lap joint Y _L	Welding neck B _w	Slip-on socket B _s	Lap joint B _L
	O	Q	X	R		Y _w	Y _s	Y _L	B _w	B _s	B _L
1/2	95.3	14.3	38.1	34.9	21.3	52.4	22.2	22.2	15.7	22.4	22.9
3/4	117.5	15.9	47.6	42.9	26.7	57.2	25.4	25.4	20.8	27.7	28.2
1	123.8	17.5	54.0	50.8	33.5	61.9	27.0	27.0	26.7	34.5	35.1
1-1/4	133.4	19.1	63.5	63.5	42.2	65.1	27.0	27.0	35.1	43.2	43.7
1-1/2	155.6	20.6	69.9	73.0	48.3	68.3	30.2	30.2	40.9	49.5	50.0
2	165.1	22.2	84.1	92.1	60.5	69.9	33.3	33.3	52.6	62.0	62.5
2-1/2	190.5	25.4	100.0	104.8	73.2	76.2	38.1	38.1	65.3	74.7	75.4
3	209.6	28.6	117.5	127.0	88.9	79.4	42.9	42.9	78.0	90.7	91.4
3-1/2	228.6	30.2	133.4	139.7	101.6	81.0	44.5	44.5	90.2	103.4	104.1
4	254.0	31.8	146.1	157.2	114.3	85.7	47.6	47.6	102.4	116.1	116.8
5	279.4	34.9	177.8	185.4	141.2	98.4	50.8	50.8	128.3	143.8	144.8
6	317.5	36.5	206.4	215.9	168.4	98.4	52.4	52.4	154.2	170.7	171.5
8	381.0	41.3	260.4	269.9	219.2	111.1	61.9	61.9	202.7	221.5	222.3
10	444.5	47.6	320.7	323.9	273.1	117.5	66.7	95.3	254.0	276.4	277.4
12	520.7	50.8	374.7	381.0	323.9	130.2	73.0	101.6	304.8	327.2	328.2
14	584.2	54.0	425.5	412.8	355.6	142.9	76.2	111.1	336.6	359.2	360.7
16	647.7	57.2	482.6	469.9	406.4	146.1	82.6	120.7	387.4	410.5	411.5
18	711.2	60.3	533.4	533.4	457.2	158.8	88.9	130.2	438.2	462.3	462.3
20	774.7	63.5	587.4	584.2	508.0	136.5	95.3	139.7	489.0	513.1	514.4
24	914.4	69.9	701.7	692.2	609.6	168.3	106.4	152.4	590.6	616.0	616.0

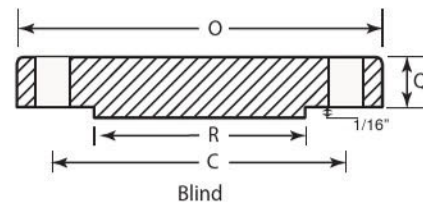
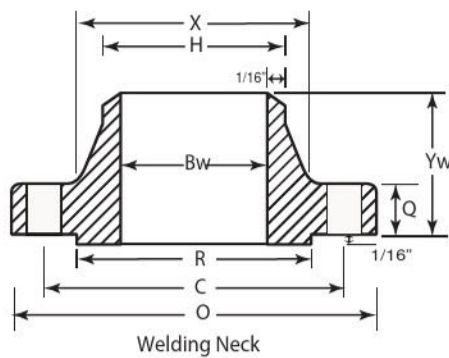
Raised Face ANSI Forged/Cast Steel Flanges CLASS 300



Unit: mm

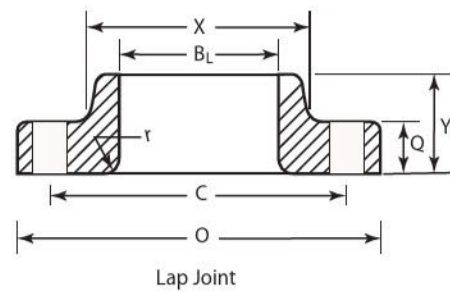
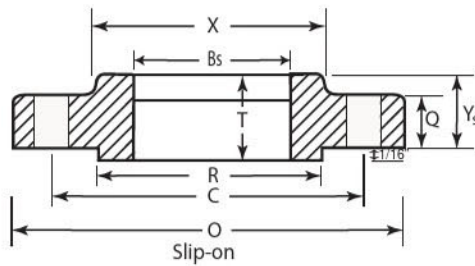
Nominal Pipe Size (Inches)	Radius of fillet	Minimum thread length	Depth of socket	Drilling				Length of bolts		
				Dia. of bolt circle	Number of bolts	Diameter of bolts	Diameter of bolt holes	Stud bolts		Machine bolts
								1/16" raised face	Ring joint	
1/2	3.2	15.9	9.5	66.7	4	12.7	15.9	63.5	76.2	50.8
3/4	3.2	15.9	11.1	57.2	4	15.9	19.1	69.9	82.6	63.5
1	3.2	17.5	12.7	88.9	4	15.9	19.1	76.2	88.9	63.5
1-1/4	4.8	20.6	14.3	98.4	4	15.9	19.1	76.2	88.9	69.9
1-1/2	6.4	22.2	15.9	114.3	4	15.9	19.1	82.6	101.6	76.2
2	7.9	28.6	17.5	127.0	8	19.1	22.2	88.9	101.6	76.2
2-1/2	7.9	31.8	19.1	149.2	8	19.1	22.2	95.3	114.3	82.6
3	9.5	31.8	20.6	168.3	8	19.1	22.2	101.6	120.7	88.9
3-1/2	9.5	36.5	-	184.2	8	19.1	22.2	108.0	127.0	95.3
4	11.1	36.5	-	200.0	8	19.1	22.2	108.0	127.0	95.3
5	11.1	42.9	-	235.0	8	19.1	22.2	114.3	133.4	101.6
6	12.7	46.0	-	269.9	12	19.1	22.2	120.7	139.7	108.0
8	12.7	50.8	-	330.2	12	22.2	25.4	133.4	152.4	120.7
10	12.7	55.6	-	387.4	16	25.4	28.6	152.4	171.5	133.4
12	12.7	60.3	-	450.9	16	28.6	31.8	165.1	184.2	146.1
14	12.7	63.5	-	514.4	20	28.6	31.8	171.5	190.5	152.4
16	12.7	68.3	-	571.5	20	31.8	34.9	184.2	203.2	165.1
18	12.7	69.9	-	628.7	24	31.8	34.9	190.5	209.6	171.5
20	12.7	73.0	-	685.8	24	31.8	34.9	203.2	222.3	177.8
24	12.7	82.6	-	812.8	24	38.1	41.3	228.6	254.0	196.9

Raised Face ANSI Forged/Cast Steel Flanges CLASS 300



Nominal Pipe Size (inches)	Counter bore screwed flange min. (mm) S	Approximate weights (kg)					
		Welding neck	Slip on	Screwed	Socket welding	Lap joint	Blind
1/2	23.6	0.9	0.7	0.7	1.4	0.7	0.9
3/4	29.0	1.4	1.1	1.1	1.4	1.1	1.4
1	35.8	1.8	1.4	1.4	1.4	1.4	1.8
1-1/4	44.5	2.3	2.0	2.0	1.8	2.0	2.7
1-1/2	50.5	3.2	2.9	2.9	2.7	2.9	3.2
2	63.5	3.6	3.2	3.2	3.2	3.2	3.6
2-1/2	76.2	5.4	4.5	4.5	4.5	4.5	5.4
3	92.2	8.2	5.9	6.3	5.9	6.6	7.2
3-1/2	104.9	9.1	7.2	7.2	7.7	7.2	9.5
4	117.6	12.0	10.6	10.9	10.0	10.9	12.7
5	144.5	16.3	13.1	14.0	-	11.8	16.8
6	171.5	20.4	16.3	16.3	-	17.2	21.7
8	222.3	31.3	25.4	25.4	-	24.9	35.8
10	276.4	45.3	34.9	36.2	-	39.9	55.3
12	328.7	64.3	51.2	49.8	-	63.0	82.9
14	360.4	93.3	72.0	74.3	-	83.4	109.2
16	411.2	112.8	95.1	99.7	-	106.0	142.7
18	462.0	138.6	114.6	126.8	-	138.2	187.5
20	512.8	167.2	139.1	147.2	-	169.9	233.3
24	614.4	235.1	222.0	222.0	-	240.1	362.4

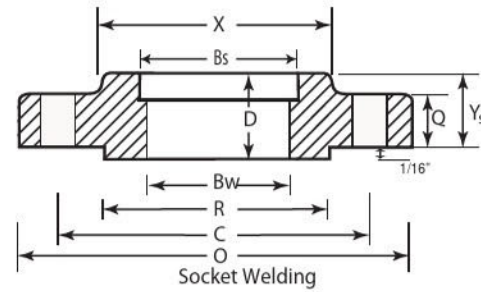
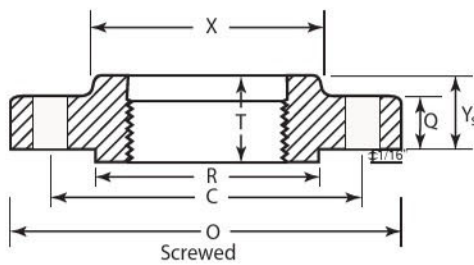
Raised Face ANSI Forged/Cast Steel Flanges CLASS 600



Unit: mm

Nominal Pipe Size (Inches)	Common Dimensions				Dia. of hub at bevel H	Length thru hub			Dia. of bore		
	Outside dia. of flange O	Thickness of flange Q	Diameter of hub at face X	Diameter of raised face R		Welding neck Y _w	Slip-on, screwed, socket Y _s	Lap joint Y _L	Welding neck B _w	Slip-on socket B _s	Lap joint B _L
	O	Q	X	R		Y _w	Y _s	Y _L	B _w	B _s	B _L
1/2	95.3	14.3	38.1	34.9	21.3	52.4	22.2	22.2	14.0	22.4	22.9
3/4	117.5	15.9	47.6	42.9	26.7	57.2	25.4	25.4	18.8	27.7	28.2
1	123.8	17.5	54.0	50.8	33.5	61.9	27.0	27.0	24.4	34.5	35.1
1-1/4	133.4	20.6	63.5	63.5	42.2	66.7	28.6	28.6	32.5	43.2	43.7
1-1/2	155.6	22.2	69.9	73.0	48.3	69.9	31.8	31.8	38.1	49.5	50.0
2	165.1	25.4	84.1	92.1	60.5	73.0	36.5	36.5	49.3	62.0	62.5
2-1/2	190.5	28.6	100.0	104.8	73.2	79.4	41.3	41.3	58.9	74.7	75.4
3	209.6	31.8	117.5	127.0	88.9	82.6	46.0	46.0	73.7	90.7	91.4
3-1/2	228.6	34.9	133.4	139.7	101.6	85.7	49.2	49.2	85.3	103.4	104.1
4	273.1	31.8	152.4	157.2	114.3	101.6	54.0	54.0	97.3	116.1	116.8
5	330.2	44.5	188.9	185.7	141.2	114.3	60.3	60.3	122.2	143.8	144.5
6	355.6	47.6	222.3	215.9	168.4	117.5	66.7	66.7	146.3	170.7	171.5
8	419.1	55.6	273.1	269.9	219.2	133.4	76.2	76.2	193.8	221.5	222.3
10	508.0	63.5	342.9	323.9	273.1	152.4	85.7	111.1	247.7	276.4	277.4
12	558.8	66.7	400.1	381.0	323.9	155.6	92.1	117.5	298.5	327.2	328.2
14	603.3	69.9	431.8	412.8	355.6	165.1	93.7	127.0	-	359.2	360.2
16	685.8	76.2	495.3	469.9	406.4	177.8	106.4	139.7	-	410.5	411.2
18	743.0	82.6	546.1	533.4	457.2	184.2	117.5	152.4	-	461.8	487.7
20	812.8	88.9	609.6	584.2	508.0	190.5	127.0	165.1	-	513.1	514.4
24	939.8	101.6	717.6	692.2	609.6	203.2	139.7	184.2	-	616.0	616.0

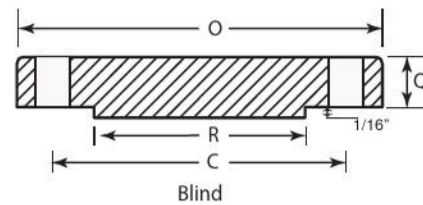
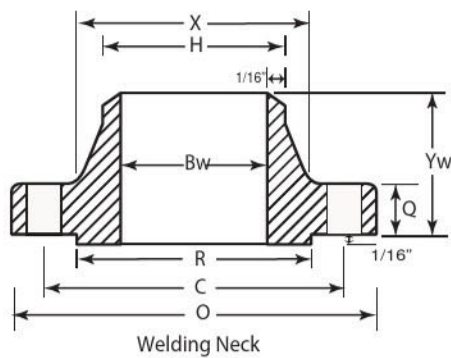
Raised Face ANSI Forged/Cast Steel Flanges CLASS 600



Unit: mm

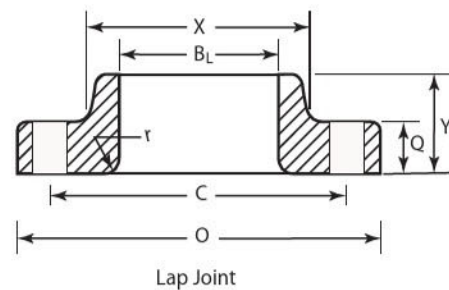
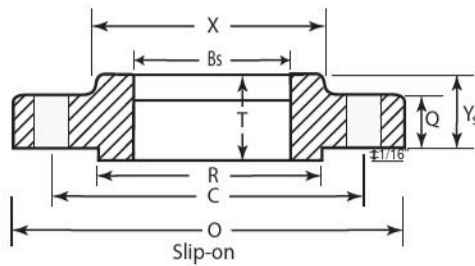
Nominal Pipe Size (Inches)	Radius of fillet <i>r</i>	Minimum thread length <i>T</i>	Depth of socket <i>D</i>	Drilling				Length of bolts		
				Dia. of bolt circle <i>C</i>	Number of bolts	Diameter of bolts	Diameter of bolt holes	Stud bolts		Male and female tongue and groove
								1/4" raised face	Ring joint	
1/2	3.2	15.9	9.5	66.7	4	12.7	15.9	76.2	76.2	69.9
3/4	3.2	15.9	11.1	57.2	4	15.9	19.1	82.6	82.6	76.2
1	3.2	17.5	12.7	88.9	4	15.9	19.1	88.9	88.9	82.6
1-1/4	3.2	20.6	14.3	98.4	4	15.9	19.1	95.3	88.9	88.9
1-1/2	4.8	22.2	15.9	114.3	4	15.9	19.1	101.6	101.6	95.3
2	7.9	28.6	19.1	127.0	8	19.1	22.2	101.6	108	95.3
2-1/2	7.9	31.8	20.6	149.2	8	19.1	22.2	114.3	120.7	108.0
3	9.5	34.9	22.2	168.3	8	19.1	22.2	120.7	127	114.3
3-1/2	9.5	39.7	-	184.2	8	22.2	25.4	133.4	139.7	127.0
4	11.1	41.3	-	215.9	8	22.2	25.4	139.7	146.1	133.4
5	11.1	47.6	-	266.7	8	25.4	28.6	158.8	165.1	152.4
6	12.7	50.8	-	292.1	12	25.4	28.6	165.1	171.5	158.8
8	12.7	57.2	-	349.3	12	28.6	31.8	190.5	196.9	184.2
10	12.7	65.1	-	431.8	16	31.8	34.9	209.6	215.9	203.2
12	12.7	69.9	-	489.0	20	31.8	34.9	215.9	222.3	209.6
14	12.7	73.0	-	527.1	20	34.9	38.1	228.6	235	222.3
16	12.7	77.8	-	603.3	20	38.1	41.3	247.7	254	241.3
18	12.7	79.4	-	654.1	20	41.3	44.5	266.7	273.1	260.4
20	12.7	82.6	-	723.9	24	41.3	44.5	285.8	292.1	279.4
24	12.7	92.1	-	838.2	24	47.6	50.8	323.9	336.6	317.5

Raised Face ANSI Forged/Cast Steel Flanges CLASS 600



Nominal Pipe Size (Inches)	Counter bore screwed flange min. (mm) S	Approximate weights (kg)					
		Welding neck	Slip on	Screwed	Socket welding	Lap joint	Blind
1/2	23.6	1.4	0.9	0.9	1.4	0.9	0.9
3/4	29.0	1.6	1.4	1.4	1.4	1.4	1.4
1	35.8	1.8	1.6	1.6	1.4	1.6	1.8
1-1/4	44.5	2.5	2.0	2.0	1.8	2.0	2.7
1-1/2	50.5	3.6	2.9	2.9	2.7	2.9	3.6
2	63.5	4.5	3.6	3.6	3.2	3.6	4.5
2-1/2	76.2	6.3	5.4	5.4	4.5	5.0	6.8
3	92.2	8.2	6.8	6.8	5.9	6.3	9.1
3-1/2	104.9	11.8	9.5	9.5	7.7	9.1	13.1
4	117.6	16.8	14.9	14.9	10.0	14.0	18.6
5	144.5	30.8	28.5	28.5	-	28.5	30.8
6	171.5	33.1	36.2	36.2	-	35.3	39.0
8	222.3	50.7	43.9	43.9	-	50.7	63.0
10	276.4	85.6	80.2	80.2	-	88.3	104.6
12	328.7	102.4	97.4	97.4	-	108.7	133.6
14	360.4	157.2	117.3	117.3	-	131.4	171.2
16	411.2	217.9	165.8	165.8	-	181.2	238.7
18	462.0	251.4	215.6	215.6	-	212.5	310.3
20	512.8	312.6	277.2	277.2	-	273.6	387.3
24	614.4	442.6	397.7	397.7	-	401.4	532.3

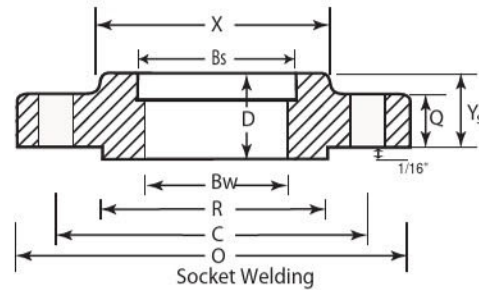
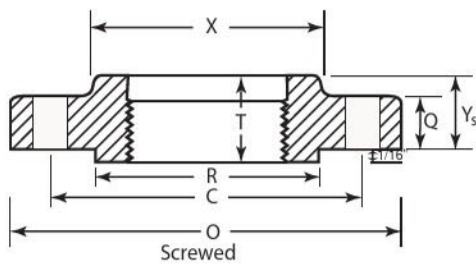
Raised Face ANSI Forged/Cast Steel Flanges CLASS 1500



Unit: mm

Nominal Pipe Size (Inches)	Common Dimensions				Dia. of hub at bevel H	Length thru hub			Dia. of bore		
	Outside dia. of flange O	Thickness of flange Q	Diameter of hub at face X	Diameter of raised face R		Welding neck Y _w	Slip-on, screwed, socket Y _s	Lap joint Y _L	Welding neck B _w	Slip-on socket B _s	Lap joint B _L
1/2	120.7	22.2	28.6	34.9	21.3	60.3	31.8	31.8	-	22.4	22.9
3/4	130.2	25.4	44.5	42.9	26.7	69.9	34.9	34.9	-	27.7	28.2
1	149.2	28.6	52.4	50.8	33.5	73.0	41.3	41.3	-	34.5	35.1
1-1/4	158.8	28.6	63.5	63.5	42.2	73.0	41.3	41.3	-	43.2	43.7
1-1/2	177.8	31.8	69.9	73.0	48.3	82.6	44.5	44.5	-	49.5	50.0
2	215.9	38.1	104.8	92.1	60.5	101.6	57.2	57.2	-	62.0	62.5
2-1/2	244.5	41.3	123.8	104.8	73.2	104.8	63.5	63.5	-	74.7	75.4
3	266.7	47.6	133.4	127.0	88.9	117.5	73.0	73.0	-	90.7	91.4
4	311.2	54.0	161.9	157.2	114.3	123.8	90.5	90.5	-	116.1	116.8
5	374.7	73.0	196.9	185.7	141.2	155.6	104.8	104.8	-	143.8	144.5
6	393.7	82.6	228.6	215.9	168.4	171.5	119.1	119.1	-	170.7	171.5
8	482.6	92.1	292.1	269.9	219.2	212.7	142.9	142.9	-	221.5	222.3
10	584.2	114.3	368.3	323.9	273.1	254.0	158.8	177.8	-	276.4	277.4
12	673.1	123.8	450.9	381.0	323.9	282.6	181.0	219.1	-	327.2	328.2
14	749.3	133.4	495.3	412.8	355.6	298.5	-	241.3	-	359.2	360.2
16	825.5	146.1	552.5	469.9	406.4	311.2	-	260.4	-	410.5	411.2
18	914.4	161.9	596.9	533.4	457.2	327.0	-	269.9	-	461.8	487.7
20	984.3	177.8	641.4	584.2	508.0	355.6	-	292.1	-	513.1	514.4
24	1168.4	203.2	762.0	692.2	609.6	406.4	-	330.2	-	616.0	616.0

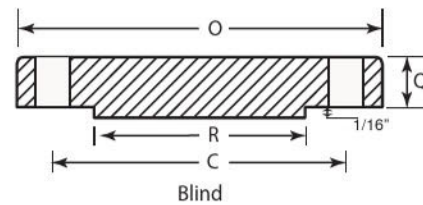
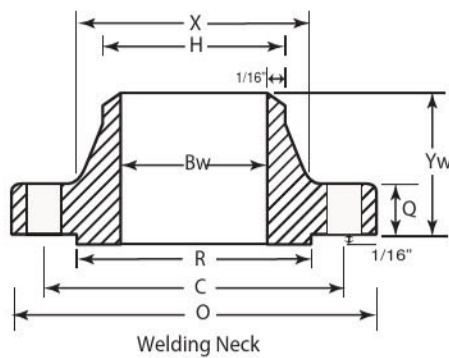
Raised Face ANSI Forged/Cast Steel Flanges CLASS 1500



Unit: mm

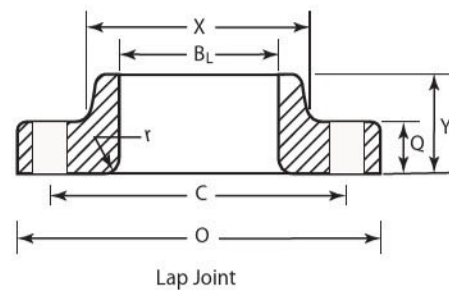
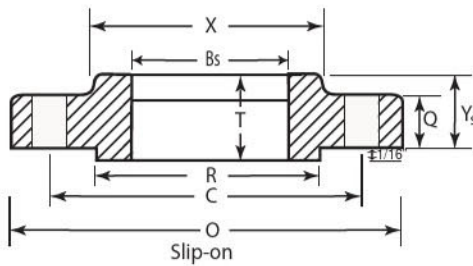
Nominal Pipe Size (Inches)	Radius of fillet r	Minimum thread length T	Depth of socket D	Drilling			Length of bolts		Male and female tongue and groove	
				Dia. of bolt circle C	Number of bolts	Diameter of bolts	Diameter of bolt holes	Stud bolts		
								1/4" raised face		Ring joint
1/2	3.2	22.2	9.5	82.6	4	19.1	22.2	101.6	101.6	95.3
3/4	3.2	25.4	11.1	88.9	4	19.1	22.2	108.0	108.0	101.6
1	3.2	28.6	12.7	101.6	4	22.2	25.4	120.7	120.7	114.3
1-1/4	4.8	30.2	14.3	111.1	4	22.2	25.4	120.7	120.7	114.3
1-1/2	6.4	31.8	15.9	123.8	4	22.2	25.4	133.4	133.4	127.0
2	7.9	38.1	17.5	165.1	8	25.4	28.6	139.7	146.1	133.4
2-1/2	7.9	47.6	19.1	190.5	8	25.4	28.6	152.4	152.4	146.1
3	9.5	50.8	-	203.2	8	28.6	31.8	171.5	171.5	165.1
4	11.1	57.2	-	241.3	8	28.6	34.9	190.5	190.5	184.2
5	12.7	63.5	-	292.1	8	38.1	38.1	241.3	241.3	235.0
6	12.7	69.9	-	317.5	12	34.9	41.3	254.0	254.0	247.7
8	12.7	76.2	-	393.7	12	34.9	44.5	285.8	285.8	279.4
10	12.7	84.1	-	482.6	12	47.6	50.8	336.6	336.6	330.2
12	12.7	92.1	-	571.5	16	50.8	54.0	374.7	374.7	368.3
14	12.7	-	-	635.0	16	57.2	60.3	406.4	406.4	400.1
16	12.7	-	-	704.9	16	63.5	63.5	444.5	444.5	438.2
18	12.7	-	-	774.7	16	69.9	69.9	489.0	489.0	482.6
20	12.7	-	-	831.9	16	76.2	76.2	533.4	533.4	527.1
24	12.7	-	-	990.6	16	88.9	92.1	609.6	609.6	603.3

Raised Face ANSI Forged/Cast Steel Flanges CLASS 1500



Nominal Pipe Size (Inches)	Counter bore screwed flange min. (mm) S	Approximate weights (kg)					
		Welding neck	Slip on	Screwed	Socket welding	Lap joint	Blind
1/2	23.6	3.2	2.7	2.7	2.8	2.7	1.8
3/4	29.0	3.2	2.7	2.7	2.8	2.7	2.7
1	35.8	3.9	3.4	3.4	3.6	3.4	4.1
1-1/4	44.5	4.5	4.5	4.5	5.0	4.5	4.5
1-1/2	50.5	6.3	6.3	6.3	6.8	6.3	6.3
2	63.5	10.9	10.9	10.9	10.9	9.5	11.3
2-1/2	76.2	16.3	10.0	10.0	17.2	13.1	15.9
3	92.2	21.7	16.3	16.3	-	17.2	21.7
4	117.6	31.3	33.1	33.1	-	34.0	33.1
5	144.5	59.8	59.8	59.8	-	62.5	64.3
6	171.5	74.3	74.3	74.3	-	77.0	72.0
8	222.3	123.7	116.9	116.9	-	129.6	136.8
10	276.4	205.7	197.5	197.5	-	219.7	229.7
12	328.7	312.6	302.2	302.2	-	339.3	351.1
14	360.4	439.4	-	-	-	403.2	441.7
16	411.2	566.3	-	-	-	521.0	588.9
18	462.0	736.1	-	-	-	668.2	792.8
20	512.8	928.7	-	-	-	804.1	1007.9
24	614.4	1506.2	-	-	-	1279.7	1642.1

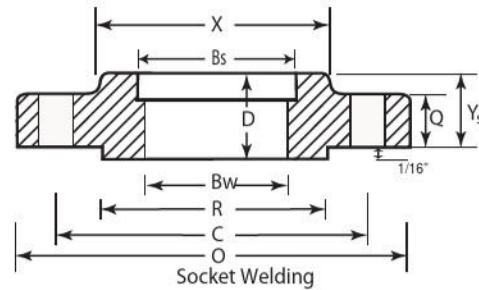
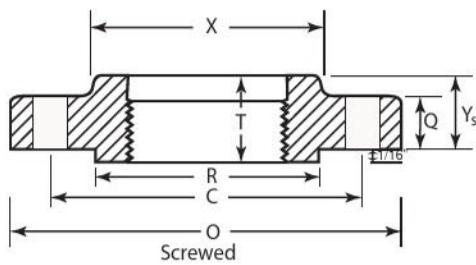
Raised Face ANSI Forged/Cast Steel Flanges CLASS 2500



Unit: mm

Nominal Pipe Size (Inches)	Common Dimensions				Dia. of hub at bevel H	Length thru hub			Dia. of bore		
	Outside dia. of flange	Thickness of flange	Diameter of hub at face	Diameter of raised face		Welding neck	Slip-on, screwed, socket	Lap joint	Welding neck	Slip-on socket	Lap joint
	O	Q	X	R		Y _w	Y _s	Y _L	B _w	B _s	B _L
1/2	133.4	30.2	42.9	34.9	21.3	73.0	39.7	39.7	-	22.4	22.9
3/4	139.7	31.8	50.8	42.9	26.7	79.4	42.9	42.9	-	27.7	28.2
1	158.8	34.9	57.2	50.8	33.5	88.9	47.6	47.6	-	34.5	35.1
1-1/4	184.2	38.1	73.0	63.5	42.2	95.3	52.4	52.4	-	43.2	43.7
1-1/2	203.2	44.5	79.4	73.0	48.3	111.1	60.3	60.3	-	49.5	50.0
2	235.0	50.8	95.3	92.1	60.5	127.0	69.9	69.9	-	62.0	62.5
2-1/2	266.7	57.2	114.3	104.8	73.2	142.9	79.4	79.4	-	74.7	75.4
3	304.8	66.7	133.4	127.0	88.9	168.3	92.1	92.1	-	90.7	91.4
4	355.6	76.2	165.1	157.2	114.3	190.5	108.0	108.0	-	116.1	116.8
5	419.1	85.7	203.2	185.7	141.2	228.6	130.2	130.2	-	143.8	144.5
6	482.6	108.0	235.0	215.9	168.4	273.1	152.4	152.4	-	170.7	171.5
8	552.5	127.0	304.8	269.9	219.2	317.5	177.8	177.8	-	221.5	222.3
10	673.1	165.1	374.7	323.9	273.1	419.1	228.6	228.6	-	276.4	277.4
12	762.0	184.2	441.3	381.0	323.9	463.6	254.0	254.0	-	327.2	328.2

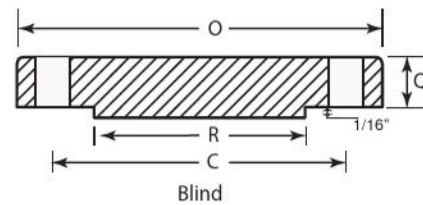
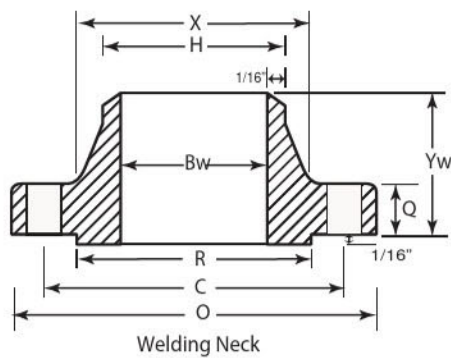
Raised Face ANSI Forged/Cast Steel Flanges CLASS 2500



Unit: mm

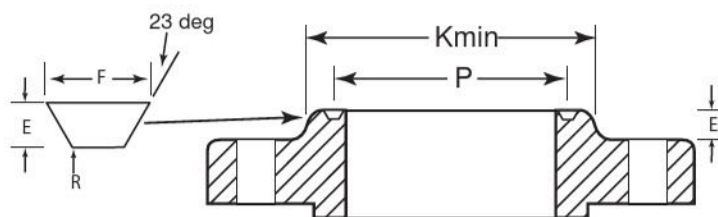
Nominal Pipe Size (Inches)	Radius of fillet <i>r</i>	Minimum thread length <i>T</i>	Depth of socket <i>D</i>	Drilling				Length of bolts		Male and female tongue and groove
				Dia. of bolt circle <i>C</i>	Number of bolts	Diameter of bolts	Diameter of bolt holes	Stud bolts		
								1/4" raised face	Ring joint	
1/2	3.2	28.6	-	82.6	4	19.1	22.2	120.7	120.7	114.3
3/4	3.2	31.8	-	95.3	4	19.1	22.2	120.7	120.7	114.3
1	3.2	34.9	-	108.0	4	22.2	25.4	133.4	133.4	127.0
1-1/4	4.8	38.1	-	130.2	4	25.4	28.6	146.1	152.4	139.7
1-1/2	6.4	44.5	-	146.1	4	25.4	28.6	165.1	161.9	158.8
2	7.9	50.8	-	171.5	8	28.6	31.8	171.5	177.8	165.1
2-1/2	7.9	57.2	-	196.9	8	28.6	31.8	190.5	196.9	184.2
3	9.5	63.5	-	228.6	8	31.8	34.9	215.9	222.3	209.6
4	11.1	69.9	-	273.1	8	38.1	41.3	247.7	260.4	235.0
5	11.1	76.2	-	323.9	8	44.5	47.6	292.1	311.2	285.8
6	12.7	82.6	-	368.3	8	50.8	54.0	342.9	355.6	336.6
8	12.7	95.3	-	438.2	12	50.8	54.0	381.0	393.7	374.7
10	12.7	108.0	-	539.8	12	63.5	66.7	482.6	508.0	476.3
12	12.7	120.7	-	619.1	12	69.9	73.0	533.4	558.8	527.1

Raised Face ANSI Forged/Cast Steel Flanges CLASS 2500



Nominal Pipe Size (inches)	Counter bore screwed flange min. (mm) S	Approximate weights (kg)					
		Welding neck	Slip on	Screwed	Socket welding	Lap joint	Blind
1/2	23.6	3.6	3.2	3.2	-	3.2	3.2
3/4	29.0	4.1	4.1	4.1	-	3.6	4.5
1	35.8	5.9	5.4	5.4	-	5.4	5.4
1-1/4	44.5	9.1	8.2	8.2	-	7.7	8.2
1-1/2	50.5	12.7	11.3	11.3	-	10.9	11.3
2	63.5	19.0	17.2	17.2	-	16.8	17.7
2-1/2	76.2	23.6	24.9	24.9	-	24.0	25.4
3	92.2	42.6	37.6	37.6	-	36.2	39.0
4	117.6	66.1	57.5	57.5	-	55.3	60.2
5	144.5	110.5	95.1	95.1	-	92.4	101.0
6	171.5	171.2	146.3	146.3	-	142.2	156.3
8	222.3	260.9	219.7	219.7	-	213.4	241.4
10	276.4	483.8	419.0	419.0	-	406.3	464.3
12	328.7	728.4	588.9	588.9	-	571.7	663.2

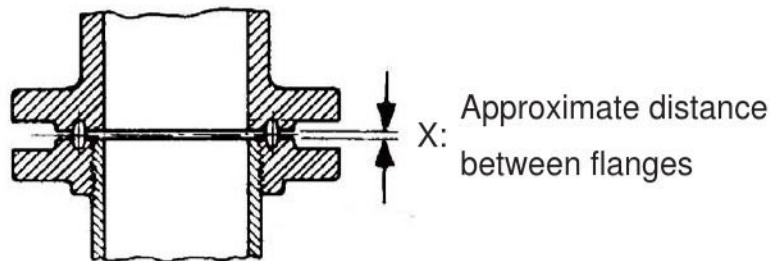
Ring Type Joint ANSI Forged/Cast Steel Flanges CLASS 150 – CLASS 2500



Unit: mm

Nominal Pipe Size (Inches)							Groove number	Groove Dimensions			
CLASS 150	CLASS 300	CLASS 400	CLASS 600	CLASS 900	CLASS 1500	CLASS 2500		Pitch Dia.	Depth	Width	Radius at bottom
								P	E	F	R
-	1/2	1/2	1/2	-	-	-	R11	34.1	5.6	7.1	0.8
-	-	-	-	1/2	1/2	-	12	39.7	6.4	8.7	0.8
-	3/4	3/4	3/4	-	-	1/2	13	42.9	6.4	8.7	0.8
-	-	-	-	3/4	3/4	-	14	44.5	6.4	8.7	0.8
1	-	-	-	-	-	-	15	47.6	6.4	8.7	0.8
-	1	1	1	1	1	3/4	16	50.8	6.4	8.7	0.8
1-1/4	-	-	-	-	-	-	17	57.2	6.4	8.7	0.8
-	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1	18	60.3	6.4	8.7	0.8
1-1/2	-	-	-	-	-	-	19	65.1	6.4	8.7	0.8
-	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	20	68.3	6.4	8.7	0.8
-	-	-	-	-	-	1-1/4	21	72.2	7.9	11.9	0.8
2	-	-	-	-	-	-	22	82.6	6.4	8.7	0.8
-	2	2	2	-	-	1-1/2	23	82.6	7.9	11.9	0.8
-	-	-	-	2	2	-	24	95.3	7.9	11.9	0.8
2-1/2	-	-	-	-	-	-	25	101.6	6.4	8.7	0.8
-	2-1/2	2-1/2	2-1/2	-	-	2	26	101.6	7.9	11.9	0.8
-	-	-	-	2-1/2	2-1/2	-	27	108	7.9	11.9	0.8
-	-	-	-	-	-	2-1/2	28	111.1	9.5	13.5	0.8
3	-	-	-	-	-	-	29	114.3	6.4	8.7	0.8
-	-	-	-	-	-	-	30	117.5	7.9	11.9	0.8
-	3	3	3	3	-	-	31	123.8	7.9	11.9	0.8
-	-	-	-	-	-	3	32	127	9.5	13.5	1.6
3-1/2	-	-	-	-	-	-	33	131.8	6.4	8.7	0.8
-	3-1/2	3-1/2	3-1/2	3-1/2	-	-	34	131.8	7.9	11.9	0.8
-	-	-	-	-	3	-	35	136.5	7.9	11.9	0.8
4	-	-	-	-	-	-	36	149.2	6.4	8.7	0.8
-	4	4	4	4	-	-	37	149.2	7.9	11.9	0.8
-	-	-	-	-	-	4	38	157.2	11.1	16.7	1.6
-	-	-	-	-	4	-	39	161.9	7.9	11.9	0.8
5	-	-	-	-	-	-	40	171.5	6.4	8.7	0.8
-	5	5	5	5	-	-	41	181	7.9	11.9	0.8
-	-	-	-	-	-	5	42	190.5	12.7	19.8	1.6
6	-	-	-	-	-	-	43	193.7	6.4	8.7	0.8
-	-	-	-	-	5	-	44	193.7	7.9	11.9	0.8
-	6	6	6	6	-	-	45	211.1	4.8	11.9	0.8

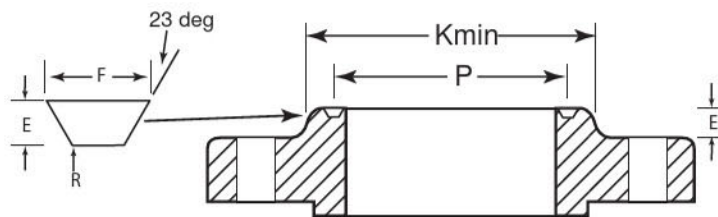
Ring Type Joint ANSI Forged/Cast Steel Flanges CLASS 150 – CLASS 2500



Unit: mm

CLASS 150		CLASS 150 / CLASS 400 / CLASS 600				CLASS 900		CLASS 1500		CLASS 2500	
Raised face diameter	Space between flanges	Raised face diameter	Space between flanges			Raised face diameter	Space between flanges	Raised face diameter	Space between flanges	Raised face diameter	Space between flanges
			CLASS 300	CLASS 400	CLASS 600						
K	X	K	X	X	X	K	X	K	X	K	X
-	-	50.8	3.2	3.2	3.2	-	-	-	-	-	-
-	-	-	-	-	-	60.3	4	60.3	4	-	-
-	-	63.5	2.4	2.4	2.4	-	-	-	-	65	4
-	-	-	-	-	-	66.7	4	66.7	4	-	-
63.5	4	-	-	-	-	-	-	-	-	-	-
-	-	69.9	4	4	4	71.4	4	71.4	4	73	4
73	4	-	-	-	-	-	-	-	-	-	-
-	-	79.4	4	4	4	81	4	81	4	82.5	4
82.6	4	-	-	-	-	-	-	-	-	-	-
-	-	90.5	4	4	4	92.1	4	98.4	4	-	-
-	-	-	-	-	-	-	-	-	-	101.6	3.2
101.6	4	-	-	-	-	-	-	-	-	-	-
-	-	108	5.6	5.6	5.6	-	-	-	-	114.3	3.2
-	-	-	-	-	-	123.8	-	123.8	3.2	-	-
120.7	4	-	-	-	-	-	3.2	-	-	-	-
-	-	127	5.6	5.6	5.6	-	-	-	-	133.3	3.2
-	-	-	-	-	-	136.5	3.2	136.5	3.2	-	-
-	-	-	-	-	-	-	-	-	-	149.2	3.2
133.4	4	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	146	5.5	5.5	5.5	155.6	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	168.3	3.2
154	4	-	-	-	-	-	-	-	-	-	-
-	-	158.8	5.5	5.5	5.5	-	-	-	-	-	-
-	-	-	-	-	-	-	-	168.3	3.2	-	-
171.5	4	-	-	-	-	-	-	-	-	-	-
-	-	174.6	5.5	5.5	5.5	181	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	203.2	4
-	-	-	-	-	-	-	-	193.7	3.2	-	-
193.7	4	-	-	-	-	-	-	-	-	-	-
-	-	209.6	5.5	5.5	5.5	215.9	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	241.3	4
219.1	4	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	228.6	3.2	-	-
-	-	241.3	5.5	5.5	5.5	241.3	4	-	-	-	-

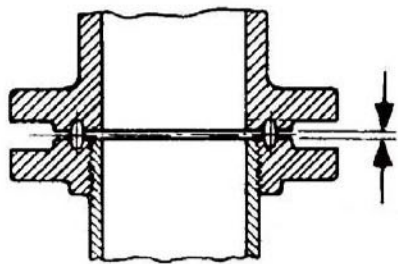
Ring Type Joint ANSI Forged/Cast Steel Flanges CLASS 150 – CLASS 2500



Unit: mm

Nominal Pipe Size (Inches)							Groove number	Groove Dimensions			
CLASS 150	CLASS 300	CLASS 400	CLASS 600	CLASS 900	CLASS 1500	CLASS 2500		Pitch Dia.	Depth	Width	Radius at bottom
								P	E	F	R
-	-	-	-	-	6	-	R46	211.1	9.5	12.7	1.6
-	-	-	-	-	-	6	47	228.6	12.7	19.8	1.6
8	-	-	-	-	-	-	48	247.7	6.4	8.6	0.8
-	8	8	8	8	-	-	49	269.9	7.9	11.9	0.8
-	-	-	-	-	8	-	50	269.9	11.1	16.7	1.6
-	-	-	-	-	-	8	51	279.4	14.3	22.9	1.6
10	-	-	-	-	-	-	52	304.8	6.4	8.6	0.8
-	10	10	10	10	-	-	53	323.9	7.9	11.9	0.8
-	-	-	-	-	10	-	54	323.9	11.1	16.7	1.6
-	-	-	-	-	-	10	55	342.9	17.5	20.6	2.4
12	-	-	-	-	-	-	56	381	6.4	8.6	0.8
-	12	12	12	12	-	-	57	381	7.9	11.9	0.8
-	-	-	-	-	12	-	58	381	14.3	22.9	1.6
14	-	-	-	-	-	-	59	396.9	6.4	8.6	0.8
-	-	-	-	-	-	12	60	406.4	17.5	33.3	2.4
-	14	14	14	-	-	-	61	419.1	7.9	11.9	0.8
-	-	-	-	14	-	-	62	419.1	11.1	16.7	1.6
-	-	-	-	-	14	-	63	419.1	15.9	27	2.4
16	-	-	-	-	-	-	64	454	6.4	8.6	0.8
-	16	16	16	-	-	-	65	469.9	7.9	11.9	0.8
-	-	-	-	16	-	-	66	469.9	11.1	16.7	1.6
-	-	-	-	-	16	-	67	469.9	17.5	30.2	2.4
18	-	-	-	-	-	-	68	517.5	6.4	8.6	0.8
-	18	18	18	-	-	-	69	533.4	7.9	11.9	0.8
-	-	-	-	18	-	-	70	533.4	12.7	19.8	1.6
-	-	-	-	-	18	-	71	533.4	17.5	30.2	2.4
20	-	-	-	-	-	-	72	558.8	6.4	8.7	0.8
-	20	20	20	-	-	-	73	584.2	9.5	13.5	1.6
-	-	-	-	20	-	-	74	584.2	12.7	19.8	1.6
-	-	-	-	-	20	-	75	584.2	17.5	33.3	2.4
24	-	-	-	-	-	-	76	673.1	6.4	8.7	0.8
-	24	24	24	-	-	-	77	692.2	11.1	16.7	1.6
-	-	-	-	24	-	-	78	692.2	15.9	27	2.4
-	-	-	-	-	24	-	79	692.2	20.6	27	2.4

Ring Type Joint ANSI Forged/Cast Steel Flanges CLASS 150 – CLASS 2500

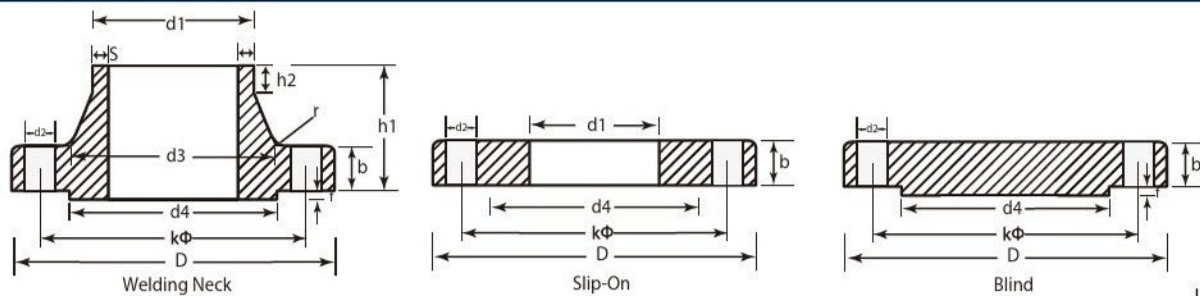


X: Approximate distance
between flanges

Unit: mm

CLASS 150		CLASS 150 / CLASS 400 / CLASS 600				CLASS 900		CLASS 1500		CLASS 2500	
Raised face diameter	Space between flanges	Raised face diameter	Space between flanges			Raised face diameter	Space between flanges	Raised face diameter	Space between flanges	Raised face diameter	Space between flanges
			CLASS 300	CLASS 400	CLASS 600						
K	X	K	X	X	X	K	X	K	X	K	X
-	-	-	-	-	-	-	-	247.7	3.2	-	-
-	-	-	-	-	-	-	-	-	-	279.4	4
273.1	0.15625	-	-	-	-	-	-	-	-	-	-
-	-	11.875	5.5	5.5	4.7	308	4	-	-	-	-
-	-	-	-	-	-	-	-	317.5	2.4	-	-
330.2	0.15625	-	-	-	-	-	-	-	-	337.2	4.8
-	-	14	5.5	5.5	4.7	362	4	-	-	-	-
-	-	-	-	-	-	-	-	377.8	4	-	-
-	-	-	-	-	-	-	-	-	-	425.5	6.4
406.4	0.15625	-	-	-	-	-	-	-	-	-	-
-	-	16.25	5.5	5.5	4.7	412.8	4	-	-	-	-
425.5	0.125	-	-	-	-	-	-	438.2	4.8	-	-
-	-	-	-	-	-	-	-	-	-	495.3	7.9
-	-	18	5.5	5.5	4.7	-	-	-	-	-	-
-	-	-	-	-	-	466.7	4	-	-	-	-
482.6	0.125	-	-	-	-	-	-	489	5.6	-	-
-	-	20	5.5	5.5	4.7	-	-	-	-	-	-
-	-	-	-	-	-	523.9	4	-	-	-	-
-	-	-	-	-	-	-	-	546.1	7.9	-	-
546.1	0.125	-	-	-	-	-	-	-	-	-	-
-	-	22.625	5.5	5.5	4.7	-	-	-	-	-	-
-	-	-	-	-	-	593.7	4.8	-	-	-	-
-	-	-	-	-	-	-	-	612.8	7.9	-	-
596.9	0.125	-	-	-	-	-	-	-	-	-	-
-	-	25	5.5	5.5	4.7	-	-	-	-	-	-
-	-	-	-	-	-	647.7	4.8	-	-	-	-
711.2	0.125	-	-	-	-	-	-	673.1	9.5	-	-
-	-	29.5	5.5	5.5	4.7	-	-	-	-	-	-
-	-	-	-	-	-	777.9	5.6	-	-	-	-
-	-	-	-	-	-	-	-	793.8	11.1	-	-

DIN 2631 Welding Neck Flanges
DIN 2573 Slip-on Flanges
DIN 2527 Blind Flanges
Nominal Pressure 6

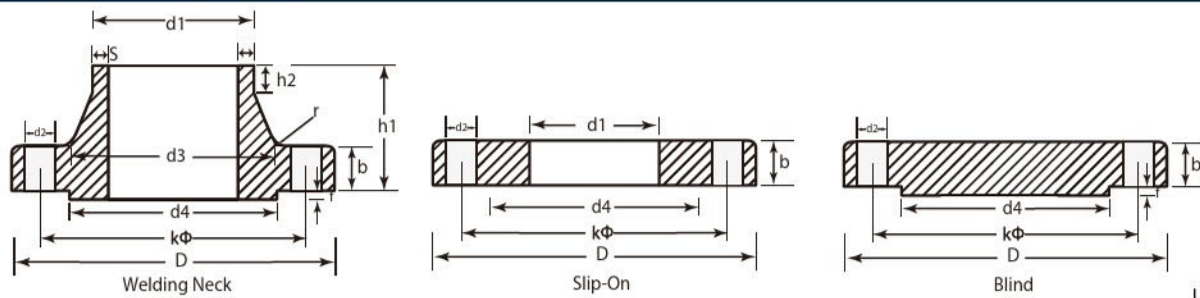


Unit: mm

Pipe		Flange					Neck				Raised Face		Bolts			Arropx. Weight (kg)				
DN	d ₁ DIN (ISO)*	D	b			k	h ₁	d ₅ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂	Weld- ing Nack	Slip- on	Blind	
			Welding Nack	Slip-on	Blind															
10	14 (17.2)	75	12	12	12	50	28	22 (26)	1.8	4	6	35	2	4	M10	-	11.5	0.34	0.36	0.33
15	20 (21.3)	80	12	12	12	55	30	28 (30)	2	4	6	40	2	4	M10	-	11.5	0.39	0.41	0.38
20	25 (26.9)	90	14	14	14	65	32	35 (38)	2.3	4	6	50	2	4	M10	-	11.5	0.59	0.60	0.59
25	30 (33.7)	100	14	14	14	75	35	40 (42)	2.6	4	6	60	2	4	M10	-	11.5	0.75	0.74	0.74
32	38 (42.4)	120	14	16	14	90	35	50 (55)	2.6	6	6	70	2	4	M12	1/2"	14	1.05	1.19	1.07
40	44.5 (48.3)	130	14	16	14	100	38	58 (62)	2.6	6	7	80	3	4	M12	1/2"	14	1.18	1.39	1.21
50	57 (60.3)	140	14	16	14	110	38	70 (74)	2.9	6	8	90	3	4	M12	1/2"	14	1.34	1.53	1.43
65	76.1	160	14	16	14	130	38	88	2.9	6	9	110	3	4	M12	1/2"	14	1.67	1.89	2.21
80	88.9	190	16	18	16	150	42	102	3.2	8	10	128	3	4	M16	5/8"	18	2.71	2.98	3.09
100	108 (114)	210	16	18	16	170	45	122 (130)	3.6	8	10	148	3	4	M16	5/8"	18	3.24	3.46	4.37
125	133 (139)	240	18	20	18	200	48	148 (155)	4	8	10	178	3	8	M16	5/8"	18	4.49	4.60	5.68
150	159 (168)	265	18	20	18	225	48	172 (184)	4.5	10	12	202	3	8	M16	5/8"	18	5.15	5.22	7.02
200	216 (219)	320	20	22	20	280	55	230 (236)	5.9	10	15	258	3	8	M16	5/8"	18	7.78	7.15	11.7
250	267 (273)	375	22	24	22	335	60	282 (290)	6.3	12	15	312	3	12	M16	5/8"	18	10.8	9.61	17.6
300	318 (323)	440	22	24	22	395	62	335 (342)	7.1	12	15	365	4	12	M20	3/4"	23	14.0	12.6	24.0
350	368 (355)	490	22	26	22	445	62	385	7.1	12	15	415	4	12	M29	3/4"	23	16.5	15.6	30.1
400	419 (406)	540	22	26	22	495	65	438	7.1	12	15	465	4	16	M20	3/4"	23	18.7	18.4	36.4
500	521 (508)	645	24	30	24	600	68	538	7.1	12	15	570	4	20	M20	3/4"	23	28.6	24.5	58.1
600	622 (609)	755	24	-	-	705	70	640	7.1	12	16	670	5	20	M24	7/8"	27	31.5	-	-

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.

DIN 2632 Welding Neck Flanges
DIN 2576 Slip-on Flanges
DIN 2527 Blind Flanges
Nominal Pressure 10

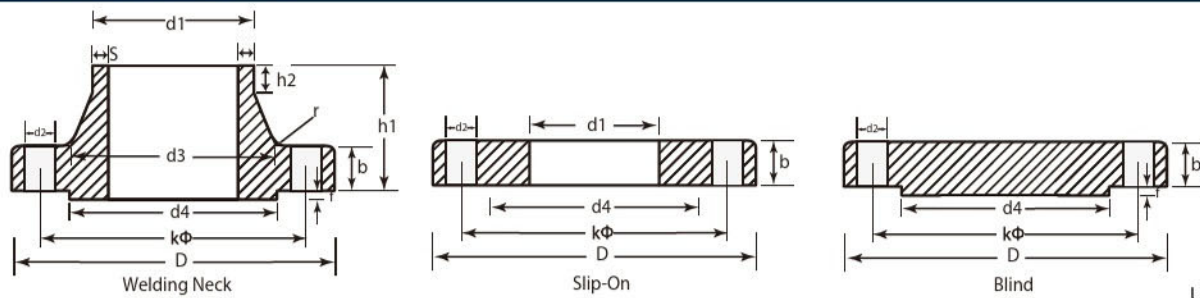


Unit: mm

Pipe		Flange					Neck				Raised Face		Bolts			Arropx. Weight (kg)			
DN	d ₁ DIN (ISO)*	D	b			k	h ₁	d ₃ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂	Weld-Ing Neck	Slip-on	Blind
10	14 (17.2)	90	14	14	14	60	35	25 (28)	1.8	4	6	40	2	4	M12 1/2"	14	0.58	0.61	0.56
15	20 (21.3)	95	14	14	14	65	35	30 (32)	2	4	6	45	2	4	M12 1/2"	14	0.65	0.68	0.64
20	25 (26.9)	105	16	16	16	75	38	38 (40)	2.3	4	6	58	2	4	M12 1/2"	14	0.95	0.95	0.93
25	30 (33.7)	115	16	16	16	85	38	42 (45)	2.6	4	6	68	2	4	M12 1/2"	14	1.14	1.14	1.13
32	38 (42.4)	140	16	16	16	100	40	52 (56)	2.6	6	6	78	2	4	M16 5/8"	18	1.69	1.66	1.66
40	44.5 (48.3)	150	16	16	16	110	42	60 (64)	2.6	6	7	88	3	4	M16 5/8"	18	1.86	1.89	1.85
50	57 (60.3)	165	18	18	18	125	45	72 (75)	2.9	6	8	102	3	4	M16 5/8"	18	2.53	2.51	2.59
65	76.1	185	18	18	18	145	45	90	2.9	6	10	122	3	4	M16 5/8"	18	3.06	3.00	3.33
80	88.9	200	20	20	20	160	50	105	3.2	8	10	138	3	8	M16 5/8"	18	3.70	3.79	4.34
100	108 (114)	220	20	20	20	180	52	125 (131)	3.6	8	12	158	3	8	M16 5/8"	18	4.62	4.20	5.26
125	133 (139)	250	22	22	22	210	55	150 (156)	4	8	12	188	3	8	M16 5/8"	18	6.30	5.71	7.67
150	159 (168)	285	22	22	22	240	55	175 (184)	4.5	10	12	212	3	8	M20 3/4"	23	7.75	6.72	9.85
200	216 (219)	340	24	24	24	295	62	235	5.9	10	16	268	3	8	M20 3/4"	23	11.3	9.50	15.6
250	267 (273)	395	26	26	26	350	68	285 (292)	6.3	12	16	320	3	12	M20 3/4"	23	14.7	12.5	23.1
300	318 (323)	445	26	26	28	400	68	344	7.1	12	16	370	4	12	M20 3/4"	23	17.6	14.4	29.4
350	368 (355)	505	26	28	30	460	68	385	7.1	12	16	430	4	16	M20 3/4"	23	21.4 23.4	20.6	38.0
400	419 (406)	565	26	32	32	515	72	440	7.1	12	16	482	4	16	M24 7/8"	27	26.1 28.7	27.9	47.5
500	521 (508)	670	28	38	34	620	75	542	7.1	12	16	585	4	20	M24 7/8"	27	38	41.1	72.7
600	622 (609)	780	28	-	-	725	80	642	7.1	12	18	685	5	20	M27 1"	30	44.2	-	-

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.

DIN 2633 Welding Neck Flanges
DIN 2543 Slip-on Flanges
DIN 2527 Blind Flanges
Nominal Pressure 16

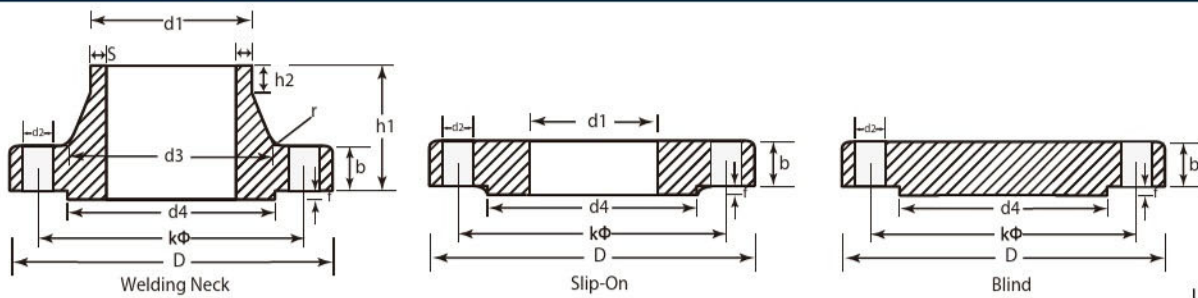


Unit: mm

Pipe		Flange				Neck				Raised Face		Bolts			Arropx. Weight (kg)					
DN	d ₁ DIN (ISO)*	D	b			k	h ₁	d ₃ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂	Weld- ing Nack	Slip- on	Blind	
			Welding Nack	Slip-on	Blind															
10	14 (17.2)	90	14	-	14	60	35	25 (28)	1.8	4	6	40	2	4	M12	1/2"	14	0.58	0.63	0.56
15	20 (21.3)	95	14	14	14	65	35	30 (32)	2	4	6	45	2	4	M12	1/2"	14	0.65	0.72	0.64
20	25 (26.9)	105	16	16	16	75	38	38 (40)	2.3	4	6	58	2	4	M12	1/2"	14	0.95	1.01	0.93
25	30 (33.7)	115	16	16	16	85	38	42 (45)	2.6	4	6	68	2	4	M12	1/2"	14	1.14	1.23	1.13
32	38 (42.4)	140	16	16	16	100	40	52 (56)	2.6	6	6	78	2	4	M16	5/8"	18	1.69	1.80	1.66
40	44.5 (48.3)	150	16	16	16	110	42	60 (64)	2.6	6	7	88	3	4	M16	5/8"	18	1.86	2.09	1.85
50	57 (60.3)	165	18	18	18	125	45	72 (75)	2.9	6	8	102	3	4	M16	5/8"	18	2.53	2.88	2.59
65	76.1	185	18	18	18	145	45	90	2.9	6	10	122	3	4	M16	5/8"	18	3.06	3.66	3.33
80	88.9	200	20	20	20	160	50	105	3.2	8	10	138	3	8	M16	5/8"	18	3.70	4.77	4.34
100	108 (114)	220	20	20	20	180	52	125 (131)	3.6	8	12	158	3	8	M16	5/8"	18	4.62	5.65	5.26
125	133 (139)	250	22	22	22	210	55	150 (156)	4	8	12	188	3	8	M16	5/8"	18	6.30	8.42	7.67
150	159 (168)	285	22	22	22	240	55	175 (184)	4.5	10	12	212	3	8	M20	3/4"	23	7.75	10.4	9.85
200	216 (219)	340	24	24	24	295	62	235	5.9	10	16	268	3	12	M20	3/4"	23	11.0	16.1	15.6
250	267 (273)	405	26	26	26	355	70	285 (292)	6.3	12	16	320	3	12	M24	7/8"	27	15.6	24.9	23.9
300	318 (323)	460	28	28	28	410	78	344	7.1	12	16	378	4	12	M24	7/8"	27	22.0	35.1	33.6
350	368 (355)	520	30	30	30	470	82	390	8	12	16	438	4	16	M24	7/8"	27	28.7 31.0	47.8	46.2
400	419 (406)	580	32	32	32	525	85	445	8	12	16	490	4	16	M27	1"	30	36.3 39.3	63.5	61.5
500	521 (508)	715	34	36	34	650	90	548	8	12	16	610	4	20	M30	1-1/8"	33	61.0	102.0	99.5
600	622 (609)	840	36	40	--	770	95	652	8	12	18	725	5	20	M33	1-1/4"	36	75.4	-	-

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.

DIN 2634 Welding Neck Flanges
DIN 2544 Slip-on Flanges
DIN 2527 Blind Flanges
Nominal Pressure 25

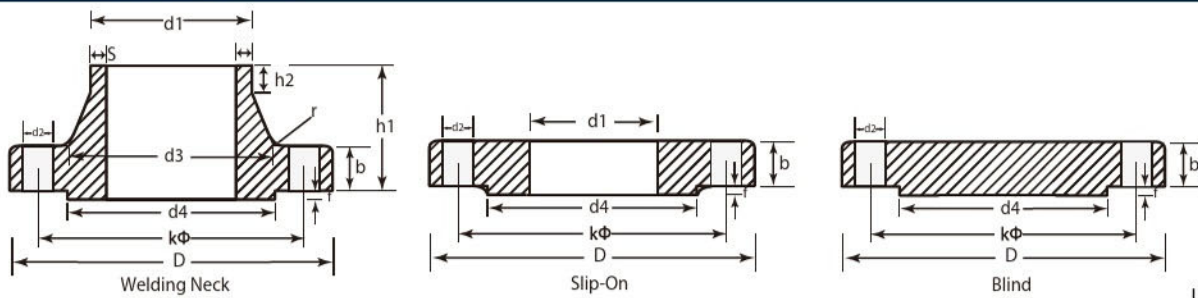


Unit: mm

Pipe DN	d ₁ DIN (ISO)*	Flange			k	h ₁	Neck			Raised Face		Bolts			Arropx. Weight (kg)					
		D	b				d ₃ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂	Weld- ing Nack	Slip- on	Blind		
10	14 (17.2)	90	16	-	16	60	35	25 (28)	1.8	4	6	40	2	4	M12	1/2"	14	0.66	0.72	0.62
15	20 (21.3)	95	16	16	16	65	38	30 (32)	2	4	6	45	2	4	M12	1/2"	14	0.76	0.81	0.74
20	25 (26.9)	105	18	18	18	75	40	38 (40)	2.3	4	6	58	2	4	M12	1/2"	14	1.06	1.24	1.05
25	30 (33.7)	115	18	18	18	85	40	42 (45)	2.6	4	6	68	2	4	M12	1/2"	14	1.3	1.38	1.31
32	38 (42.4)	140	18	18	18	100	42	52 (56)	2.6	6	6	78	2	4	M16	5/8"	18	1.88	2.03	1.82
40	44.5 (48.3)	150	18	18	18	110	45	60 (64)	2.6	6	7	88	3	4	M16	5/8"	18	2.33	2.35	2.11
50	57 (60.3)	165	20	20	20	125	48	72 (75)	2.9	6	8	102	3	4	M16	5/8"	18	2.82	3.20	2.91
65	76.1	185	22	22	22	145	52	90	2.9	6	10	122	3	8	M16	5/8"	18	3.74	4.29	4.13
80	88.9	200	24	24	24	160	58	105	3.2	8	12	138	3	8	M16	5/8"	18	4.75	5.88	5.21
100	108 (114)	235	24	24	24	190	65	128 (134)	3.6	8	12	162	3	8	M20	3/4"	23	6.52	7.54	7.08
125	133 (139)	270	26	26	26	220	68	155 (162)	4	8	12	188	3	8	M24	7/8"	27	9.07	10.8	10.4
150	159 (168)	300	28	28	28	250	75	182 (192)	4.5	10	12	218	3	8	M24	7/8"	27	11.8	14.5	13.9
200	216 (219)	360	30	30	30	310	80	244	6.3	10	16	278	3	12	M24	7/8"	27	17	22.3	21.5
250	267 (273)	425	32	32	32	370	88	292 (298)	7.1	12	18	335	3	12	M27	1"	30	24.4	33.5	32.5
300	318 (323)	485	34	34	34	430	92	352	8	12	18	395	4	16	M27	1"	30	31.2	46.3	44.7
350	368 (355)	555	38	38	38	490	100	398	8	12	20	450	4	16	M30	1-1/8"	33	44.2 47.2	68.0	65.9
400	419 (406)	620	40	40	40	550	110	452	8.8	12	20	505	4	16	M33	1-1/4"	36	58 62	89.7	87.0
500	521 (508)	730	44	44	44	660	125	558	10	12	20	615	4	20	M33	1-1/4"	36	89.6	138	134

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.

DIN 2635 Welding Neck Flanges
DIN 2545 Slip-on Flanges
DIN 2527 Blind Flanges
Nominal Pressure 40

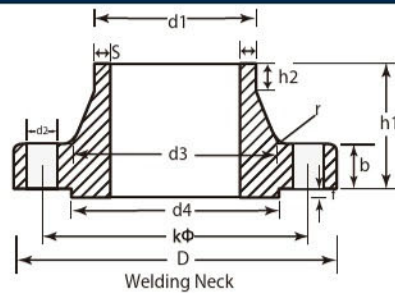


Unit: mm

Pipe		Flange					Neck				Raised Face		Bolts			Approx. Weight (kg)			
DN	d ₁ DIN (ISO)*	D	b			k	h ₁	d ₅ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂	Weld- ing Nack	Slip- on	Blind
10	14 (17.2)	90	16	-	16	60	35	25 (28)	1.8	4	6	40	2	4	M12 1/2"	14	0.66	0.72	0.62
15	20 (21.3)	95	16	16	16	65	38	30 (32)	2	4	6	45	2	4	M12 1/2"	14	0.76	0.81	0.74
20	25 (26.9)	105	18	18	18	75	40	38 (40)	2.3	4	6	58	2	4	M12 1/2"	14	1.06	1.24	1.05
25	30 (33.7)	115	18	18	18	85	40	42 (45)	2.6	4	6	68	2	4	M12 1/2"	14	1.3	1.38	1.31
32	38 (42.4)	140	18	18	18	100	42	52 (56)	2.6	6	6	78	2	4	M16 5/8"	18	1.88	2.03	1.82
40	44.5 (48.3)	150	18	18	18	110	45	60 (64)	2.6	6	7	88	3	4	M16 5/8"	18	2.33	2.35	2.11
50	57 (60.3)	165	20	20	20	125	48	72 (75)	2.9	6	8	102	3	4	M16 5/8"	18	2.82	3.20	2.91
65	76.1	185	22	22	22	145	52	90	2.9	6	10	122	3	8	M16 5/8"	18	3.74	4.29	4.13
80	88.9	200	24	24	24	160	58	105	3.2	8	12	138	3	8	M16 5/8"	18	4.75	5.88	5.21
100	108 (114)	235	24	24	24	190	65	128 (134)	3.6	8	12	162	3	8	M20 3/4"	23	6.52	7.54	7.08
125	133 (139)	270	26	26	26	220	68	155 (162)	4	8	12	188	3	8	M24 7/8"	27	9.07	10.8	10.4
150	159 (168)	300	28	28	28	250	75	182 (192)	4.5	10	12	218	3	8	M24 7/8"	27	11.8	14.5	13.9
200	216 (219)	375	34	34	34	320	88	244	6.3	10	16	285	3	12	M27 1"	30	21.5	27.2	26.2
250	267 (273)	450	38	38	38	385	105	298 (306)	7.1	12	18	345	3	12	M30 1-1/8"	33	34.9	43.8	43.1
300	318 (323)	515	42	42	42	450	115	362	8	12	18	410	4	16	M30 1-1/8"	33	49.7	63.3	62.2
350	368 (355)	580	46	46	46	510	125	408	8.8	12	20	460	4	16	M33 1-1/4"	36	68.1	89.5	87.2
400	419 (406)	660	50	50	50	585	135	462	11	12	20	535	4	16	M36 1-3/8"	39	99.7	127	124
500	521 (508)	755	52	52	52	670	140	562	14.2	12	20	615	4	20	M39 1-3/8"	42	117	172	168

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.

DIN 2636 Welding Neck Flanges Nominal Pressure 64

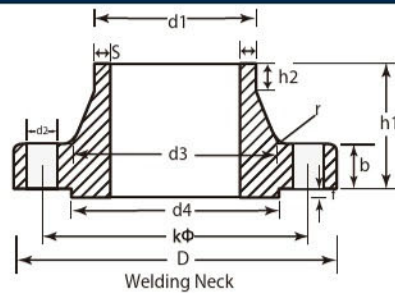


Unit: mm

Pipe		Flange				Neck				Raised face		Bolts			Arropx. Weight (kg)	
DN	d ₁ DIN (ISO)*	D	b	k	h ₁	d ₃ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂		
10 to 40		See DIN 2637. Rated pressure 100														
50	57 (60.3)	180	26	135	62	78 (82)	2.9	6	10	102	3	4	M20	3/4"	22	4.5
65	76.1	205	26	160	68	98	3.2	6	12	122	3	8	M20	3/4"	22	5.7
80	88.9	215	28	170	72	112	3.6	8	12	138	3	8	M20	3/4"	22	6.7
100	108 (114.3)	250	30	200	78	132 (138)	4	8	12	162	3	8	M24	7/8"	26	9.6
125	133 (139.7)	295	34	240	88	162 (168)	4.5	8	12	188	3	8	M27	1"	30	15.1
150	159 (168.3)	345	36	280	95	192 (202)	5.6	10	12	215	3	8	M30	1-1/8"	33	21.9
175	193.7 (219.1)	375 415	40 42	310 345	105 110	228 (256)	6.3 7.1	10	16	260 285	3	12	M30	1-1/8"	33	23.7 35
250	267 (273)	470	46	400	125	310 (316)	8.8	12	18	345	3	12	M33	1-1/4"	36	49.6
300	323.9	530	52	460	140	372	11	12	18	410	4	16	M33	1-1/4"	36	68.7
350	368 (355.6)	600	56	525	150	420	12.5	12	20	465	4	16	M36	1-3/8"	39	94.6
400	419 (406.4)	670	60	585	160	475	14.2	12	20	535	4	16	M39	1-1/2"	42	124

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.

DIN 2637 Welding Neck Flanges Nominal Pressure 100

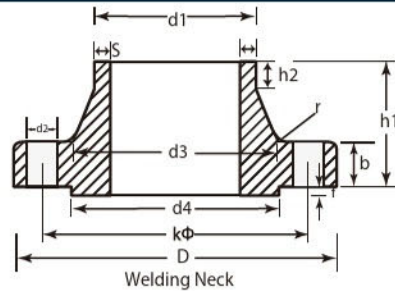


Unit: mm

Pipe		Flange				Neck				Raised face		Bolts			Arropx. Weight (kg)	
DN	d ₁ DIN (ISO)*	D	b	k	h ₁	d ₃ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂		
10	14 (17.2)	100	20	70	45	28 (32)	1.8	4	6	40	2	4	M12	1/2"	14	1.1
15	20 (21.3)	105	20	75	45	32 (34)	2	4	6	45	2	4	M12	1/2"	14	1.2
25	30 (33.7)	140	24	100	58	48 (52)	2.6	4	8	65	2	4	M16	5/8"	18	2.7
32	38 (42.4)	155	24	110	60	58 (62)	2.6	6	8	75	2	4	M20	3/4"	23	3.2
40	44.5 (48.3)	170	26	125	62	65 (70)	2.9	6	10	85	3	4	M20	3/4"	23	4.1
50	57 (60.3)	195	28	145	68	86 (90)	3.2	6	10	95	3	4	M24	7/8"	27	6
65	76.1	220	30	170	76	108	3.6	6	12	120	3	8	M24	7/8"	27	7.9
80	88.9	230	32	180	78	120	4	8	12	138	3	8	M24	7/8"	27	8.9
100	108 (114.3)	265	36	210	90	145 (150)	5	8	12	162	3	8	M27	1"	30	13.7
125	133 (139.7)	315	40	250	105	180	6.3	8	12	185	3	8	M30	1-1/8"	33	22.7
150	159 (168.3)	355	44	290	115	210	7.1	10	12	215	3	12	M30	1-1/8"	33	30.2
175	193.7	385	48	320	127	245	8.8	10	16	260	3	12	M30	1-1/8"	33	38.9
200	219.1	430	52	360	130	278	10	10	16	280	3	12	M33	1-1/4"	36	52.8
250	267 (273)	505	60	430	157	340	12.5	12	18	340	3	12	M36	1-3/8"	39	81.4
300	323.9	585	68	500	170	400	14.2	12	18	410	4	16	M39	1-1/2"	42	122
350	368 (355.6)	655	74	560	189	460	16	12	20	465	4	16	M45	1-3/4"	48	165

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.

DIN 2638 Welding Neck Flanges Nominal Pressure 160



Unit: mm

Pipe		Flange				Neck				Raised face		Bolts			Arropx. Weight (kg)	
DN	d ₁ DIN (ISO)*	D	b	k	h ₁	d ₃ DIN (ISO)	s	r	h ₂	d ₄	f	#	Dia. of Bolt	d ₂		
10	14 (17.2)	125	24	85	58	44	2.6	4	6	40	2	4	M16	5/8"	18	2.1
15	20 (21.3)	130	26	90	60	48	2.6	4	6	45	2	4	M16	5/8"	18	2.5
25	30 (33.7)	150	28	105	65	60	3.6	4	8	68	2	4	M20	3/4"	18	3.5
40	44.5 (48.3)	185	34	135	80	84	5	6	10	88	3	4	M24	7/8"	26	6.5
50	57 (60.3)	200	38	150	85	95	6.3	6	10	102	3	8	M24	7/8"	26	7.9
65	76.1	230	42	180	95	124	8	6	12	122	3	8	M24	7/8"	26	12
80	101.6	255	46	200	102	136	11	8	12	138	3	8	M27	1"	30	16
100	127	300	54	235	120	164	14.2	8	14	162	3	8	M30	1-1/8"	33	26.3
125	152.4	340	60	275	140	200	16	8	16	188	3	12	M30	1-1/8"	33	37.8
150	177.8	390	68	320	160	240	17.5	10	18	218	3	12	M33	1-1/4"	36	58
200	244.5	485	82	400	190	305	25	10	25	285	3	12	M39	1-1/2"	42	105
250	298.5	585	100	490	215	385	32	12	30	345	3	16	M45	2-1/8"	48	182

* NOTE: Outside diameter of pipe complies with ISO recommendation R64.