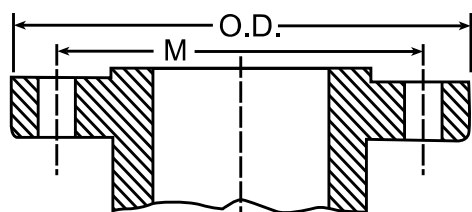


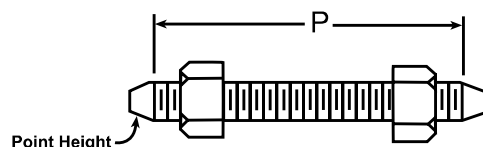
CLASS 1500 STEEL PIPE FLANGES



For Ring Type Joint Facing Dimension information see page 152.



Flange



Stud Bolt

Bolting Pattern and Bolt Lengths								
Pipe Size	Outside Diameter	Drilling				Length of Bolts		
		Diameter of Bolt Circle	Diameter of Bolt Holes	Number of Bolt Holes	Diameter of Bolts	Raised Face 0.25 in.	Male & Female / Tongue & Groove	Ring Joint
	O.D.	M				P	P	P

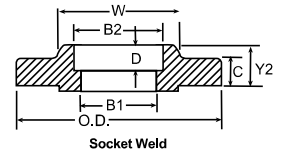
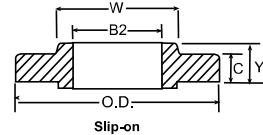
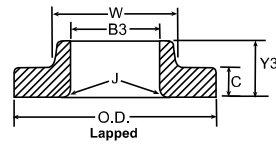
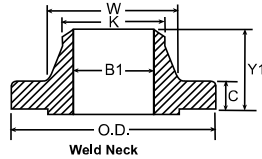
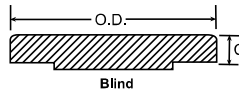
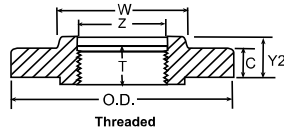
ASME B16.5

1/2	4.75	3.25	7/8	4	3/4	4.25	4.00	4.25
3/4	5.12	3.50	7/8	4	3/4	4.50	4.25	4.50
1	5.88	4.00	1	4	7/8	5.00	4.75	5.00
1 1/4	6.25	4.38	1	4	7/8	5.00	4.75	5.00
1 1/2	7.00	4.88	1 1/8	4	1	5.50	5.25	5.50
2	8.50	6.50	1	8	7/8	5.75	5.50	5.75
2 1/2	9.62	7.50	1 1/8	8	1	6.25	6.00	6.25
3	10.50	8.00	1 1/4	8	1 1/8	7.00	6.75	7.00
4	12.25	9.50	1 3/8	8	1 1/4	7.75	7.50	7.75
5	14.75	11.50	1 5/8	8	1 1/2	9.75	9.50	9.75
6	15.50	12.50	1 1/2	12	1 3/8	10.25	10.00	10.50
8	19.00	15.50	1 3/4	12	1 5/8	11.50	11.25	11.75
10	23.00	19.00	2	12	1 7/8	13.25	13.00	13.50
12	26.50	22.50	2 1/8	16	2	14.75	14.50	15.25
14	29.50	25.00	2 3/8	16	2 1/4	16.00	15.75	16.75
16	32.50	27.75	2 5/8	16	2 1/2	17.50	17.25	18.50
18	36.00	30.50	2 7/8	16	2 3/4	19.50	19.25	20.75
20	38.75	32.75	3 1/8	16	3	21.25	21.00	22.25
24	46.00	39.00	3 5/8	16	3 1/2	24.25	24.00	25.50

WELDBEND NOTES

1. Standard flange facings on page 146.
2. All dimensions are in inches.
3. Calculated flange weights on page 103.
4. For dimensional tolerances see page 144.
5. All flanges conform to ASTM A105/ASME SA105.
6. All flanges 1/2"-24" conform to ASME B16.5.

For Ring Type Joint Facing Dimension information see page 152.



Pipe Size	Outside Diameter of Flange	Thickness of Flange (Min.)	Diameter of Hub*	Diameter of Weld Neck	Length Through Hub			Thread Length (Min.)	Bore			Lap Joint Radius	Min. Counter Bore Threaded Flange	Depth of Socket
					Threaded, Slip-on & Socket Weld	Lap Joint	Weld Neck		Slip-on & Socket Weld (Min.)	Lap Joint (Min.)	Weld Neck & Socket Weld			
	O.D.	C	W	K	Y2	Y3	Y1	T	B2	B3	B1	J	Z	D

ASME B16.5

1/2	4.75	0.88	1.50	0.84	1.25	1.25	2.38	0.88	0.88	0.90	To be specified by the purchaser.	0.12	0.93	0.38
3/4	5.12	1.00	1.75	1.05	1.38	1.38	2.75	1.00	1.09	1.11		0.12	1.14	0.44
1	5.88	1.12	2.06	1.32	1.62	1.62	2.88	1.12	1.36	1.38		0.12	1.41	0.50
1 1/4	6.25	1.12	2.50	1.66	1.62	1.62	2.88	1.19	1.70	1.72		0.19	1.75	0.56
1 1/2	7.00	1.25	2.75	1.90	1.75	1.75	3.25	1.25	1.95	1.97		0.25	1.99	0.62
2	8.50	1.50	4.12	2.38	2.25	2.25	4.00	1.50	2.44	2.46		0.31	2.50	0.69
2 1/2	9.62	1.62	4.88	2.88	2.50	2.50	4.12	1.88	2.94	2.97		0.31	3.00	0.75
3	10.50	1.88	5.25	3.50		2.88	4.62			3.60		0.38		
4	12.25	2.12	6.38	4.50		3.56	4.88			4.60		0.44		
5	14.75	2.88	7.75	5.56		4.12	6.12			5.69		0.44		
6	15.50	3.25	9.00	6.63		4.69	6.75			6.75		0.50		
8	19.00	3.62	11.50	8.63		5.62	8.38			8.75		0.50		
10	23.00	4.25	14.50	10.75		7.00	10.00			10.92		0.50		
12	26.50	4.88	17.75	12.75		8.62	11.12			12.92		0.50		
14	29.50	5.25	19.50	14.00		9.50	11.75			14.18		0.50		
16	32.50	5.75	21.75	16.00		10.25	12.25			16.19		0.50		
18	36.00	6.38	23.50	18.00		10.88	12.88			18.20		0.50		
20	38.75	7.00	25.25	20.00		11.50	14.00			20.25		0.50		
24	46.00	8.00	30.00	24.00		13.00	16.00			24.25		0.50		

WELDBEND NOTES

- Standard flange facings on page 146.
 - All dimensions are in inches.
 - Calculated flange weights on page 103.
 - For dimensional tolerances see page 144.
 - Weld end preparations on page 154.
 - Thread standards on page 156.
 - Blind flanges may be produced with or without hubs.
 - All flanges conform to ASTM A105/ASME SA105.
 - All flanges 1/2"-24" conform to ASME B16.5.
- * A taper shall not exceed 7 degrees on threaded, slip-on and lapped flanges.

CLASS 1500					
Pipe Size	Outside Diameter	Threaded & Slip-on	Weld Neck	Blind	Lap Joint
	O.D.				

ASME B16.5

½	4.75	6.00	7.00	4.00	6.00
¾	5.12	6.00	7.00	6.00	6.00
1	5.88	8.00	9.00	9.00	8.00
1 ¼	6.25	10.00	10.00	10.00	10.00
1 ½	7.00	14.00	14.00	14.00	14.00
2	8.50	25.00	25.00	25.00	25.00
2 ½	9.62	36.00	36.00	35.00	35.00
3	10.50	48.00	48.00	48.00	47.00
4	12.25	73.00	73.00	73.00	75.00
5	14.75	132.00	132.00	140.00	140.00
6	15.50	165.00	165.00	160.00	170.00
8	19.00	260.00	275.00	302.00	286.00
10	23.00	436.00	455.00	510.00	485.00
12	26.50	667.00	690.00	775.00	749.00
14	29.50	940.00	940.00	975.00	890.00
16	32.50	1250.00	1250.00	1300.00	1250.00
18	36.00	1625.00	1625.00	1750.00	1475.00
20	38.75	2050.00	2050.00	2225.00	1775.00
24	46.00	2825.00	3325.00	3625.00	2825.00

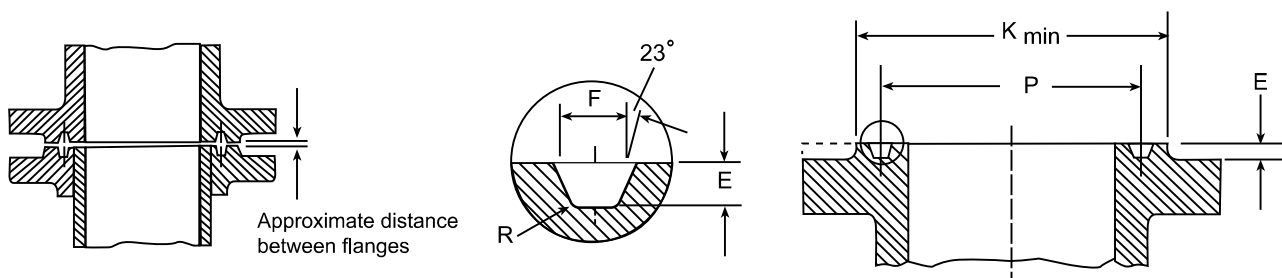
WELDBEND NOTES

1. All dimensions are in inches.
2. All weights are in pounds and approximated or estimated.

RING TYPE JOINT FACING DIMENSIONS



CLASS 1500



Nominal		Groove Number	Groove Dimensions				
Pipe Size	Outside Diameter		Pitch Diameter	Depth	Width	Radius at Bottom	Diameter of Gasket
	O.D.		P	E	F	R	K
½	4.75	R12	1.562	0.250	0.344	0.03	2.38
¾	5.12	R14	1.750	0.250	0.344	0.03	2.62
1	5.88	R16	2.000	0.250	0.344	0.03	2.81
1 ¼	6.25	R18	2.375	0.250	0.344	0.03	3.19
1 ½	7.00	R20	2.688	0.250	0.344	0.03	3.62
2	8.50	R24	3.750	0.312	0.469	0.03	4.88
2 ½	9.62	R27	4.250	0.312	0.469	0.03	5.38
3	10.50	R35	5.375	0.312	0.469	0.03	6.62
4	12.25	R39	6.375	0.312	0.469	0.03	7.62
5	14.75	R44	7.625	0.312	0.469	0.03	9.00
6	15.50	R46	8.312	0.375	0.531	0.06	9.75
8	19.00	R50	10.625	0.438	0.656	0.06	12.50
10	23.00	R54	12.750	0.438	0.656	0.06	14.62
12	26.50	R58	15.000	0.562	0.906	0.06	17.25
14	29.50	R63	16.500	0.625	1.062	0.09	19.25
16	32.50	R67	18.500	0.688	1.188	0.09	21.50
18	36.00	R71	21.000	0.688	1.188	0.09	24.12
20	38.75	R75	23.000	0.688	1.312	0.09	26.50
24	46.00	R79	27.250	0.812	1.438	0.09	31.25

WELDBEND NOTES

- All dimensions are in inches.
- Height of raised portion is equal to the depth of groove dimension E, but is not subjected to the tolerances for E. Former full-face contour may be used.
- Tolerances:
 E (depth) + 0.016, - 0.0
 F (width) ± 0.008
 P (pitch diameter) ± 0.005
 R (radius at bottom)
 $R \leq 0.06 + 0.03, - 0.0$;
 $R > 0.06 \pm 0.03$
 23° (angle) = ½°