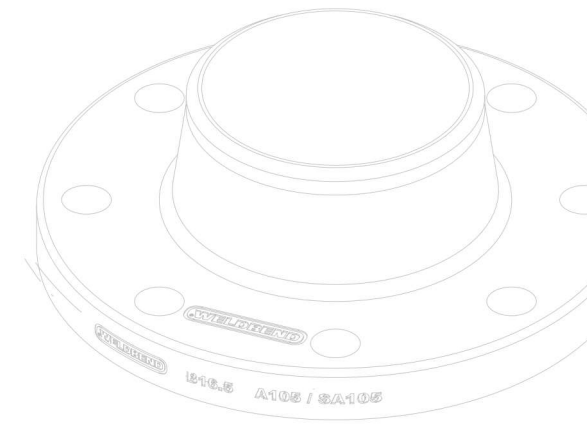
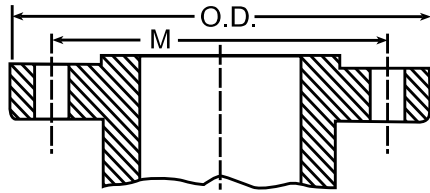


ISO Certificates

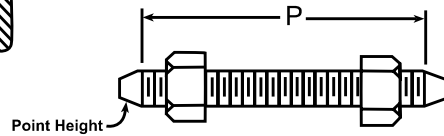


- Weldbend is PED Compliant. Weldbend maintains a strict quality control system ensuring it continually meets the most current ISO Certifications.
- For full size viewing, download from www.weldbend.com.

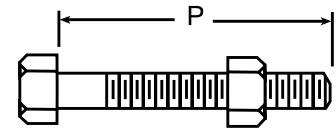
For Ring Type Joint Facing Dimension information see page 149.



Flange



Stud Bolt



Machine 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	Stud Bolts Raised Face 0.06 in.	Stud Bolts Ring Joint	Machine Bolts Raised Face 0.06 in.
	O.D.	M				P	P	P

ASME B16.5

1/2	3.75	2.62	5/8	4	1/2	2.50	3.00	2.25
3/4	4.62	3.25	3/4	4	5/8	3.00	3.50	2.50
1	4.88	3.50	3/4	4	5/8	3.00	3.50	2.50
1 1/4	5.25	3.88	3/4	4	5/8	3.25	3.75	2.75
1 1/2	6.12	4.50	7/8	4	3/4	3.50	4.00	3.00
2	6.50	5.00	3/4	8	5/8	3.50	4.00	3.00
2 1/2	7.50	5.88	7/8	8	3/4	4.00	4.50	3.25
3	8.25	6.62	7/8	8	3/4	4.25	4.75	3.50
3 1/2	9.00	7.25	7/8	8	3/4	4.25	5.00	3.75
4	10.00	7.88	7/8	8	3/4	4.50	5.00	3.75
5	11.00	9.25	7/8	8	3/4	4.75	5.25	4.25
6	12.50	10.62	7/8	12	3/4	4.75	5.50	4.25
8	15.00	13.00	1	12	7/8	5.50	6.00	4.75
10	17.50	15.25	1 1/8	16	1	6.25	6.75	5.50
12	20.50	17.75	1 1/4	16	1 1/8	6.75	7.25	5.75
14	23.00	20.25	1 1/4	20	1 1/8	7.00	7.50	6.25
16	25.50	22.50	1 3/8	20	1 1/4	7.50	8.00	6.50
18	28.00	24.75	1 3/8	24	1 1/4	7.75	8.25	6.75
20	30.50	27.00	1 3/8	24	1 1/4	8.00	8.75	7.25
24	36.00	32.00	1 5/8	24	1 1/2	9.00	10.00	8.00

ASME B16.47 Series A

30	43.00	39.25	1 7/8	28	1 3/4	Formula for determining bolt lengths (P) see page 159.
36	50.00	46.00	2 1/8	32	2	
42	50.75	47.50	1 3/4	32	1 5/8	
48	57.75	54.00	2	32	1 7/8	

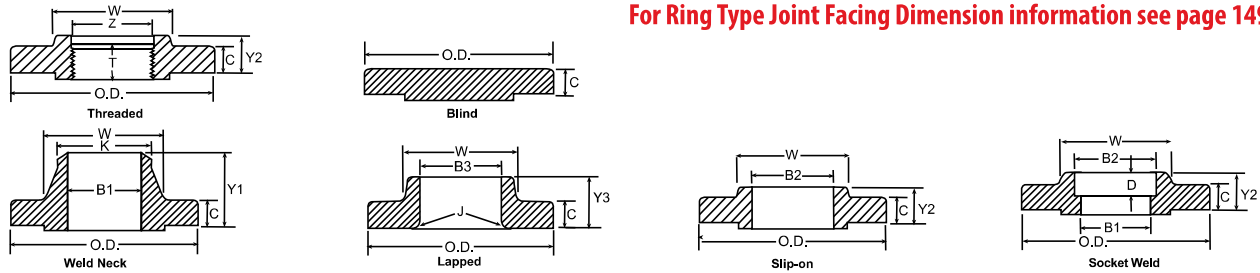
ASME B16.47 Series B

30	39.00	36.25	1 1/2	36	1 3/8	Formula for determining bolt lengths (P) see page 159.
36	46.12	42.88	1 3/4	32	1 5/8	
42	52.50	49.00	1 7/8	36	1 3/4	
48	59.50	55.75	2	40	1 7/8	

WELDBEND NOTES

- Standard flange facings on page 146.
- All dimensions are in inches.
- Calculated flange weights on page 100.
- For dimensional tolerances see page 144.
- All flanges conform to ASTM A105/ASME SA105.
- All flanges 1/2"-24" conform to ASME B16.5.
All flanges 30" and larger conform to ASME B16.47.

For Ring Type Joint Facing Dimension information see page 149.



Pipe Size	Outside Diameter of Flange	Thickness of Flange (Min.)	Thickness of Lap Joint (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	C	W	K	Y2	Y3	Y1	T	B2	B3	B1▲	J	Z	D

ASME B16.5

½	3.75	0.50	0.56	1.50	0.84	0.81	0.88	2.00	0.62	0.88	0.90	0.62	0.12	0.93	0.38
¾	4.62	0.56	0.62	1.88	1.05	0.94	1.00	2.19	0.62	1.09	1.11	0.82	0.12	1.14	0.44
1	4.88	0.62	0.69	2.12	1.32	1.00	1.06	2.38	0.69	1.36	1.38	1.05	0.12	1.41	0.50
1¼	5.25	0.69	0.75	2.50	1.66	1.00	1.06	2.50	0.81	1.70	1.72	1.38	0.19	1.75	0.56
1½	6.12	0.75	0.81	2.75	1.90	1.13	1.19	2.63	0.88	1.95	1.97	1.61	0.25	1.98	0.62
2	6.50	0.81	0.88	3.31	2.38	1.25	1.31	2.69	1.12	2.44	2.46	2.07	0.31	2.50	0.69
2½	7.50	0.94	1.00	3.94	2.88	1.44	1.50	2.94	1.25	2.94	2.97	2.47	0.31	3.00	0.75
3	8.25	1.06	1.12	4.62	3.50	1.63	1.69	3.06	1.25	3.57	3.60	3.07	0.38	3.63	0.81
3½	9.00	1.12	1.19	5.25	4.00	1.69	1.75	3.13	1.44	4.07	4.10	3.55	0.38	4.13	
4	10.00	1.19	1.25	5.75	4.50	1.82	1.88	3.32	1.44	4.57	4.60	4.03	0.44	4.63	
5	11.00	1.31	1.38	7.00	5.56	1.94	2.00	3.82	1.69	5.66	5.69	5.05	0.44	5.69	
6	12.50	1.38	1.44	8.12	6.63	2.00	2.06	3.82	1.81	6.72	6.75	6.07	0.50	6.75	
8	15.00	1.56	1.62	10.25	8.63	2.38	2.44	4.32	2.00	8.72	8.75	7.98	0.50	8.75	
10	17.50	1.81	1.88	12.62	10.75	2.56	3.75	4.56	2.19	10.88	10.92	10.02	0.50	10.88	
12	20.50	1.94	2.00	14.75	12.75	2.82	4.00	5.06	2.38	12.88	12.92	12.00	0.50	12.94	
14	23.00	2.06	2.12	16.75	14.00	2.94	4.38	5.56	2.50	14.14	14.18	13.25	0.50	14.19	
16	25.50	2.19	2.25	19.00	16.00	3.19	4.75	5.69	2.69	16.16	16.19	15.25	0.50	16.19	
18	28.00	2.31	2.38	21.00	18.00	3.44	5.12	6.19	2.75	18.18	18.20	17.25	0.50	18.19	
20	30.50	2.44	2.50	23.12	20.00	3.69	5.50	6.32	2.88	20.20	20.25	19.25	0.50	20.19	
24	36.00	2.69	2.75	27.62	24.00	4.13	6.00	6.56	3.25	24.25	24.25	23.25	0.50	24.19	

ASME B16.47 Series A

	WN	BLD				
30	43.00	3.57	3.69	32.56	30.00	8.19
36	50.00	4.07	4.32	39.00	36.00	9.44
42	50.75	4.63	4.63	43.25	42.00	7.82
48	57.75	5.19	5.19	49.38	48.00	8.75

ASME B16.47 Series B

	WN	BLD				
30	39.00	3.63	3.63	32.00	30.25	6.16
36	46.12	4.00	4.00	38.00	36.25	7.06
42	52.50	4.63	4.63	44.00	42.31	8.00
48	59.50	5.00	5.25	50.31	48.31	8.75

WELDBEND NOTES

- Standard flange facings on page 146.
- All dimensions are in inches.
- Calculated flange weights on page 100.
- 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 ½"-24" conform to ASME B16.5.
All flanges 30" and larger conform to ASME B16.47.
- * A taper shall not exceed 7 degrees on threaded, slip-on and lapped flanges.
▲ Dimensions listed for socket weld and weld neck flanges are for Standard bore unless specified by purchaser.

FLANGES

CLASS 300					
Pipe Size	Outside Diameter	Threaded & Slip-on	Weld Neck	Blind	Lap Joint
	O.D.				

ASME B16.5

1/2	3.75	3.00	2.00	2.00	2.00
3/4	4.62	3.00	3.00	3.00	3.00
1	4.88	3.00	4.00	4.00	3.00
1 1/4	5.25	4.50	5.00	6.00	4.50
1 1/2	6.12	6.50	7.00	7.00	6.50
2	6.50	7.00	9.00	8.00	7.00
2 1/2	7.50	10.00	12.00	12.00	10.00
3	8.25	14.00	18.00	16.00	14.00
3 1/2	9.00	17.00	20.00	21.00	17.00
4	10.00	24.00	26.50	28.00	24.00
5	11.00	31.00	36.00	37.00	28.00
6	12.50	39.00	45.00	50.00	39.00
8	15.00	58.00	69.00	81.00	58.00
10	17.50	81.00	100.00	124.00	91.00
12	20.50	115.00	142.00	185.00	140.00
14	23.00	165.00	206.00	250.00	190.00
16	25.50	220.00	250.00	315.00	234.00
18	28.00	280.00	320.00	415.00	305.00
20	30.50	325.00	400.00	515.00	375.00
24	36.00	490.00	580.00	800.00	550.00

ASME B16.47 Series A

30	43.00	—	870.00	1543.00	—
36	50.00	—	1275.00	2436.00	—
42	50.75	—	950.00	2688.00	—
48	57.75	—	1380.00	3896.00	—

ASME B16.47 Series B

30	39.00	—	550.00	1249.00	—
36	46.12	—	840.00	1921.00	—
42	52.50	—	1135.00	2876.00	—
48	59.50	—	1575.00	4183.00	—

WELDBEND NOTES

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