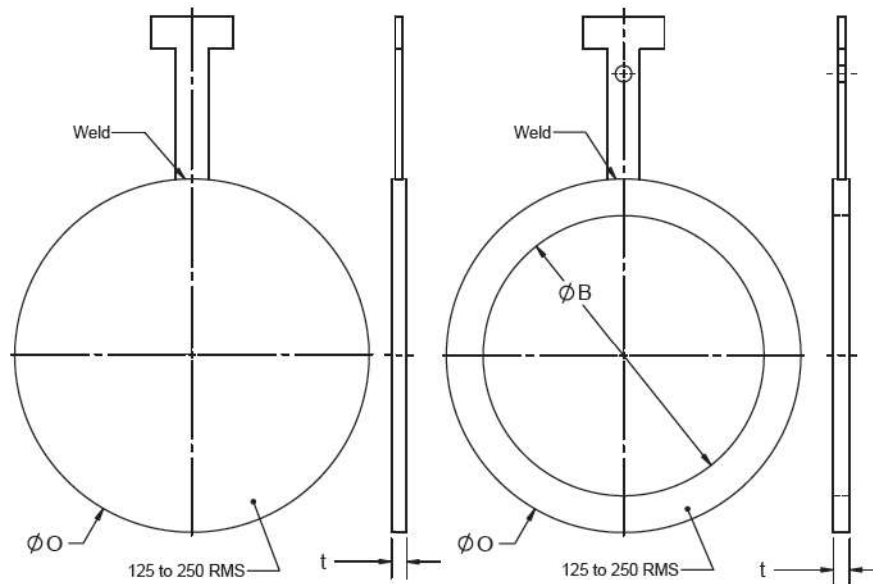


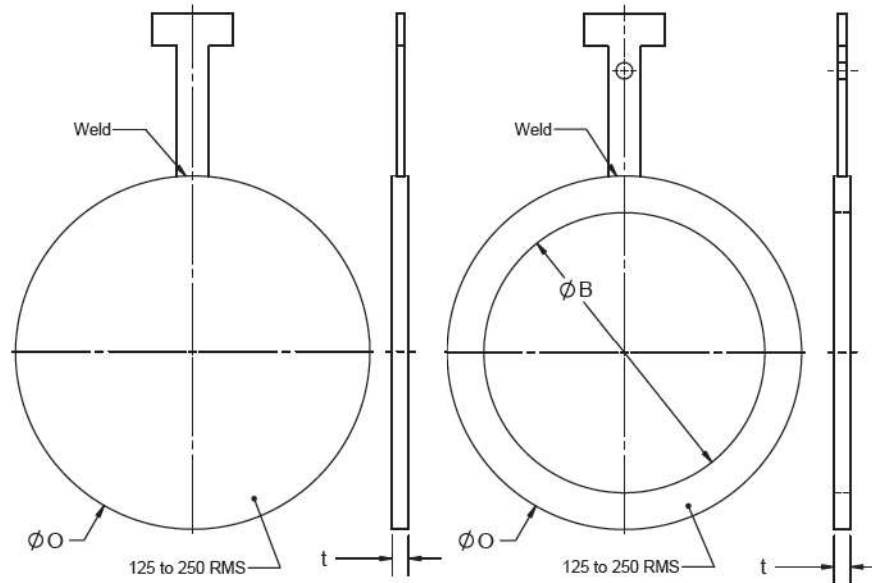
### Dimensions of Class 150 Blind and Spacer



### ASME B16.48 BLINDS AND SPACERS

NPS	Inside Diameter B		Outside Diameter O		Thk t		Bld Wgt	Spr Wgt
	In.	mm.	In.	mm.	In.	mm.		
1/2	0.62	16	1.75	44	0.12	3	0.2	0.1
3/4	0.82	21	2.12	54	0.12	3	0.2	0.1
1	1.05	27	2.50	64	0.12	3	0.2	0.1
1 1/4	1.66	42	2.88	73	0.25	6	0.5	0.2
1 1/2	1.90	48	3.25	83	0.25	6	0.6	0.3
2	2.38	60	4.00	102	0.25	6	0.6	0.3
2 1/2	2.88	73	4.75	121	0.25	6	1.2	0.6
3	3.50	89	5.25	133	0.25	6	1.8	0.9
3 1/2	4.00	102	6.25	159	0.38	10	2.2	1.1
4	4.50	114	6.75	171	0.38	10	2.6	1.3
5	5.56	141	7.62	194	0.38	10	4.4	2.2
6	6.62	168	8.62	219	0.50	13	6.2	3.1
8	8.62	219	10.88	276	0.50	13	12.7	6.4
10	10.75	273	13.25	337	0.62	16	21.1	10.6
12	12.75	324	16.00	406	0.75	19	37.3	18.6
14	14.00	356	17.62	448	0.75	19	52.6	26.3
16	16.00	406	20.12	511	0.88	22	76.6	38.3
18	18.00	457	21.50	546	1.00	25	92	46
20	20.00	508	23.75	603	1.12	28	118	59
24	24.00	610	28.12	714	1.25	32	203	102

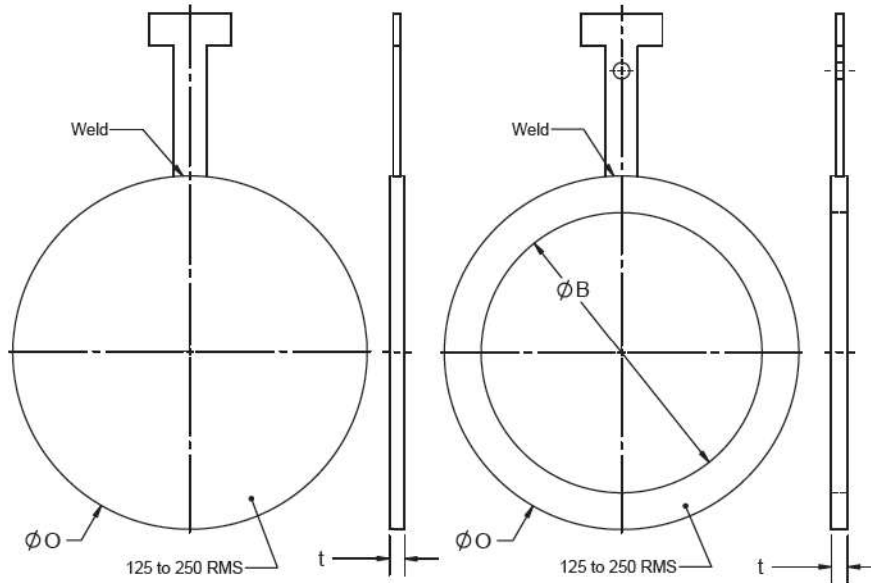
### Dimensions of Class 300 Blind and Spacer



### ASME B16.48 BLINDS AND SPACERS

NPS	Inside Diameter B		Outside Diameter O		Thk t		Blid Wgt	Spr Wgt
	In.	mm.	In.	mm.	In.	mm.		
1/2	0.62	16	2.00	51	0.25	6	0.33	0.17
3/4	0.82	21	2.50	64	0.25	6	0.33	0.17
1	1.05	27	2.75	70	0.25	6	0.33	0.17
1 1/4	1.66	42	3.12	79	0.25	6	0.6	0.3
1 1/2	1.90	48	3.62	92	0.25	6	0.87	0.43
2	2.38	60	4.25	108	0.38	10	1.2	0.6
2 1/2	2.88	73	5.00	127	0.38	10	1.6	0.8
3	3.50	89	5.75	146	0.38	10	1.93	0.97
3 1/2	4.00	102	6.38	162	0.50	13	3.6	1.8
4	4.50	114	7.00	178	0.50	13	5.19	2.6
5	5.56	141	8.38	213	0.62	16	9.32	4.66
6	6.62	168	9.75	248	0.62	16	13.39	6.69
8	8.62	219	12.00	305	0.88	22	26.64	13.32
10	10.75	273	14.12	359	1.00	25	43.29	21.65
12	12.75	324	16.50	419	1.12	28	68.6	34.3
14	14.00	356	19.00	483	1.25	32	101.9	50.95
16	16.00	406	21.12	537	1.50	38	143.2	71.6
18	18.00	457	23.38	594	1.62	41	196.5	98.24
20	20.00	508	25.62	651	1.75	44	249	124.5
24	24.00	610	30.38	772	2.00	51	416.3	208.1

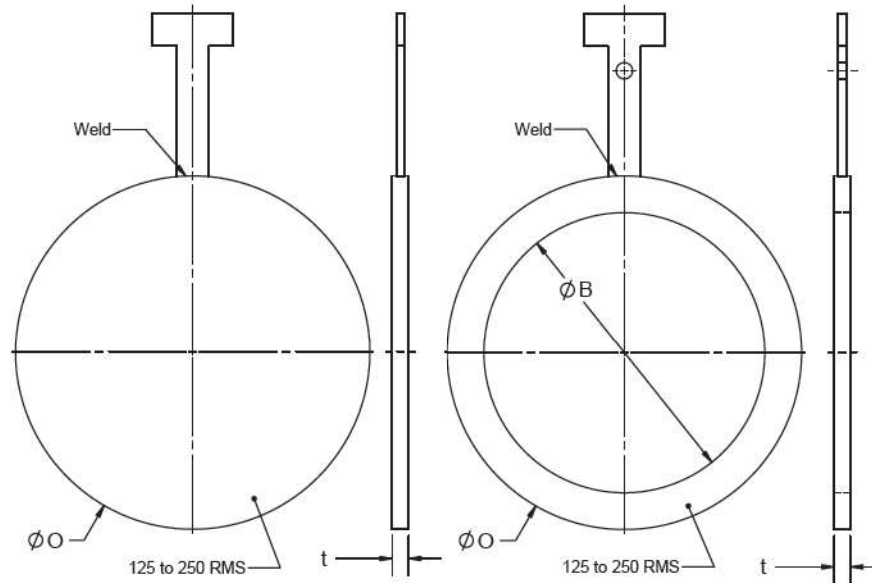
### Dimensions of Class 600 Blind and Spacer



### ASME B16.48 BLINDS AND SPACERS

NPS	Inside Diameter B		Outside Diameter O		Thk t		Blid Wgt	Spr Wgt
	In.	mm.	In.	mm.	In.	mm.		
1/2	0.62	16	2.00	51	0.25	6	0.33	0.165
3/4	0.82	21	2.50	64	0.25	6	0.33	0.17
1	1.05	27	2.75	70	0.25	6	0.53	0.27
1 1/4	1.44	37	3.12	79	0.38	10	0.73	0.37
1 1/2	1.68	43	3.62	92	0.38	10	0.87	0.43
2	2.16	55	4.25	108	0.38	10	1.47	0.73
2 1/2	2.64	67	5.00	127	0.50	13	2.6	1.3
3	3.26	83	5.75	146	0.50	13	3.66	1.83
3 1/2	3.76	96	6.25	159	0.62	16	5.86	2.93
4	4.26	108	7.50	191	0.62	16	7.99	4
5	5.30	135	9.38	238	0.75	19	15.65	7.83
6	6.36	162	10.38	264	0.88	22	23.31	11.66
8	8.33	212	12.50	318	1.12	28	39.96	19.98
10	10.42	265	15.62	397	1.38	35	78.26	39.13
12	12.39	315	17.88	454	1.62	41	123.2	61.61
14	13.62	346	19.25	489	1.75	44	153.2	76.59
16	15.62	397	22.12	562	2.00	51	226.4	113.2
18	17.62	448	24.00	610	2.12	54	299.7	149.9
20	19.56	497	26.75	679	2.50	64	412.9	206.5
24	23.50	597	31.00	787	2.88	73	649.4	324.7

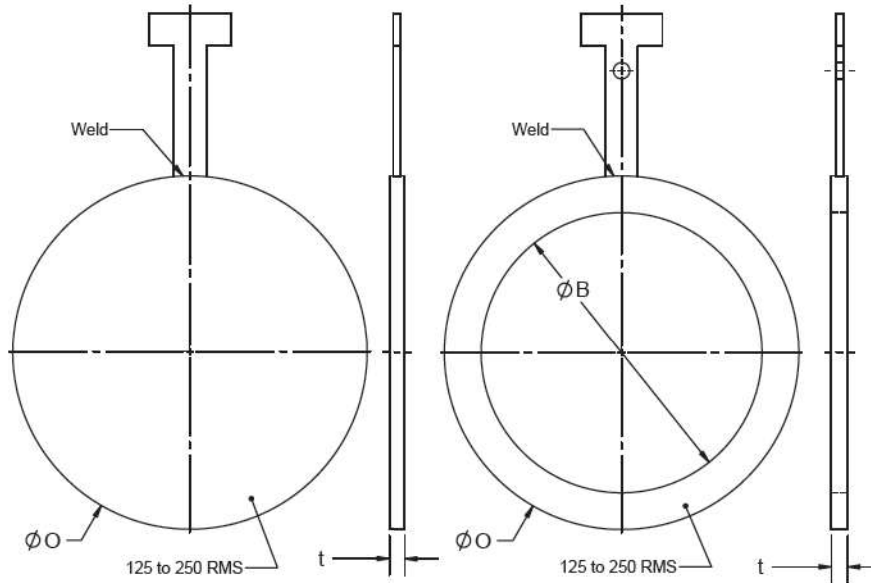
### Dimensions of Class 900 Blind and Spacer



### ASME B16.48 BLINDS AND SPACERS

NPS	Inside Diameter B		Outside Diameter O		Thk t		Bld Wgt	Spr Wgt
	In.	mm.	In.	mm.	In.	mm.		
1/2	0.62	16	2.38	60	0.25	6	0.33	0.17
3/4	0.82	21	2.62	67	0.25	6	0.33	0.17
1	1.05	27	3.00	76	0.25	6	0.6	0.3
1 1/4	1.44	35	3.38	86	0.38	10	0.93	0.47
1 1/2	1.68	41	3.75	95	0.38	10	1.2	0.6
2	2.16	53	5.50	140	0.50	13	3.13	1.57
2 1/2	2.64	63	6.38	162	0.50	13	4.73	2.36
3	3.26	78	6.50	165	0.62	16	6.33	3.16
4	4.26	102	8.00	203	0.75	19	11.32	5.66
5	5.30	128	9.62	244	0.88	22	23.18	11.59
6	6.36	154	11.25	286	1.00	25	34.97	17.48
8	8.33	203	14.00	356	1.38	35	64.6	32.3
10	10.42	255	17.00	432	1.62	41	118.6	59.27
12	12.39	303	19.50	495	1.88	48	186.5	93.24
14	13.62	333	20.38	518	2.12	54	203.1	101.6
16	15.62	381	22.50	572	2.38	60	273.1	136.5
18	17.62	429	25.00	635	2.62	67	379	189.8
20	19.56	478	27.38	695	2.88	73	499.5	249.8
24	23.50	575	32.88	835	3.50	89	832.5	416.3

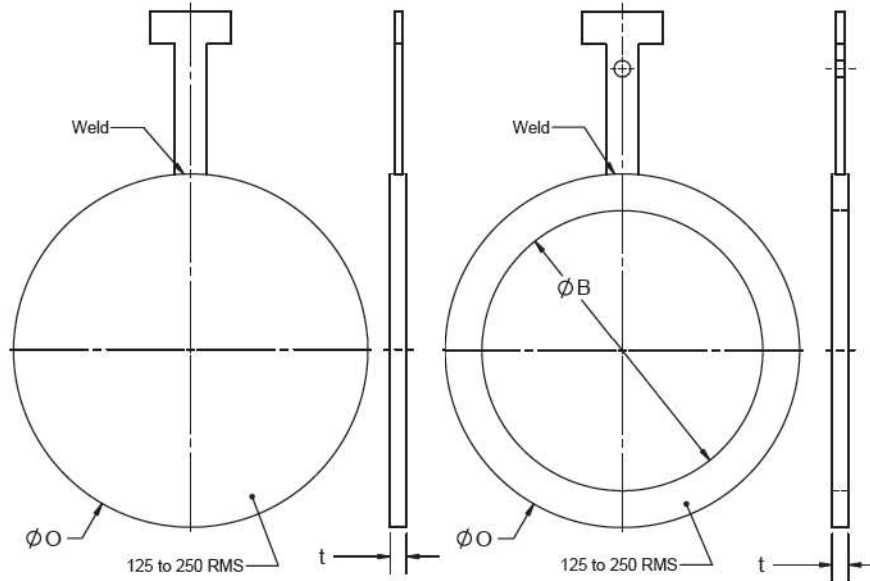
### Dimensions of Class 1500 Blind and Spacer



### ASME B16.48 BLINDS AND SPACERS

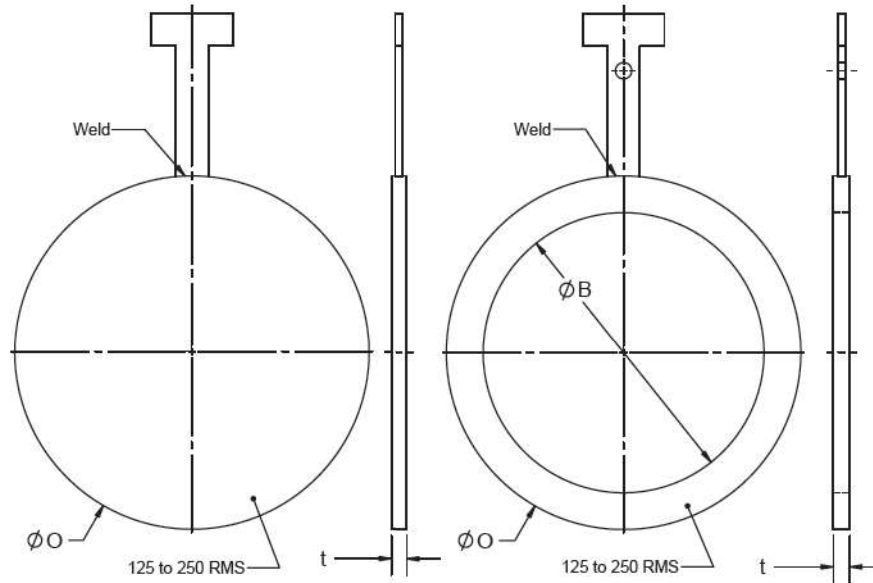
NPS	Inside Diameter B		Outside Diameter O		Thk t		Blid Wgt	Spr Wgt
	In.	mm.	In.	mm.	In.	mm.		
1/2	0.62	16	2.38	60	0.25	6	0.4	0.2
3/4	0.82	21	2.62	67	0.38	10	0.73	0.37
1	1.05	27	3.00	76	0.38	10	0.93	0.47
1 1/4	1.38	37	3.38	86	0.38	10	1.2	0.6
1 1/2	1.61	43	3.75	95	0.50	13	1.86	0.93
2	2.07	55	5.50	140	0.50	13	4.2	2.1
2 1/2	2.47	67	6.38	162	0.62	16	6.93	3.46
3	3.07	83	6.75	171	0.75	19	9.32	4.66
4	4.03	108	8.12	206	0.88	22	14.65	7.33
5	5.05	135	9.88	251	1.12	28	27.97	13.99
6	6.06	162	11.00	279	1.38	35	41.96	20.98
8	7.98	212	13.75	349	1.62	41	75.26	37.63
10	10.02	265	17.00	432	2.00	51	141.9	70.93
12	11.94	315	20.38	518	2.38	60	176.5	88.25
14	13.12	346	22.62	575	2.62	67	331	165.5
16	15.00	397	25.12	638	3.00	76	461.5	230.8
18	16.88	448	27.62	702	3.38	86	622	311
20	18.81	497	29.62	752	3.75	95	779.2	389.6
24	22.62	597	35.38	899	4.38	111	1030	515.2

### Dimensions of Class 2500 Blind and Spacer



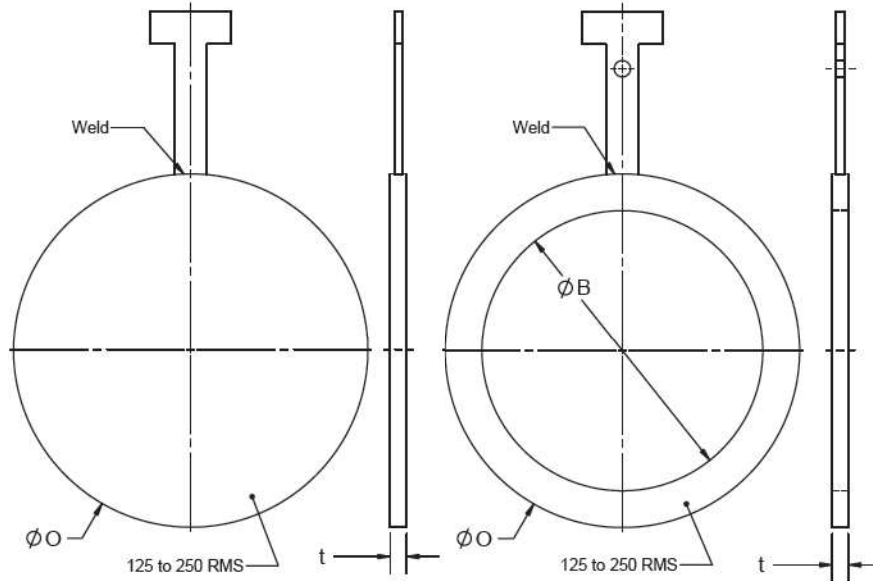
### ASME B16.48 BLINDS AND SPACERS

NPS	Inside Diameter B		Outside Diameter O		Thk t		Bld Wgt	Spr Wgt
	In.	mm.	In.	mm.	In.	mm.		
1/2	0.62	16	2.62	67	0.38	10	0.73	0.37
3/4	0.82	21	2.88	73	0.38	10	0.87	0.43
1	1.05	27	3.25	83	0.38	10	1.13	0.57
1 1/4	1.38	35	4.00	102	0.50	13	2.26	1.13
1 1/2	1.61	41	4.50	114	0.62	16	3.46	1.73
2	2.07	53	5.62	143	0.62	16	5.39	2.7
2 1/2	2.47	63	6.50	165	0.75	19	8.72	4.36
3	3.07	78	7.62	194	0.88	22	13.99	6.99
4	4.03	102	9.12	232	1.12	28	24.64	12.32
5	5.05	128	10.88	276	1.38	35	43.29	21.65
6	6.06	154	12.38	314	1.62	41	64.6	32.3
8	7.81	198	15.12	384	2.12	54	124.5	62.27
10	9.75	248	18.62	473	2.62	67	232.4	116.2
12	11.37	289	21.50	546	3.12	79	368.3	184.2



### A516 GR70N TO SUIT ASME B16.47 SERIES A FLANGES

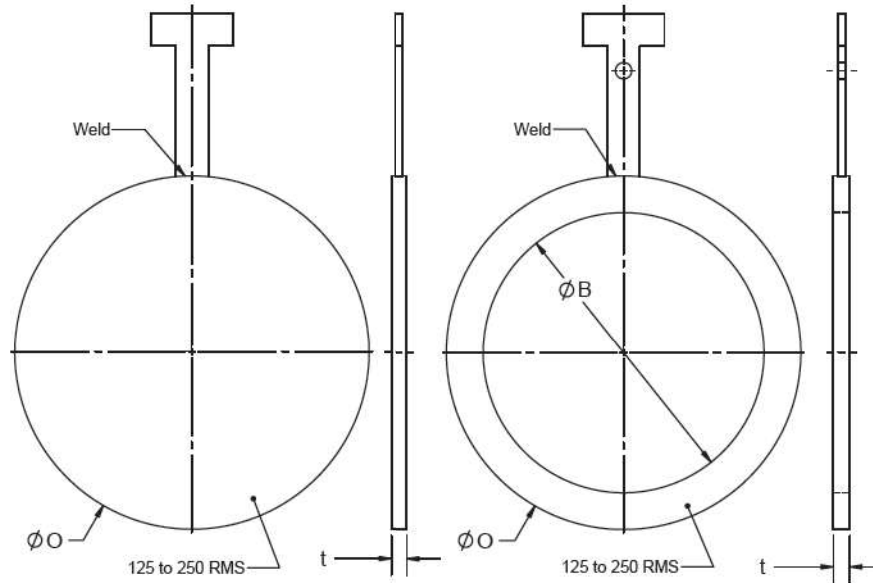
PIPE SIZE	CLASS 150			CLASS 300			CLASS 600		
	THK	OD	ID	THK	OD	ID	THK	OD	ID
26	1.75	30.375	25.25	2.063	32.75	25.25	2.875	34	25.25
28	1.75	32.625	27.25	2.125	35.25	27.25	3	35.875	27.25
30	1.75	34.625	29.25	2.375	37.375	29.25	3.375	38.125	29.25
32	1.75	36.875	31.25	2.5	39.5	31.25	3.5	40.125	31.25
34	2	38.875	33.25	2.625	41.5	33.25	3.75	42.125	33.25
36	2	41.125	35.25	3	43.875	35.25	4	44.375	35.25
38	2	43.625	37.25	3	41.375	37.25	4.125	43.375	37.25
40	2	45.625	39.25	3.125	43.75	39.25	4.375	45.375	39.25
42	2.25	47.875	41	3.25	45.75	41	4.5	47.875	41
44	2.25	50.125	43	3.5	47.875	43	4.75	49.375	43
46	2.5	52.125	45	3.625	50	45	5	52.125	45
48	2.5	54.375	47	3.75	52	47	5.375	54.625	47
50	2.5	56.375	49	4	54.125	49	5.5	56.875	49
52	2.75	58.375	51	4	56.125	51	5.75	58.875	51
54	2.75	60.875	53	4.25	58.625	53	5.875	61.125	53
56	2.875	63.125	55	4.375	60.625	55	6.125	63.375	55
58	2.875	65.375	57	4.5	62.625	57	6.375	65.375	57
60	3.125	67.375	59	4.625	64.625	59	6.5	68.125	59



### A516 GR70N TO SUIT ASME B16.47 SERIES B FLANGES

PIPE SIZE	CLASS 150			CLASS 300			CLASS 600		
	THK	OD	ID	THK	OD	ID	THK	OD	ID
26	1.75	28.438	25.25	2.063	30.25	25.25	2.875	30	25.25
28	1.75	30.437	27.25	2.125	32.375	27.25	3	32.125	27.25
30	1.75	32.437	29.25	2.375	34.75	29.25	3.375	34.5	29.25
32	1.75	34.56	31.25	2.5	36.875	31.25	3.5	36.625	31.25
34	2	36.69	33.25	2.625	39	33.25	3.75	39.125	33.25
36	2	38.75	35.25	3	41.125	35.25	4	41.25	35.25
38	2	41	37.25	3	43.125	37.25			
40	2	43	39.25	3.125	45.125	39.25			
42	2.25	45	41	3.25	47.125	41			
44	2.25	47	43	3.5	49.125	43			
46	2.5	49.31	45	3.625	51.75	45			
48	2.5	51.312	47	3.75	53.75	47			
50	2.5	53.312	49	4	55.75	49			
52	2.75	55.312	51	4	57.75	51			
54	2.75	57.5	53	4.25	60.125	53			
56	2.875	59.5	55	4.375	62.625	55			
58	2.875	62.062	57	4.5	65.065	57			
60	3.125	64.062	59	4.625	67.065	59			

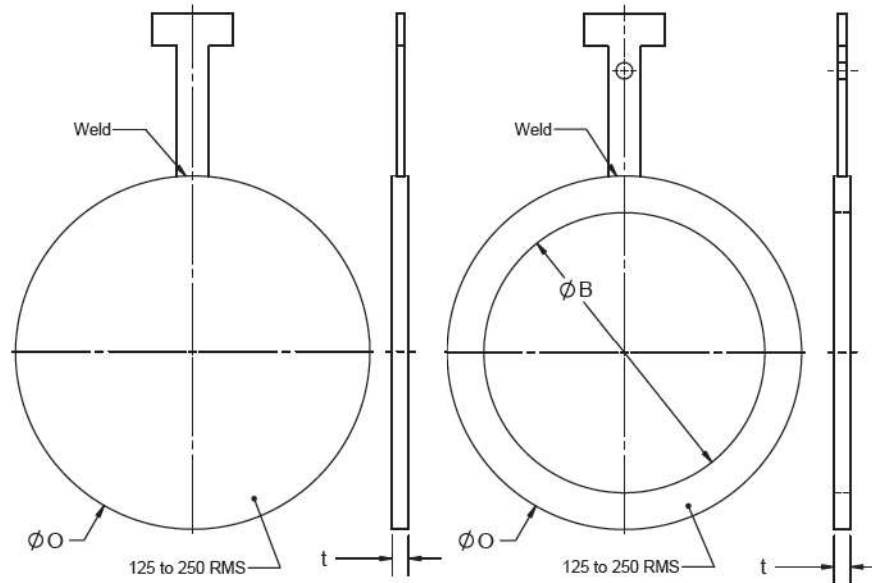




### A316 TO SUIT ASME B16.47 SERIES A FLANGES

PIPE SIZE	CLASS 150			CLASS 300			CLASS 600		
	THK	OD	ID	THK	OD	ID	THK	OD	ID
26	1.5	30.375	25.25	2.250	32.75	25.25	3	34	25.25
28	1.75	32.625	27.25	2.375	35.25	27.25	3.25	35.875	27.25
30	1.75	34.625	29.25	2.5	37.375	29.25	3.5	38.125	29.25
32	1.75	36.875	31.25	2.75	39.5	31.25	3.75	40.125	31.25
34	2	38.875	33.25	2.875	41.5	33.25	4	42.125	33.25
36	2	41.125	35.25	3	43.875	35.25	4.25	44.375	35.25
38	2	43.625	37.25	3.25	41.375	37.25	4.5	43.375	37.25
40	2.125	45.625	39.25	3.375	43.75	39.25	4.75	45.375	39.25
42	2.25	47.875	41	3.5	45.75	41	5	47.875	41
44	2.25	50.125	43	3.75	47.875	43	5.125	49.375	43
46	2.5	52.125	45	3.875	50	45	5.375	52.125	45
48	2.5	54.375	47	4.125	52	47	5.75	54.625	47
50	2.625	56.375	49	4.125	54.125	49	5.875	56.875	49
52	2.75	58.375	51	4.375	56.125	51	6.125	58.875	51
54	2.875	60.875	53	4.5	58.625	53	6.375	61.125	53
56	2.875	63.125	55	4.75	60.625	55	6.5	63.375	55
58	3	65.375	57	4.875	62.625	57	6.75	65.375	57
60	3.125	67.375	59	5	64.625	59	7	68.125	59

### Dimensions of Class 900 Blind and Spacer



### A316 TO SUIT ASME B16.47 SERIES B FLANGES

PIPE SIZE	CLASS 150			CLASS 300			CLASS 600		
	THK	OD	ID	THK	OD	ID	THK	OD	ID
26	1.5	28.438	25.25	2.250	30.25	25.25	3	30	25.25
28	1.75	30.437	27.25	2.375	32.375	27.25	3.25	32.125	27.25
30	1.75	32.437	29.25	2.5	34.75	29.25	3.5	34.5	29.25
32	1.75	34.56	31.25	2.75	36.875	31.25	3.75	36.625	31.25
34	2	36.69	33.25	2.875	39	33.25	4	39.125	33.25
36	2	38.75	35.25	3	41.125	35.25	4.25	41.25	35.25
38	2	41	37.25	3.25	43.125	37.25			
40	2.125	43	39.25	3.375	45.125	39.25			
42	2.25	45	41	3.5	47.125	41			
44	2.25	47	43	3.75	49.125	43			
46	2.5	49.31	45	3.875	51.75	45			
48	2.5	51.312	47	4.125	53.75	47			
50	2.625	53.312	49	4.125	55.75	49			
52	2.75	55.312	51	4.375	57.75	51			
54	2.875	57.5	53	4.5	60.125	53			
56	2.875	59.5	55	4.75	62.625	55			
58	3	62.062	57	4.875	65.065	57			
60	3.125	64.062	59	5	67.065	59			