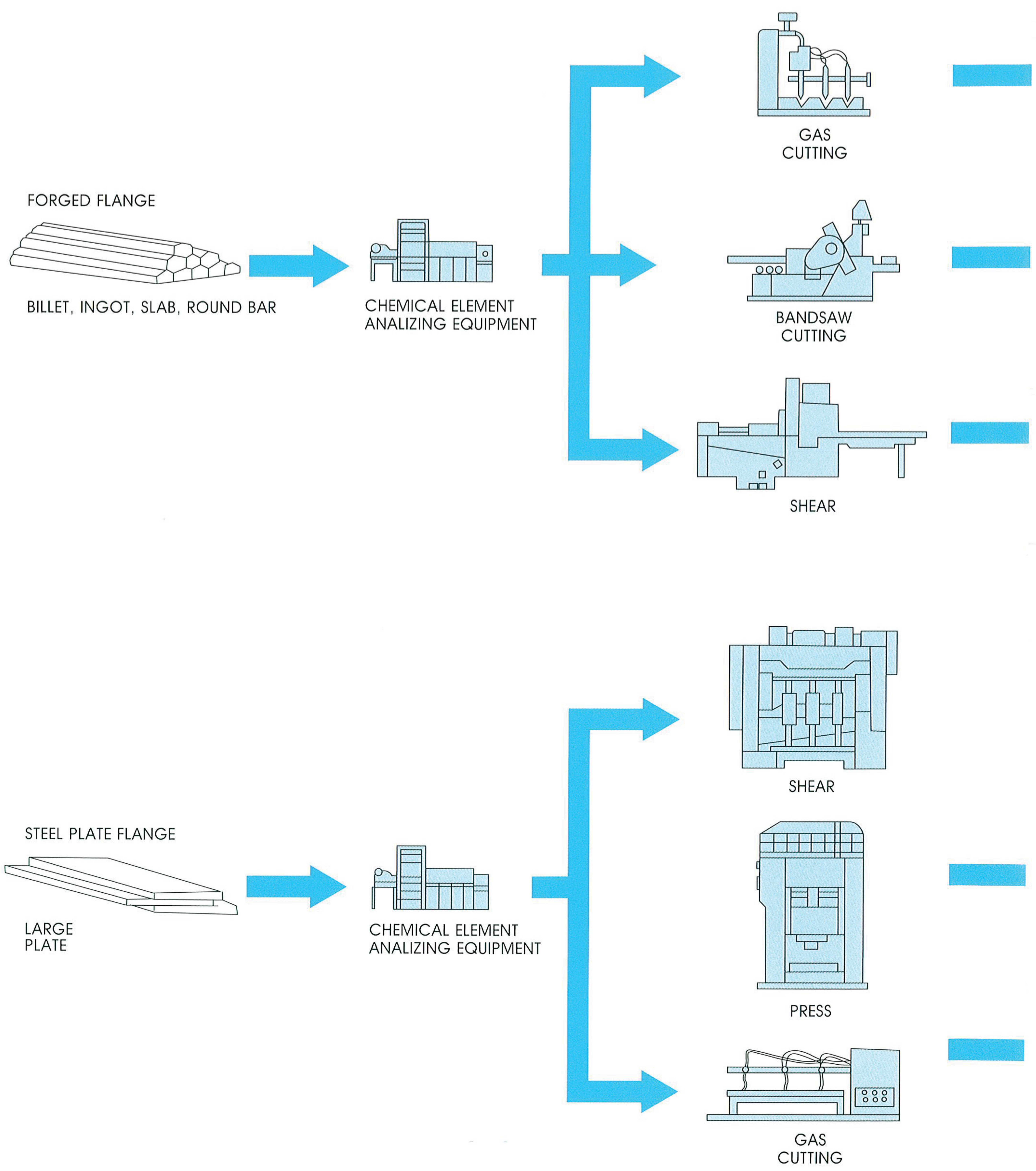
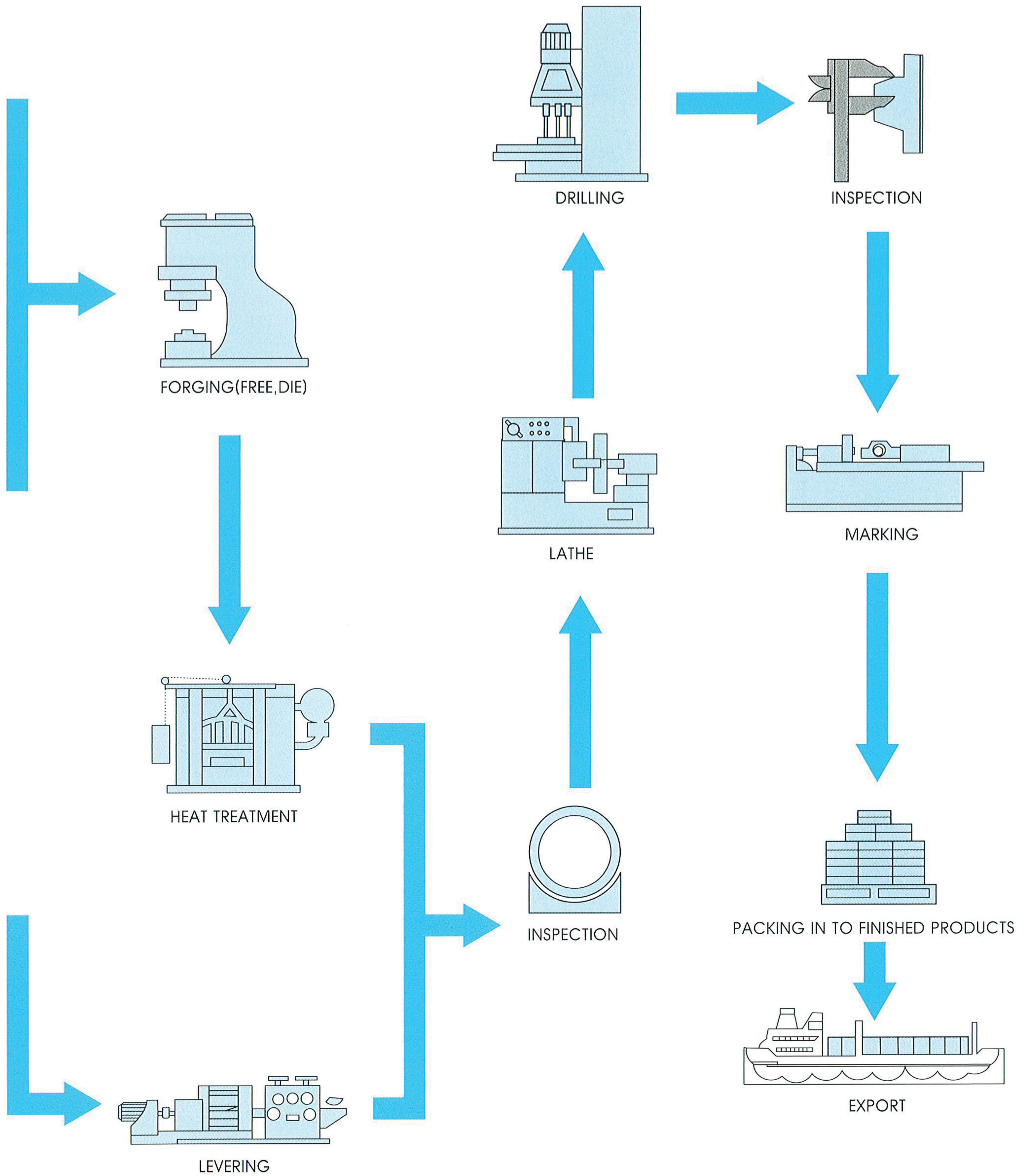




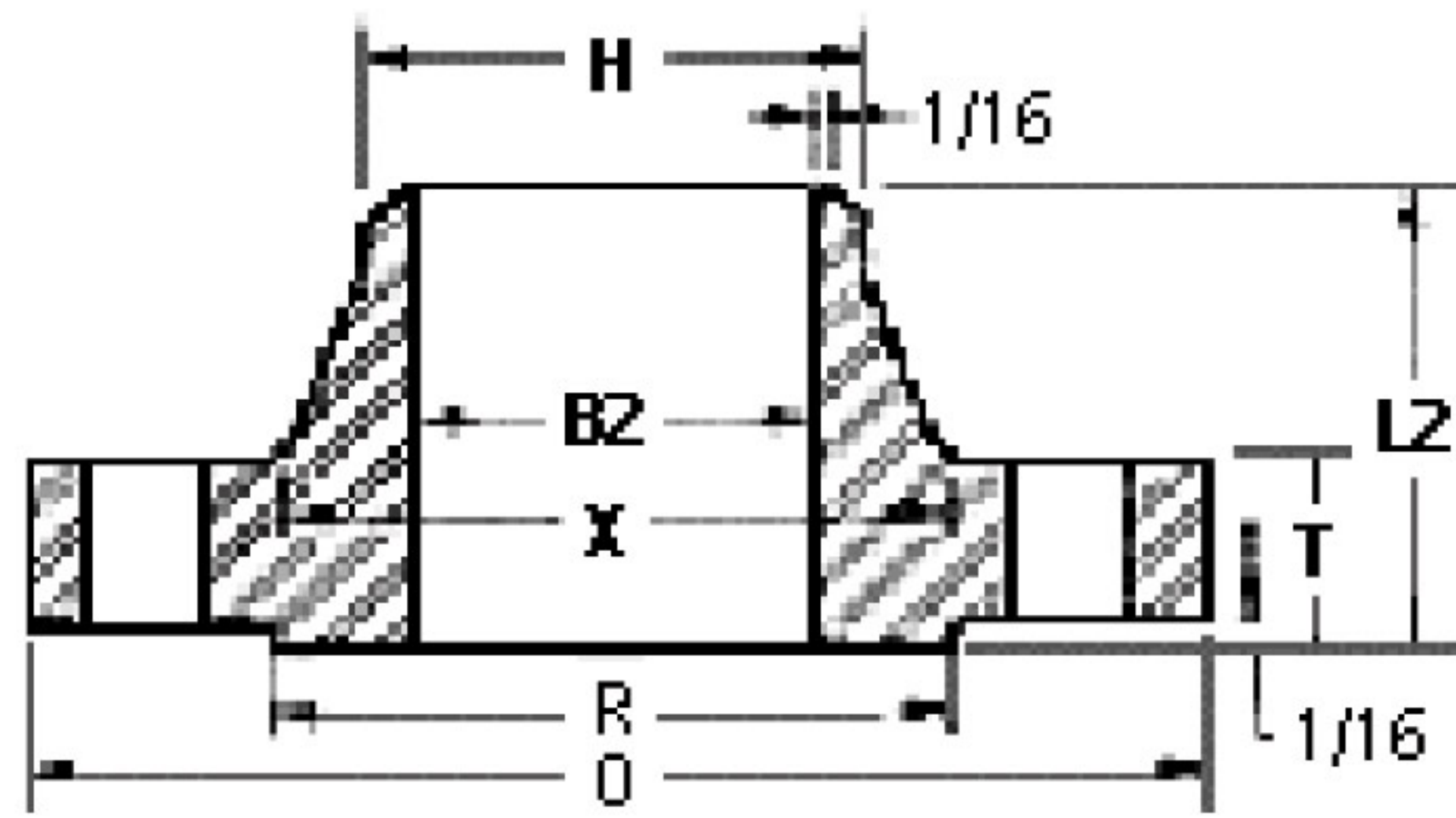
KUMKANG
STEEL PIPE FITTINGS

MANUFACTURING PROCESS

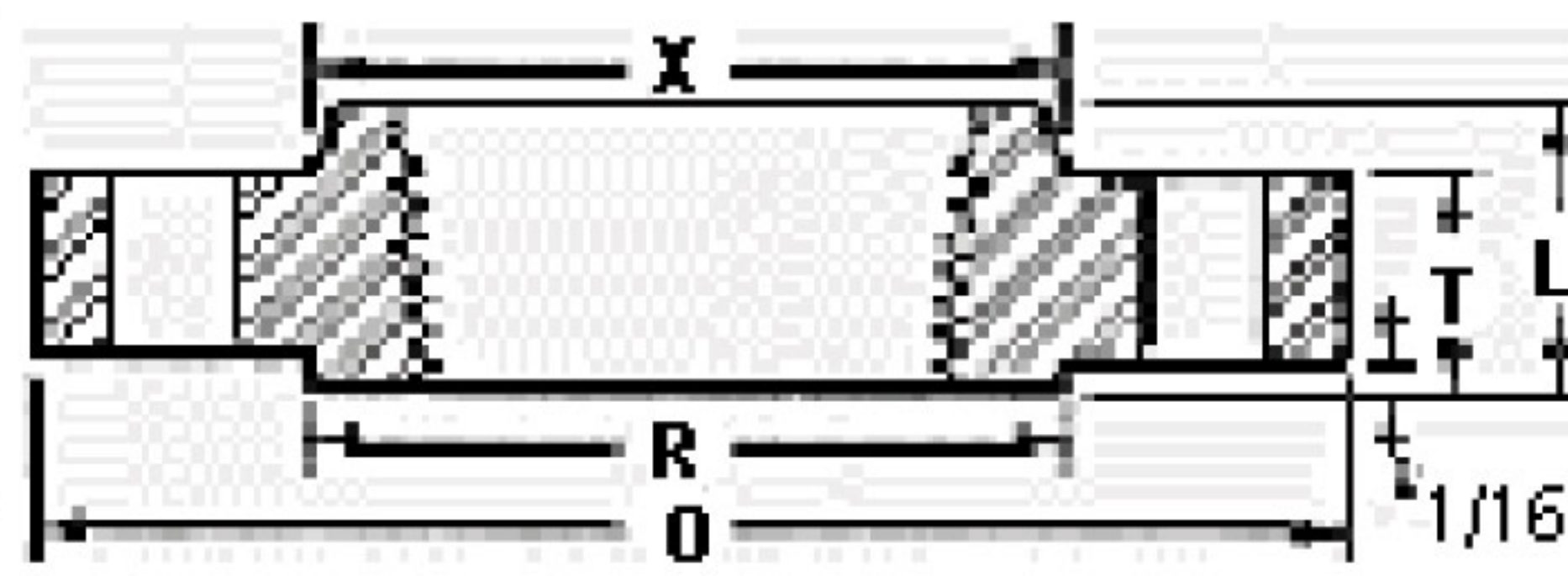




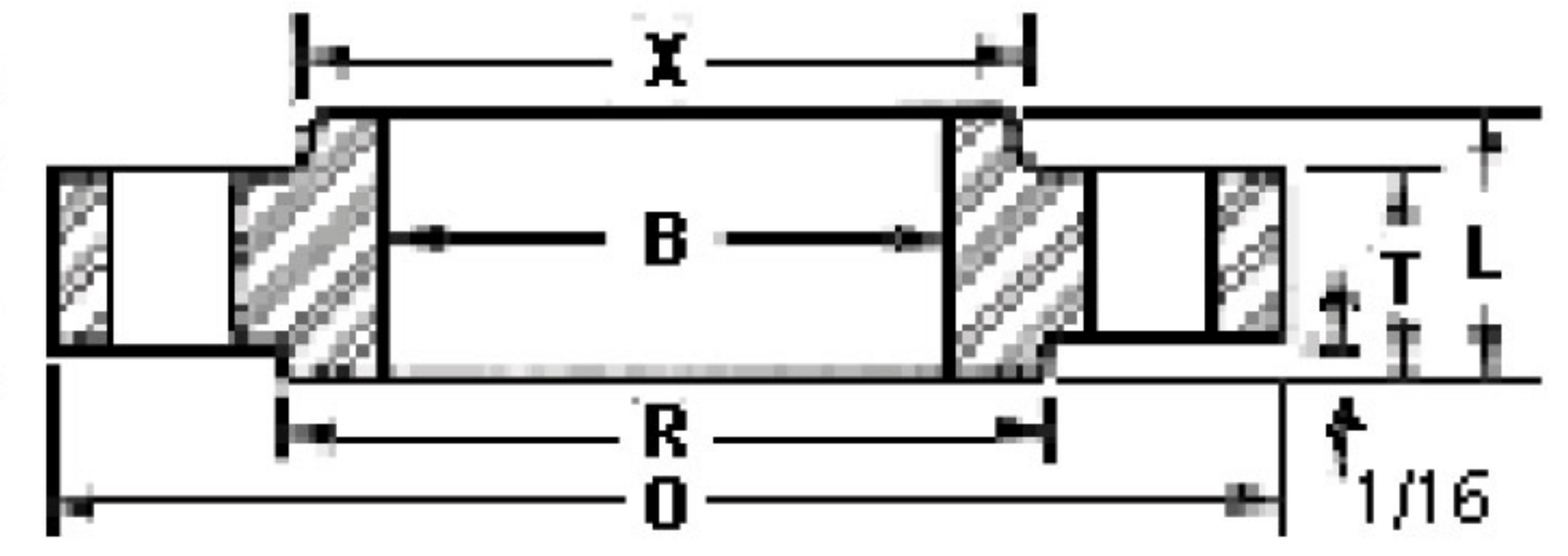
ANSI B16.5 Class 150 Forged Flanges



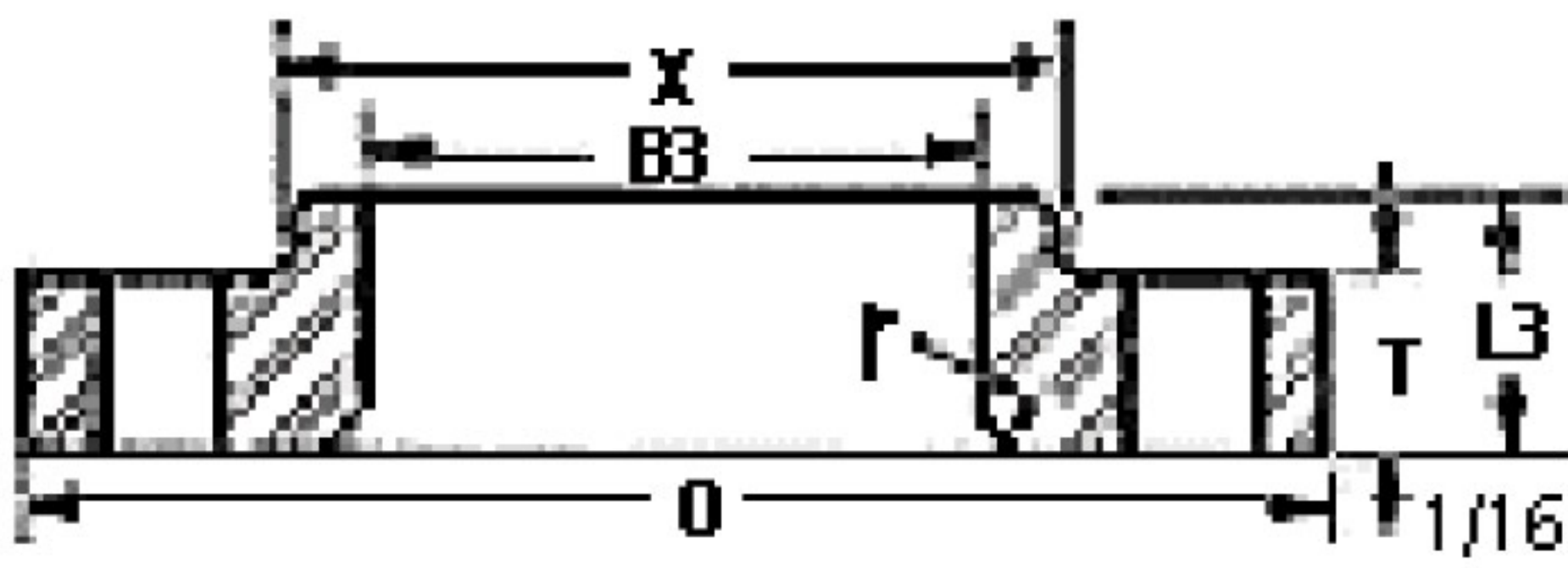
Weld Neck



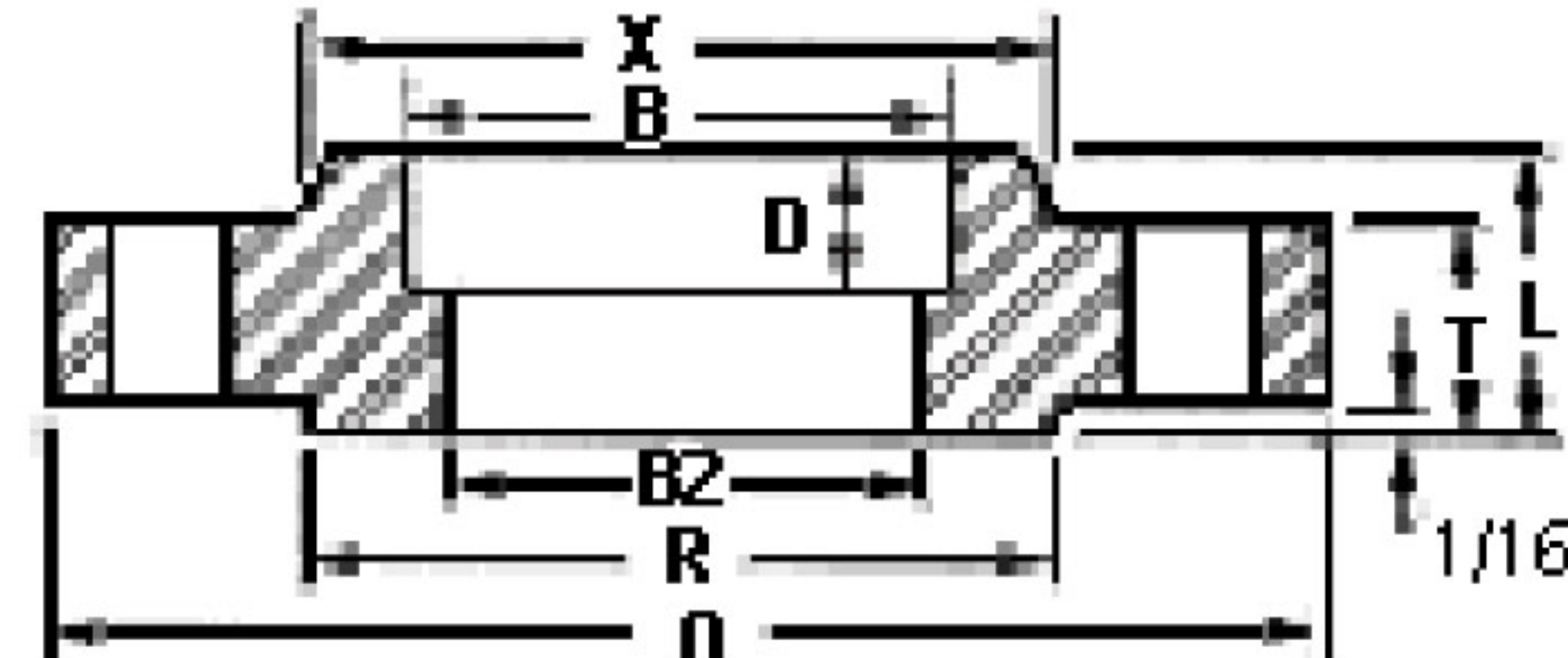
Threaded



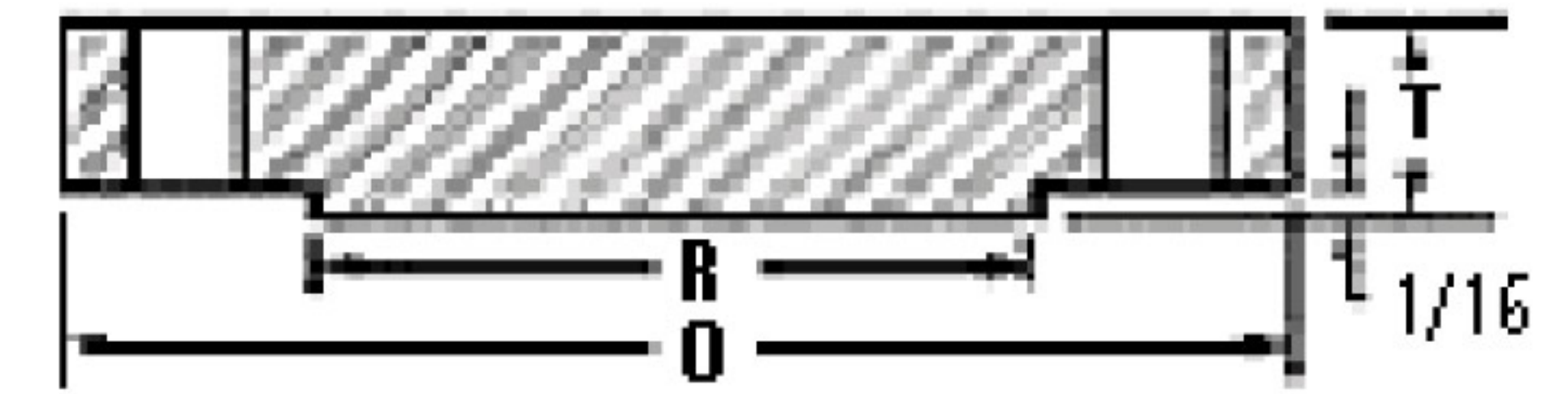
Slip-On



Lap Joint



Socket Weld



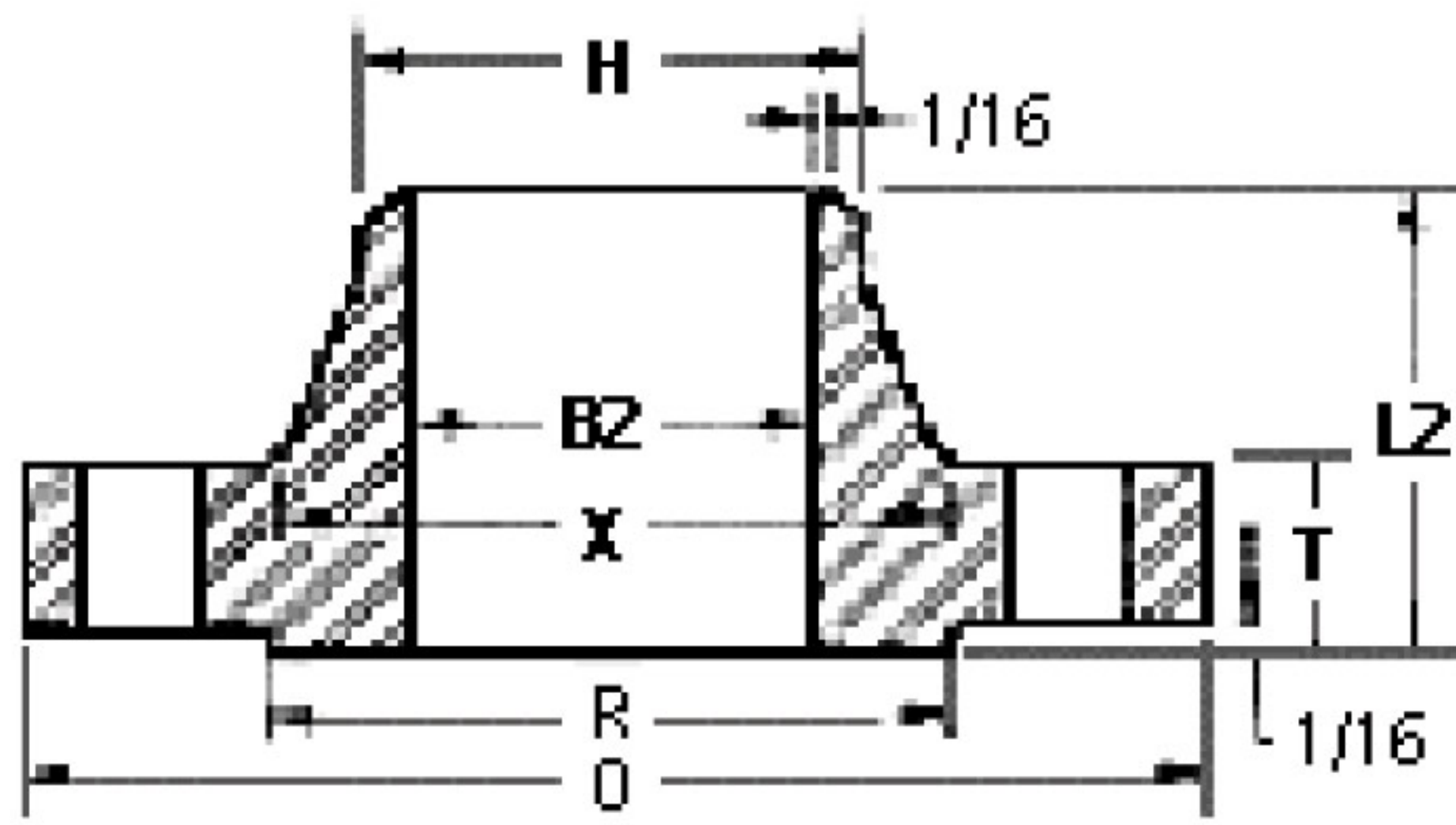
Blind

Nom. Pipe Size	O	T ₁	R	X	No. ₂ /Dia. of Holes	Bolt Circle Dia.	L2 ₁	H	B2 ₃	L	B	r	L3 ₄	B3	D
1/2	3.5	.44	1.38	1.19	4-0.62	2.38	1.88	.84	.62	.62	.88	.12	.62	.9	.38
3/4	3.88	.5	1.69	1.5	4-0.62	2.75	2.06	1.05	.82	.62	1.09	.12	.62	1.11	.44
1	4.25	.56	2	1.94	4-0.62	3.12	2.19	1.32	1.05	.69	1.36	.12	.69	1.38	.5
1 1/4	4.62	.62	2.5	2.31	4-0.62	3.5	2.25	1.66	1.38	.81	1.70	.19	.81	1.72	.56
1 1/2	5	.68	2.88	2.56	4-0.62	3.88	2.44	1.9	1.61	.88	1.95	.25	.88	1.97	.62
2	6	.75	3.62	3.06	4-0.75	4.75	2.5	2.38	2.07	1	2.44	.31	1	2.46	.69
2 1/2	7	.88	4.12	3.56	4-0.75	5.5	2.75	2.88	2.47	1.12	2.94	.31	1.12	2.97	.75
3	7.5	.94	5	4.25	4-0.75	6	2.75	3.5	3.07	1.19	3.57	.38	1.19	3.6	.81
3 1/2	8.5	.94	5.5	4.81	8-0.75	7	2.81	4	3.55	1.25	4.07	.38	1.25	4.1	.88
4	9	.94	6.19	5.31	8-0.75	7.5	3	4.5	4.03	1.31	4.57	.44	1.31	4.6	.94
5	10	.94	7.31	6.44	8-0.88	8.5	3.5	5.56	5.05	1.44	5.66	.44	1.44	5.69	.94
6	11	1	8.5	7.56	8-0.88	9.5	3.5	6.63	6.07	1.56	6.72	.5	1.56	6.75	1.06
8	13.5	1.12	10.62	9.69	8-0.88	11.75	4	8.63	7.98	1.75	8.72	.5	1.75	8.75	1.25
10	16	1.19	12.75	12	12-1.00	14.25	4	10.75	10.02	1.94	10.88	.5	1.94	10.92	1.31
12	19	1.25	15	14.38	12-1.00	17	4.5	12.75	12	2.19	12.88	.5	2.19	12.92	1.56
14	21	1.38	16.25	15.75	12-1.12	18.75	5	14	13.25	2.25	14.14	.5	3.12	14.18	1.63
16	23.5	1.44	18.5	18	16-1.12	21.25	5	16	15.25	2.5	16.16	.5	3.44	16.19	1.75
18	25	1.56	21	19.88	16-1.25	22.75	5.5	18	17.25	2.69	18.18	.5	3.81	18.20	1.94
20	27.5	1.69	23	22	20-1.25	25	5.69	20	19.25	2.88	20.2	.5	4.06	20.25	2.13
22	29.5	1.81	25.25	24.25	20-1.38	27.25	5.88	22	21.25	3.13	22.22	.5	4.25	22.25	2.38
24	32	1.88	27.25	26.12	20-1.38	29.5	6	24	23.25	3.25	24.25	.5	4.38	24.25	2.50

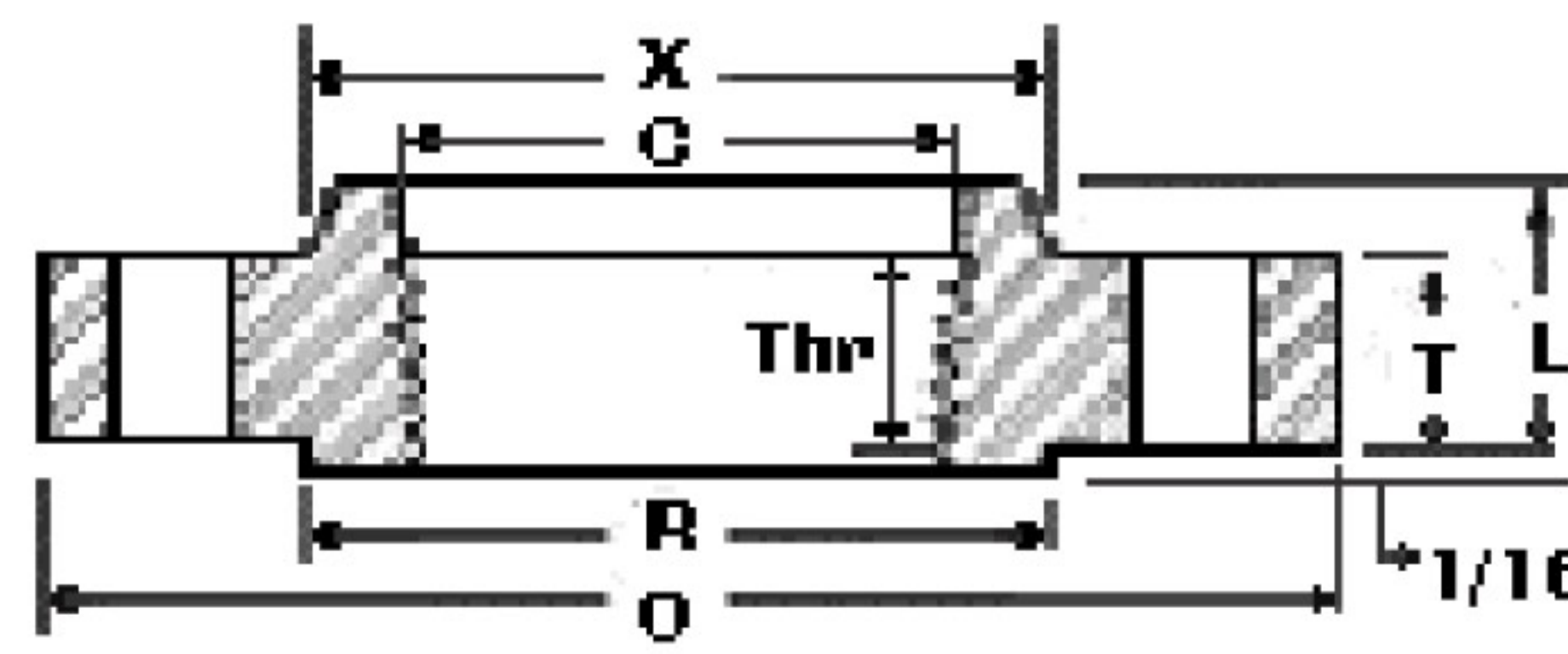
Dimensions in inches.

- 1- 1/16 in. raised face included in dimensions T, L and L2.
- 2- Bolt hole diameter 1/8 in. larger than bolt diameter.
- 3- Standard Bore dimensions provided.
- 4- This dimension is commonly associated with "true" Lap Joints. Industry standard is to make to the slip on length thru the hub.

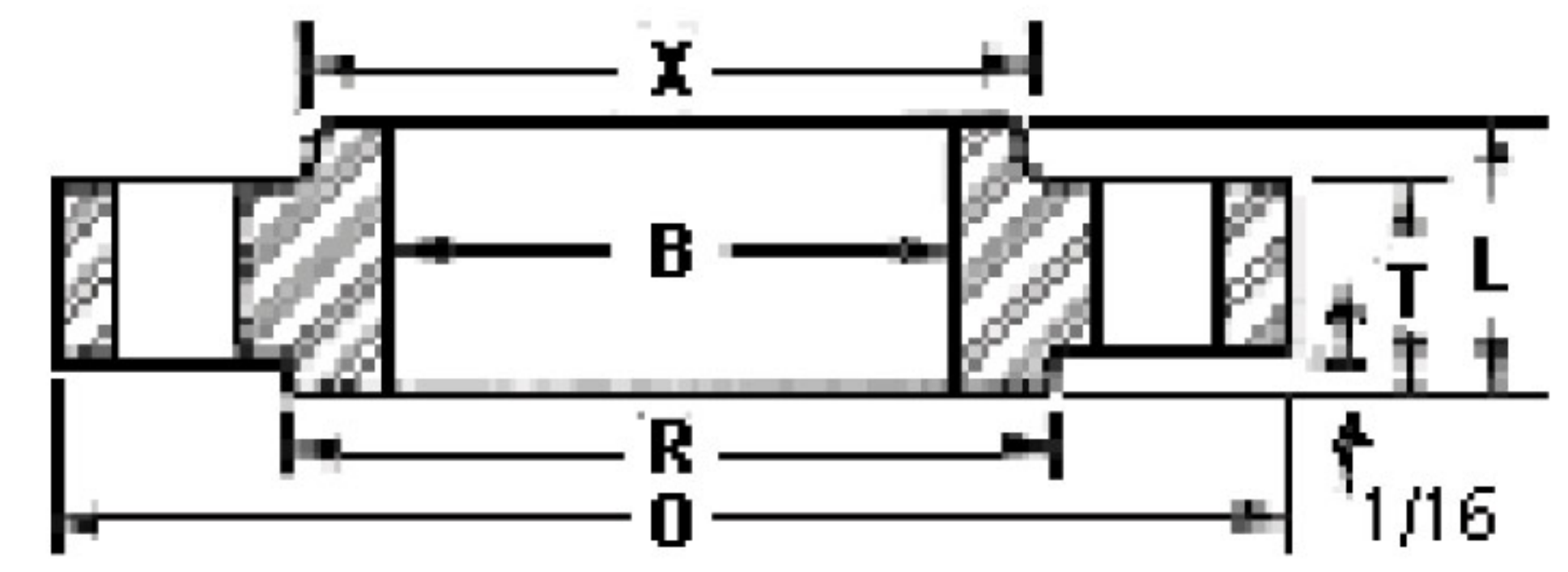
ANSI B16.5 Class 300 Forged Flanges



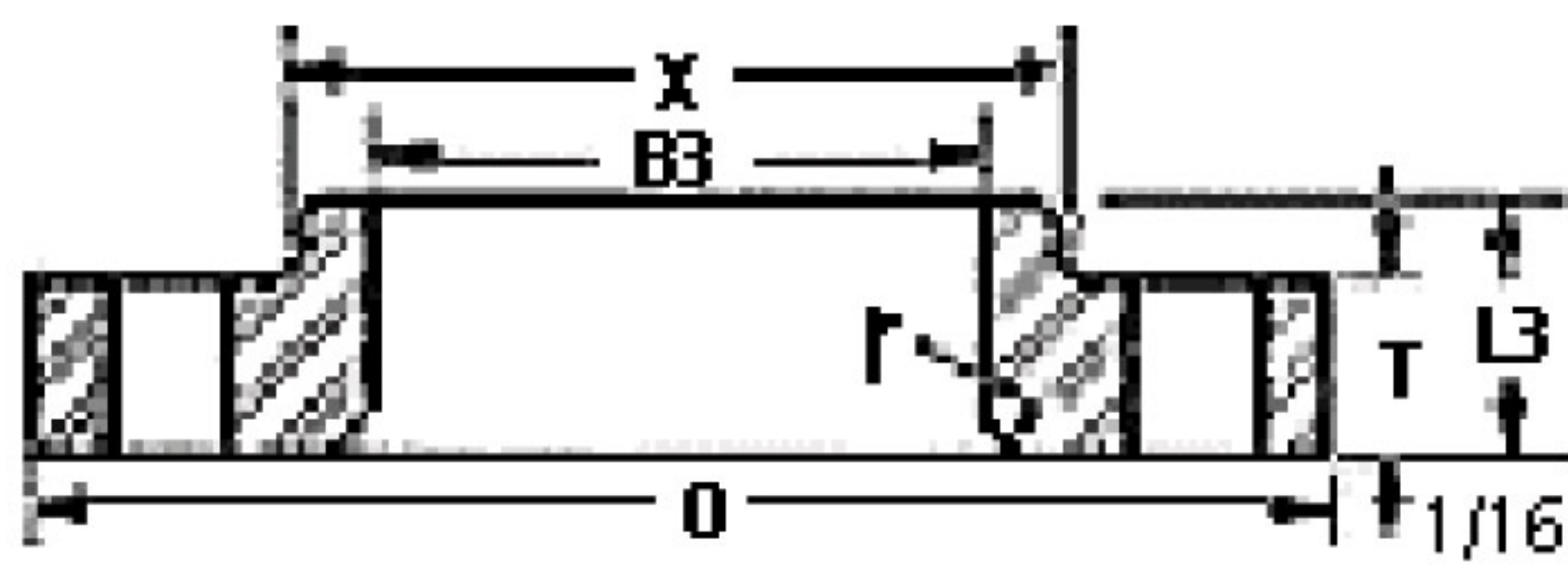
Weld Neck



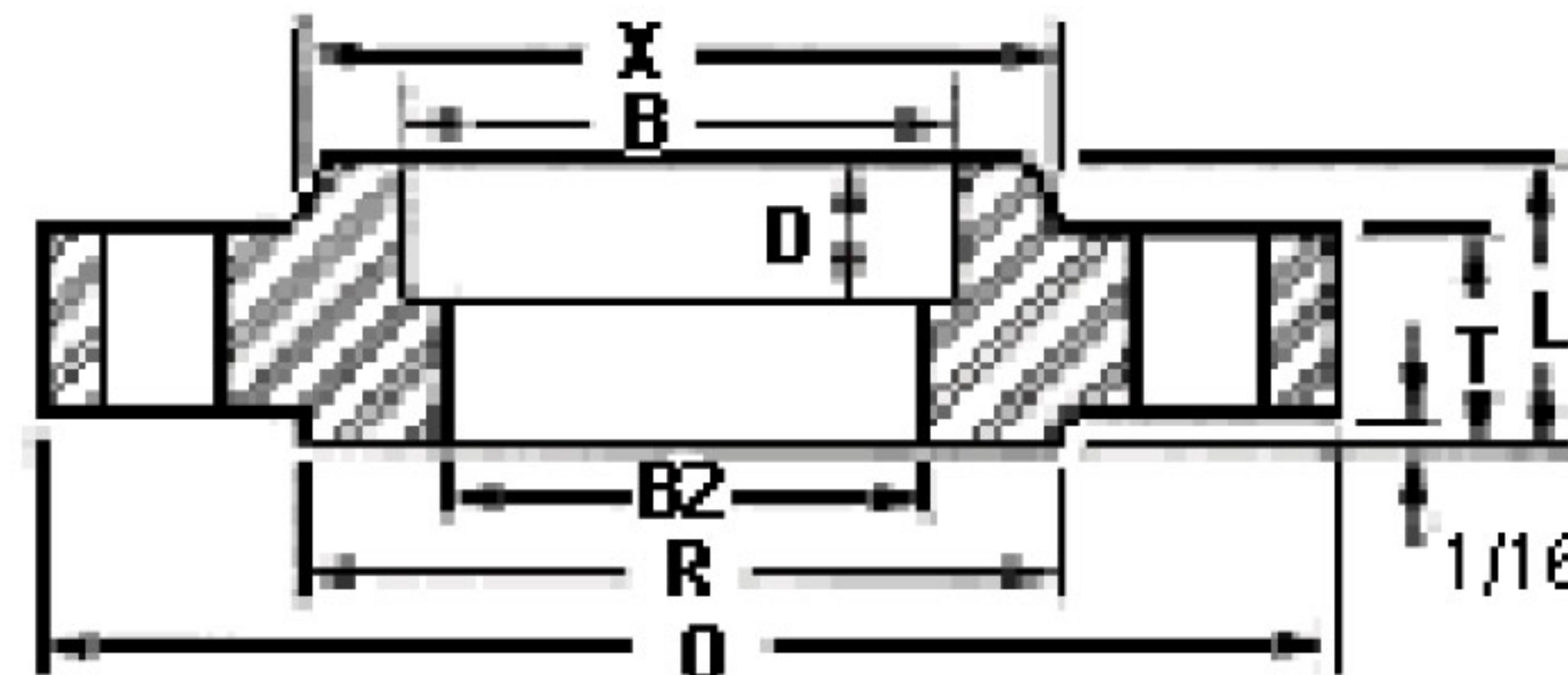
Threaded



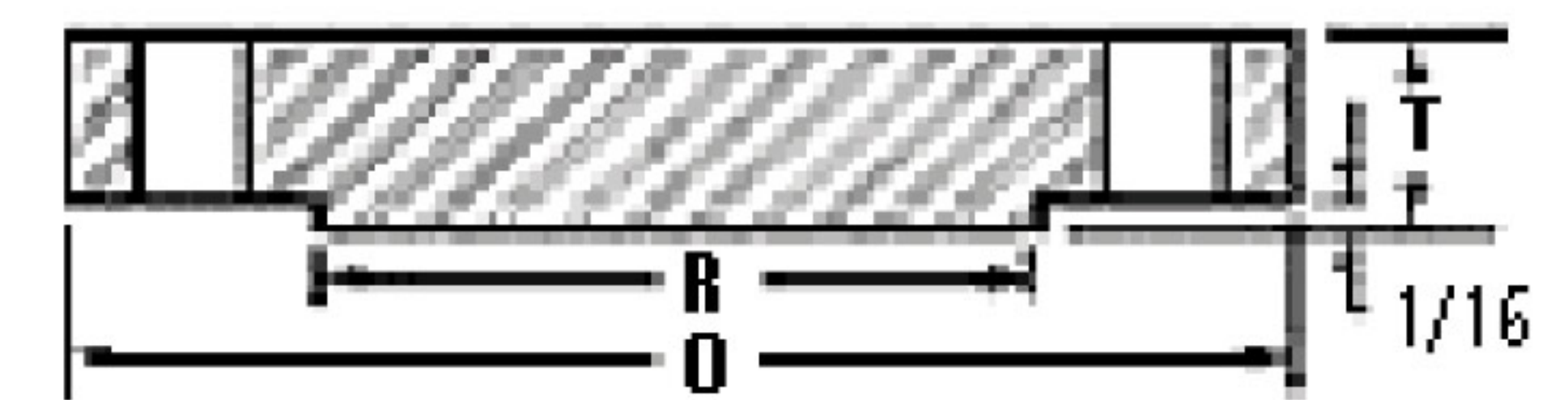
Slip-On



Lap Joint



Socket Weld



Blind

Nom. Pipe Size	O	T ₁	R	X	No. 2 & Dia. of Holes	Bolt Circle Dia.	L2 ₁	H	B2 ₃	L	B	r	L3 ₄	B3	D	C	Thr
1/2	3.75	0.56	1.38	1.5	4-0.62	2.62	2.06	0.84	0.62	0.88	0.88	0.12	0.88	0.9	0.38	0.93	0.62
3/4	4.62	0.62	1.69	1.88	4-0.75	3.25	2.25	1.05	0.82	1	1.09	0.12	1	1.11	0.44	1.14	0.62
1	4.88	0.69	2	2.12	4-0.75	3.5	2.44	1.32	1.05	1.06	1.36	0.12	1.06	1.38	0.5	1.41	0.69
1 1/4	5.25	0.75	2.5	2.5	4-0.75	3.88	2.56	1.66	1.38	1.06	1.7	0.19	1.06	1.72	0.56	1.75	0.81
1 1/2	6.12	0.81	2.88	2.75	4-0.88	4.5	2.69	1.9	1.61	1.19	1.95	0.25	1.19	1.97	0.62	1.99	0.88
2	6.5	0.88	3.62	3.31	8-0.75	5	2.75	2.38	2.07	1.31	2.44	0.31	1.31	2.46	0.69	2.5	1.12
2 1/2	7.5	1	4.12	3.94	8-0.88	5.88	3	2.88	2.47	1.5	2.94	0.31	1.5	2.97	0.75	3	1.25
3	8.25	1.12	5	4.62	8-0.88	6.62	3.12	3.5	3.07	1.69	3.57	0.38	1.69	3.6	0.81	3.63	1.25
3 1/2	9	1.19	5.5	5.25	8-0.88	7.25	3.19	4	3.55	1.75	4.07	0.38	1.75	4.1		4.13	1.44
4	10	1.25	6.19	5.75	8-0.88	7.88	3.38	4.5	4.03	1.88	4.57	0.44	1.88	4.6		4.63	1.44
5	11	1.38	7.31	7	8-0.88	9.25	3.88	5.56	5.05	2	5.66	0.44	2	5.69		5.69	1.69
6	12.5	1.44	8.5	8.12	12-0.88	10.62	3.88	6.63	6.07	2.06	6.72	0.5	2.06	6.75		6.75	1.81
8	15	1.62	10.62	10.25	12-1.00	13	4.38	8.63	7.98	2.44	8.72	0.5	2.44	8.75		8.75	2
10	17.5	1.88	12.75	12.62	16-1.12	15.25	4.62	10.75	10.02	2.62	10.88	0.5	3.75	10.92		10.88	2.19
12	20.5	2	15	14.75	16-1.25	17.75	5.12	12.75	12.00	2.88	12.88	0.5	4	12.92		12.94	2.38
14	23	2.12	16.25	16.75	20-1.25	20.25	5.62	14	13.25	3	14.14	0.5	4.38	14.18		14.19	2.5
16	25.5	2.25	18.5	19	20-1.38	22.5	5.75	16	15.25	3.25	16.16	0.5	4.75	16.19		16.19	2.69
18	28	2.38	21	21	24-1.38	24.75	6.25	18	17.25	3.5	18.18	0.5	5.12	18.2		18.19	2.75
20	30.5	2.5	23	23.12	24-1.38	27	6.38	20	19.25	3.75	20.2	0.5	5.5	20.25		20.19	2.88
22	33	2.63	25.25	25.25	24-1.63	29.25	6.5	22	21.25	4.00	22.22	0.5	5.75	22.25		22.19	3.13
24	36	2.75	27.25	27.62	24-1.62	32	6.62	24	23.25	4.19	24.25	0.5	6	24.25		24.19	3.25

Dimensions in inches.

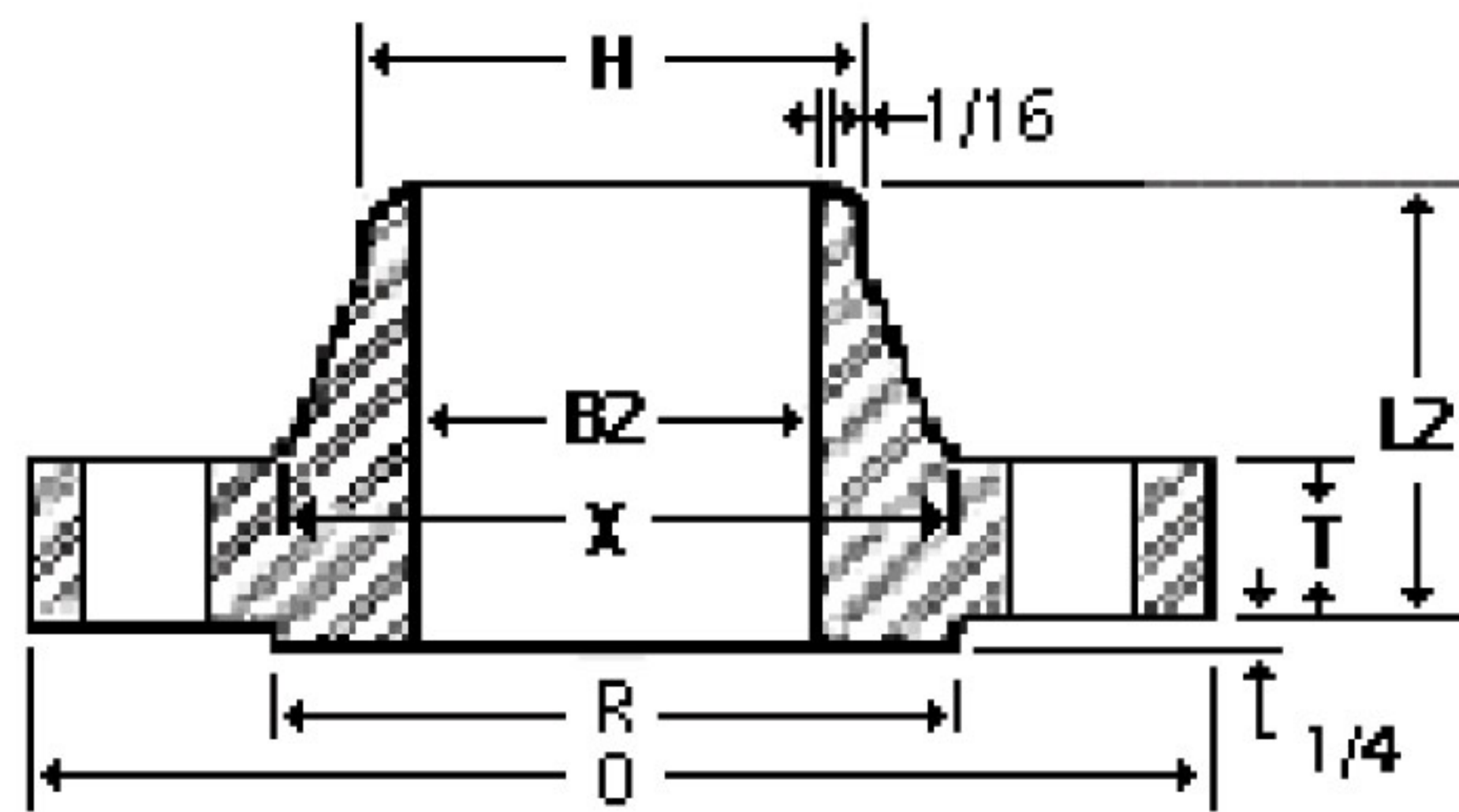
1- 1/16 in. raised face included in dimensions T, L and L2.

2- Bolt hole diameter 1/8 in. larger than bolt diameter.

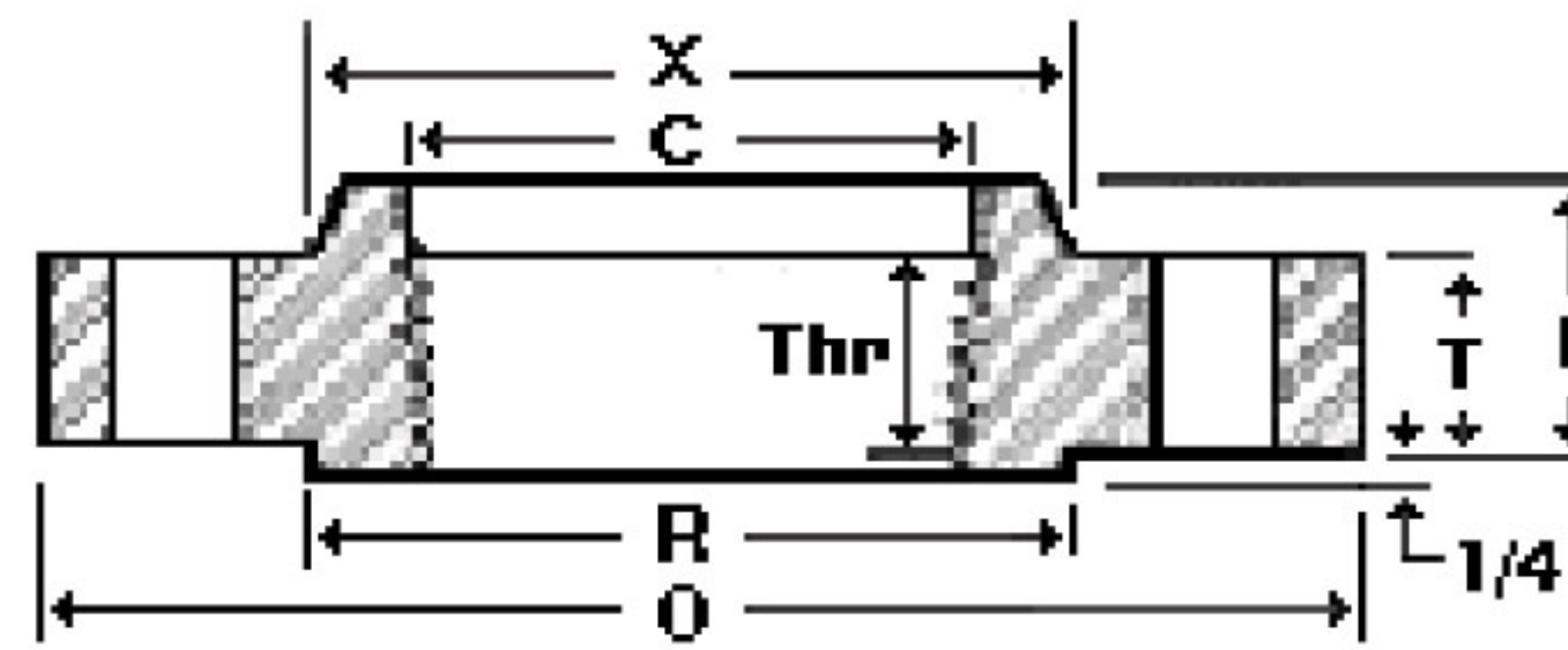
3- Standard Bore dimensions provided.

4- This dimension is commonly associated with "true" Lap Joints. Industry standard is to make to the slip on length thru the hub.

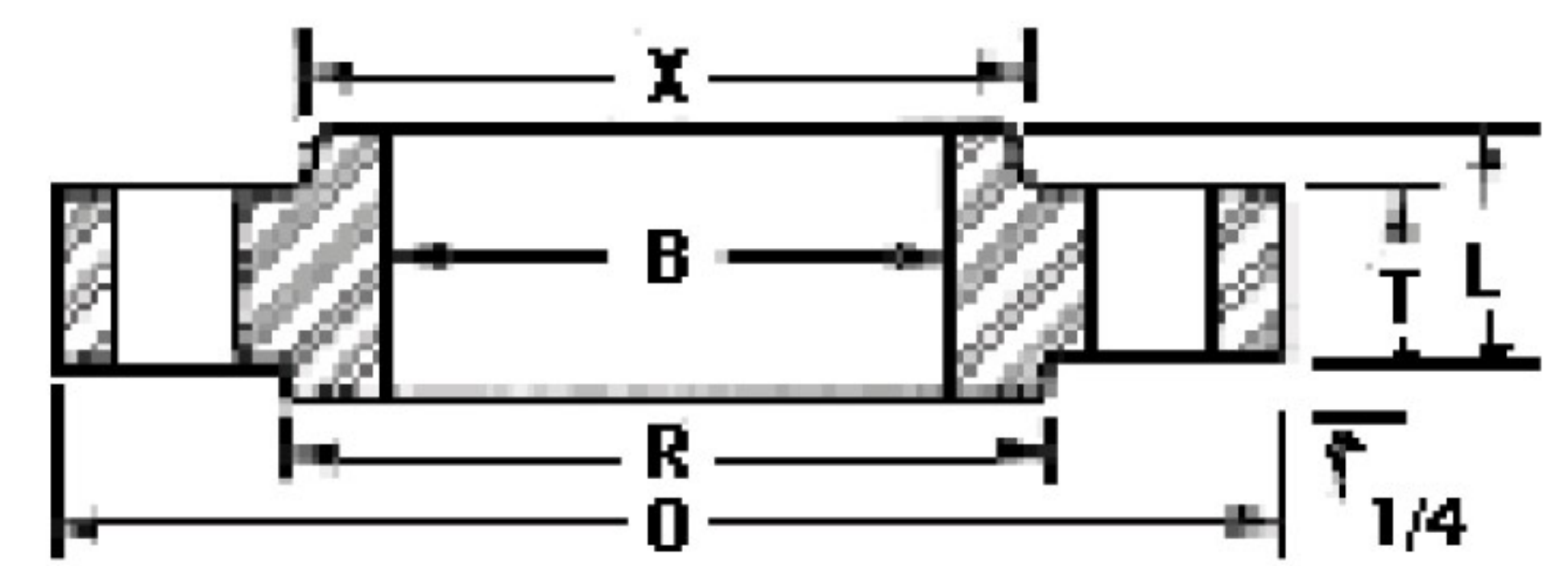
ANSI B16.5 Class 400 Forged Flanges



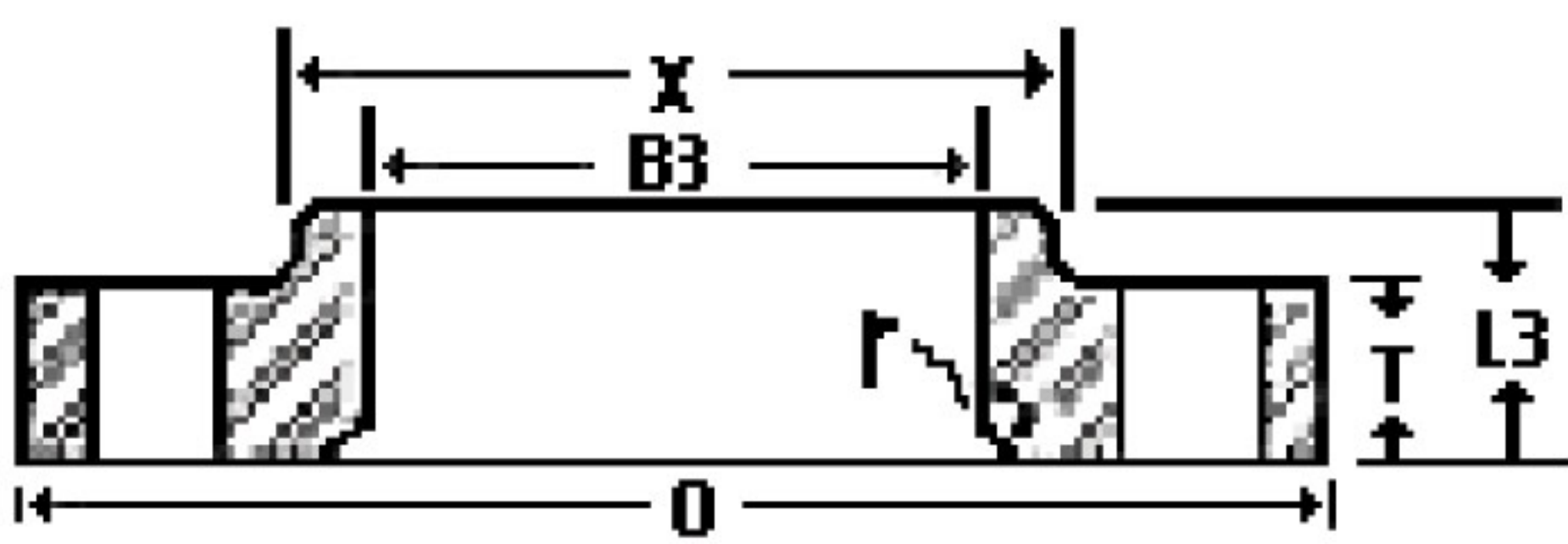
Weld Neck



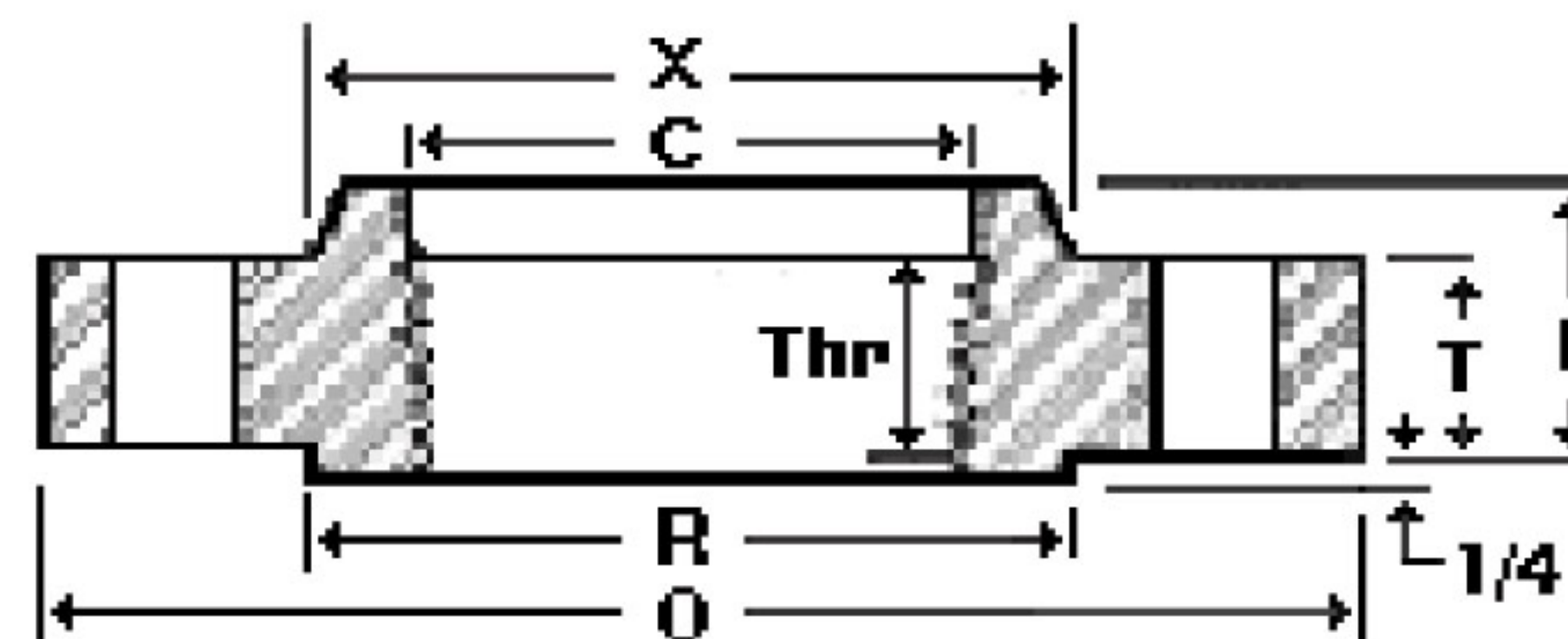
Threaded



Slip-On



Lap Joint



Socket Weld



Blind

Nom. Pipe Size	O	T ₁	R	X	No. 2 & Dia. of Holes	Bolt Circle Dia.	L2 ₁	H	B2	L	B	r	L3	B3	D	C	Thr
1/2	3.75	0.56	1.38	1.5	4-0.62	2.62	2.06	0.84	S p e c i f i e d b y P u r c h a s e r	0.88	0.88	0.12	0.88	0.9	0.38	0.93	0.62
3/4	4.62	0.62	1.69	1.88	4-0.75	3.25	2.25	1.05		1	1.09	0.12	1	1.11	0.44	1.14	0.62
1	4.88	0.69	2	2.12	4-0.75	3.5	2.44	1.32		1.06	1.36	0.12	1.06	1.38	0.5	1.41	0.69
1 1/4	5.25	0.81	2.5	2.5	4-0.75	3.88	2.62	1.66		1.12	1.7	0.19	1.12	1.72	0.56	1.75	0.81
1 1/2	6.12	0.88	2.88	2.75	4-0.88	4.5	2.75	1.9		1.25	1.95	0.25	1.25	1.97	0.62	1.99	0.88
2	6.5	1	3.62	3.31	8-0.75	5	2.88	2.38		1.44	2.44	0.31	1.44	2.46	0.69	2.5	1.12
2 1/2	7.5	1.12	4.12	3.94	8-0.88	5.88	3.12	2.88		1.62	2.94	0.31	1.62	2.97	0.75	3	1.25
3	8.25	1.25	5	4.62	8-0.88	6.62	3.25	3.5		1.81	3.57	0.38	1.81	3.6	0.81	3.63	1.38
3 1/2	9	1.38	5.5	5.25	8-1.00	7.25	3.38	4		1.94	4.07	0.38	1.94	4.1		4.13	1.56
4	10	1.38	6.19	5.75	8-1.00	7.88	3.5	4.5		2	4.57	0.44	2	4.6		4.63	1.44
5	11	1.5	7.31	7	8-1.00	9.25	4	5.56		2.12	5.66	0.44	2.12	5.69		5.69	1.69
6	12.5	1.62	8.5	8.12	12-1.00	10.62	4.06	6.63		2.25	6.72	0.5	2.25	6.75		6.75	1.81
8	15	1.88	10.62	10.25	12-1.12	13	4.62	8.63		2.69	8.72	0.5	2.69	8.75		8.75	2
10	17.5	2.12	12.75	12.62	16-1.25	15.25	4.88	10.75		2.88	10.88	0.5	4	10.92		10.88	2.19
12	20.5	2.25	15	14.75	16-1.38	17.75	5.38	12.75		3.12	12.88	0.5	4.25	12.92		12.94	2.38
14	23	2.38	16.25	16.75	20-1.38	20.25	5.88	14		3.31	14.14	0.5	4.62	14.18		14.19	2.5
16	25.5	2.5	18.5	19	20-1.50	22.5	6	16		3.69	16.16	0.5	5	16.19		16.19	2.69
18	28	2.62	21	21	24-1.50	24.75	6.5	18		3.88	18.18	0.5	5.38	18.2		18.19	2.75
20	30.5	2.75	23	23.12	24-1.62	27	6.62	20		4	20.2	0.5	5.75	20.25		20.19	2.88
22	33	2.88	25.25	25.25	24-1.75	29.25	6.75	22		4.25	22.22	0.5	6	22.25		--	--
24	36	3	27.25	27.62	24-1.88	32	6.88	24		4.5	24.25	0.5	6.25	24.25		24.19	3.25

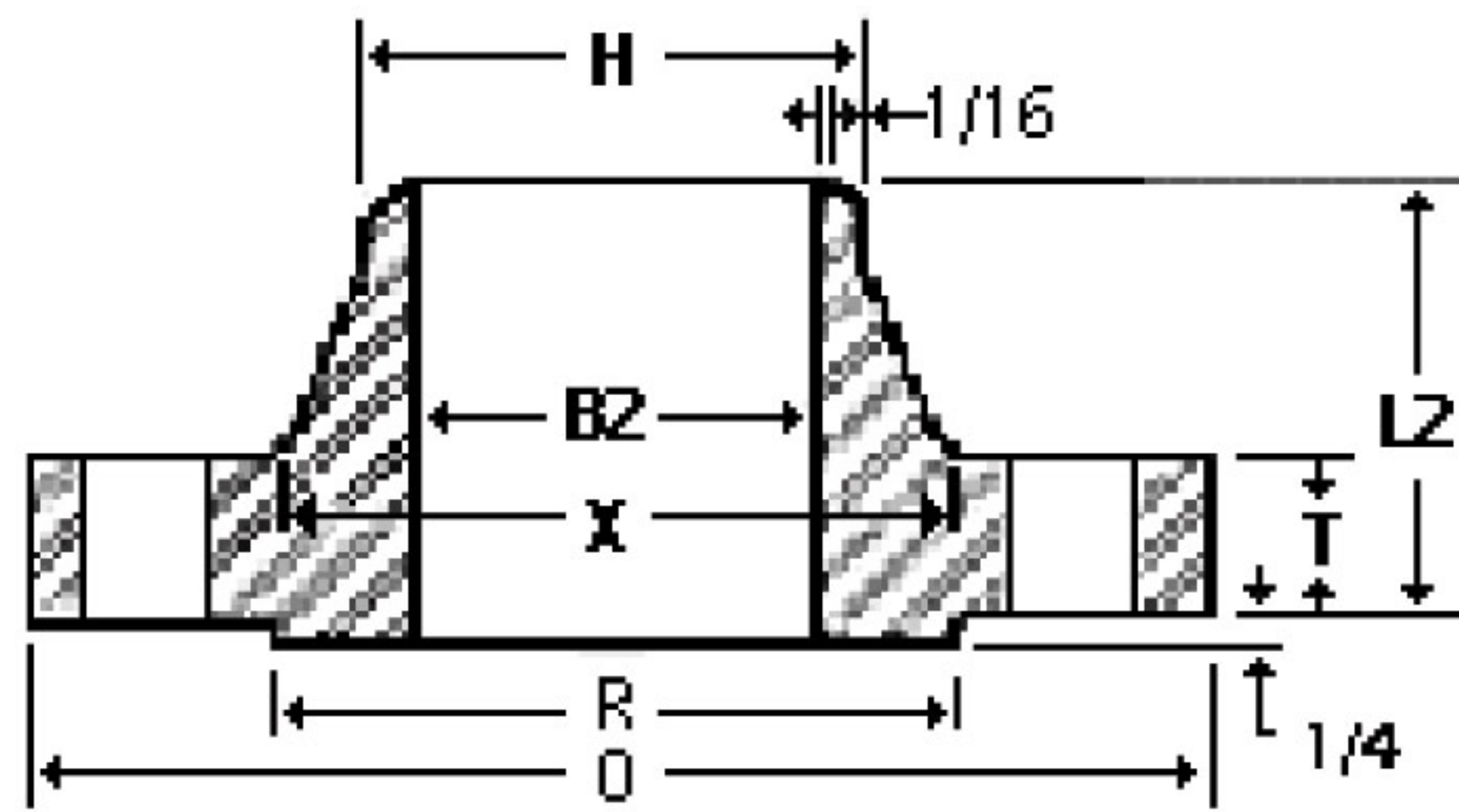
Dimensions in inches.

Sizes NPS 1/2 through 3-1/2 are same as Class 600 flanges.

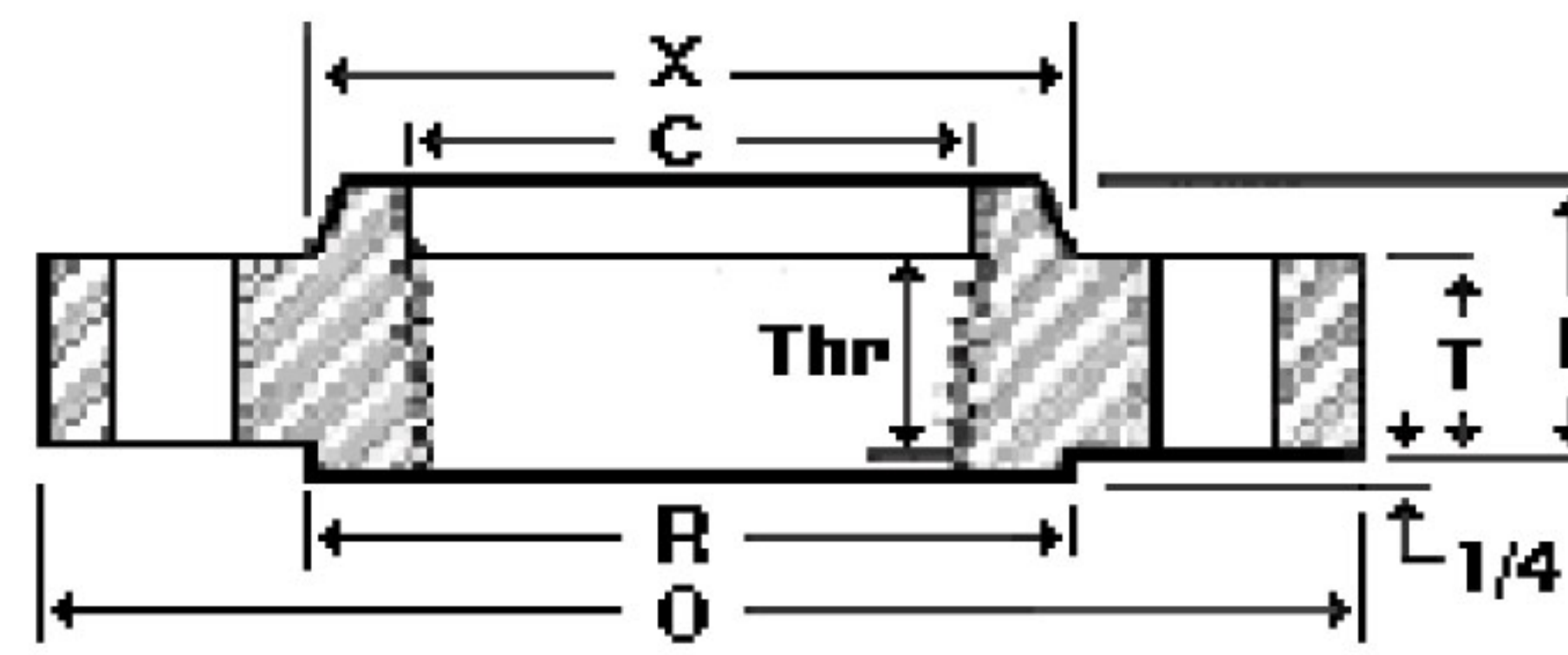
1- 1/4 in. raised face not included in dimensions T, L and L2.

2- Bolt hole diameter 1/8 in. larger than bolt diameter.

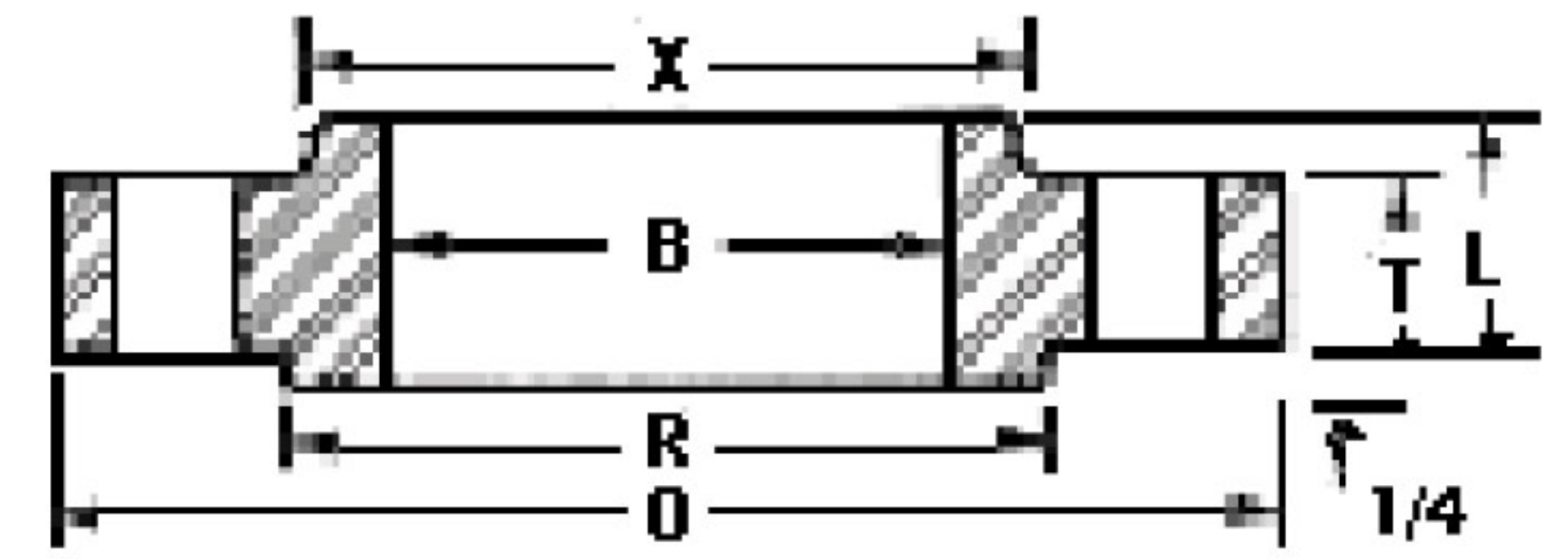
ANSI B16.5 Class 600 Forged Flanges



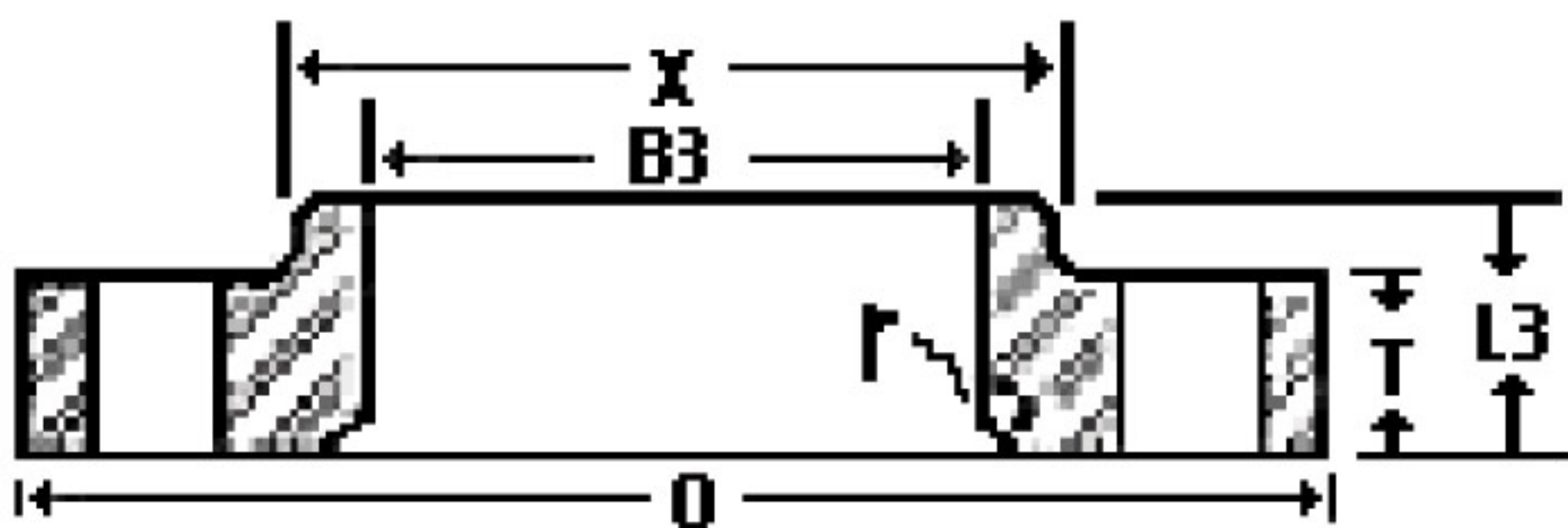
Weld Neck



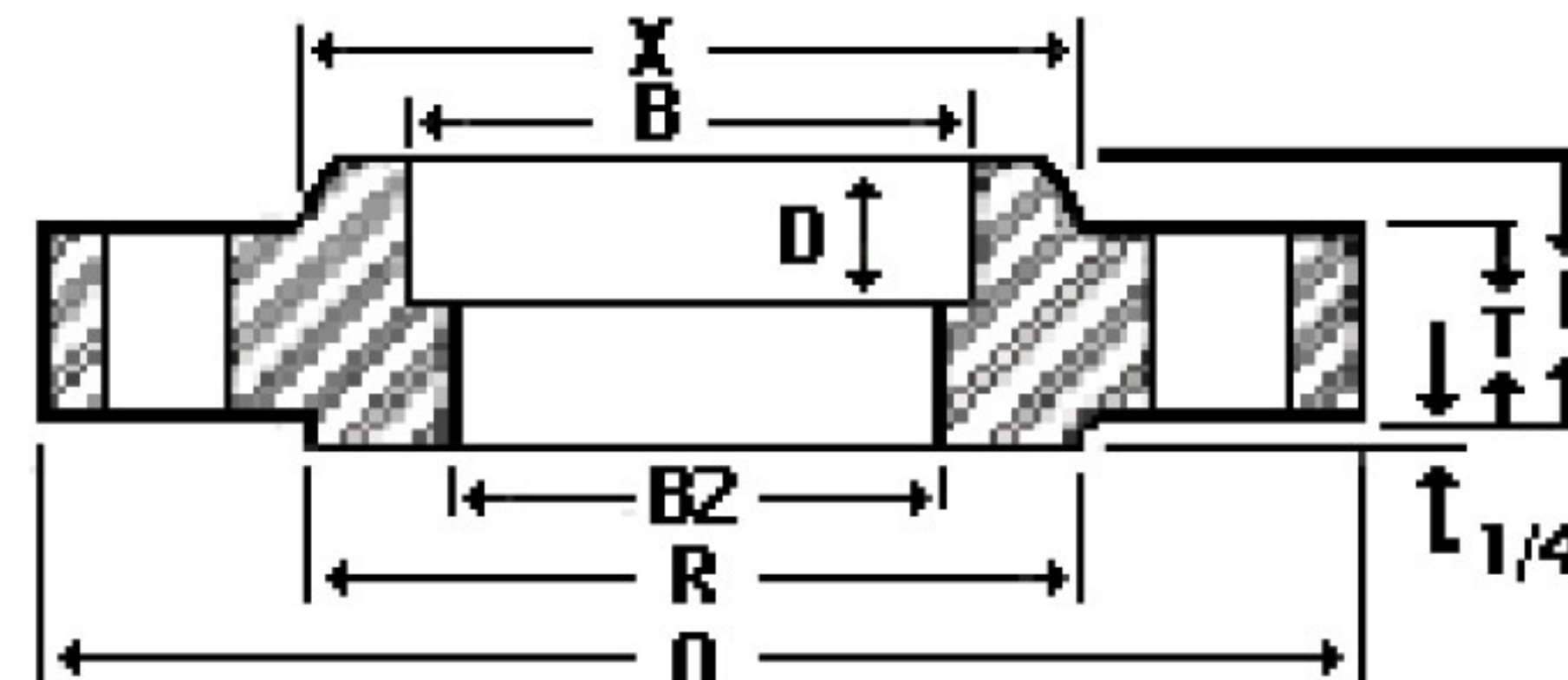
Threaded



Slip-On



Lap Joint



Socket Weld



Blind

Nom. Pipe Size	O	T ₁	R	X	No. ² and Dia. of Bolt Holes	Bolt Circle Dia.	L ₂ ¹	H	B2	L	B	r	L3	B3	D	C	Thr
1/2	3.75	0.56	1.38	1.5	4-0.62	2.62	2.06	0.84	To	0.88	0.88	0.12	0.88	0.9	0.38	0.93	0.62
3/4	4.62	0.62	1.69	1.88	4-0.75	3.25	2.25	1.05	Be	1	1.09	0.12	1	1.11	0.44	1.14	0.62
1	4.88	0.69	2	2.12	4-0.75	3.5	2.44	1.32	S	1.06	1.36	0.12	1.06	1.38	0.5	1.41	0.69
1 1/4	5.25	0.81	2.5	2.5	4-0.75	3.88	2.62	1.66	p	1.12	1.7	0.19	1.12	1.72	0.56	1.75	0.81
1 1/2	6.12	0.88	2.88	2.75	4-0.88	4.5	2.75	1.9	e	1.25	1.95	0.25	1.25	1.97	0.62	1.99	0.88
2	6.5	1	3.62	3.31	8-0.75	5	2.88	2.38	c	1.44	2.44	0.31	1.44	2.46	0.69	2.5	1.12
2 1/2	7.5	1.12	4.12	3.94	8-0.88	5.88	3.12	2.88	i	1.62	2.94	0.31	1.62	2.97	0.75	3	1.25
3	8.25	1.25	5	4.62	8-0.88	6.62	3.25	3.5	f	1.81	3.57	0.38	1.81	3.6	0.81	3.63	1.38
3 1/2	9	1.38	5.5	5.25	8-1.00	7.25	3.38	4	i	1.94	4.07	0.38	1.94	4.1		4.13	1.56
4	10.75	1.5	6.19	6	8-1.00	8.5	4	4.5	e	2.12	4.57	0.44	2.12	4.6		4.63	1.62
5	13	1.75	7.31	7.44	8-1.12	10.5	4.5	5.56	d	2.38	5.66	0.44	2.38	5.69		5.69	1.88
6	14	1.88	8.5	8.75	12-1.12	11.5	4.62	6.63	by	2.62	6.72	0.5	2.62	6.75		6.75	2
8	16.5	2.19	10.62	10.75	12-1.25	13.75	5.25	8.63	p	3	8.72	0.5	3	8.75		8.75	2.25
10	20	2.50	12.75	13.5	16-1.38	17	6	10.75	u	3.38	10.88	0.5	4.38	10.92		10.88	2.56
12	22	2.62	15	15.75	20-1.38	19.25	6.12	12.75	r	3.62	12.88	0.5	4.62	12.92		12.94	2.75
14	23.75	2.75	16.25	17	20-1.50	20.75	6.5	14	c	3.69	14.14	0.5	5	14.18		14.19	2.88
16	27	3.00	18.5	19.5	20-1.62	23.75	7	16	h	4.19	16.16	0.5	5.5	16.19		18.19	3.06
18	29.25	3.25	21	21.5	20-1.75	25.75	7.25	18	a	4.62	18.18	0.5	6	18.2		18.1	3.12
20	32	3.5	23	24	24-1.75	28.5	7.5	20	s	5	20.2	0.5	6.5	20.25		20.19	3.25
22	34.25	3.75	25.25	26.25	24-1.75	30.63	7.75	22	e	5.25	22.22	0.5	6.88	22.25		--	--
24	37	4	27.25	28.25	24-2.00	33	8	24	r	5.5	24.25	0.5	7.25	24.25		24.19	3.62

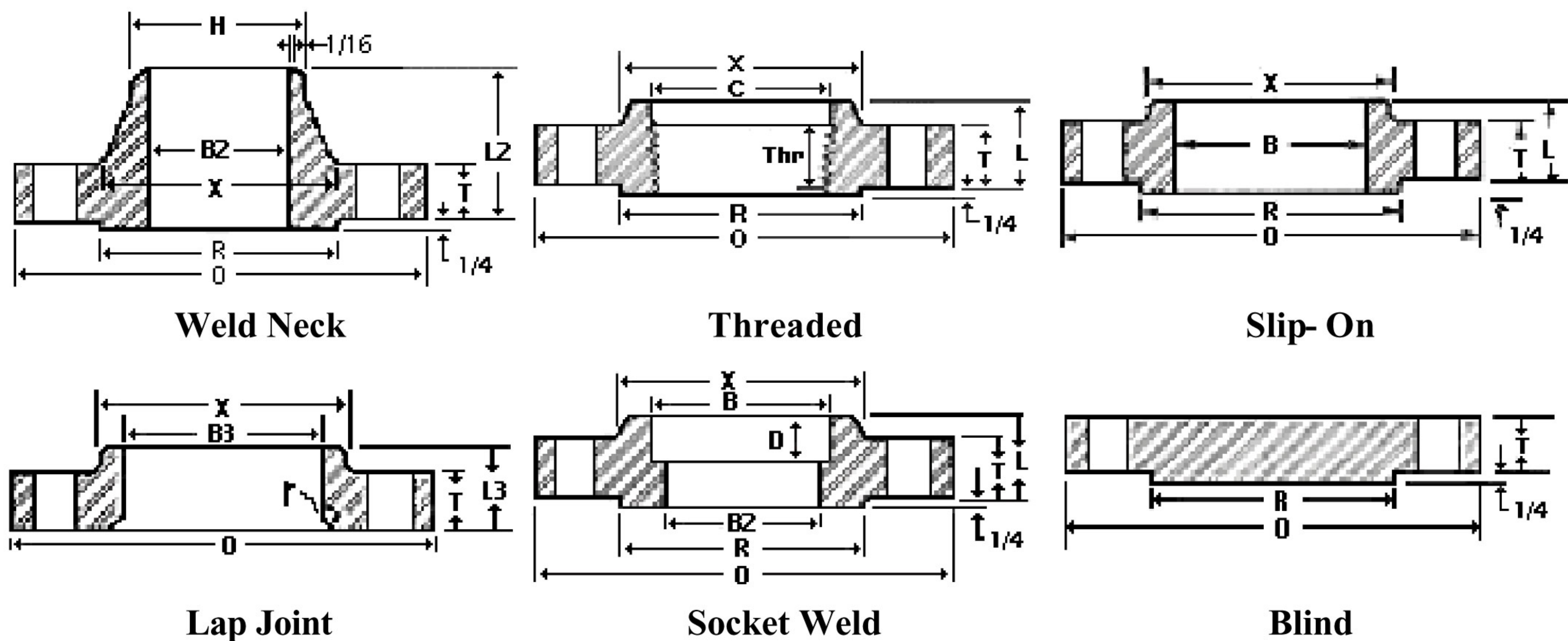
Dimensions in inches.

Sizes NPS 1/2 through 3-1/2 are same as Class 400 flanges.

1- 1/4 in. raised face not included in dimensions T, L and L2.

2- Bolt hole diameter 1/8 in. larger than bolt diameter.

ANSI B16.5 Class 900 Forged Flanges

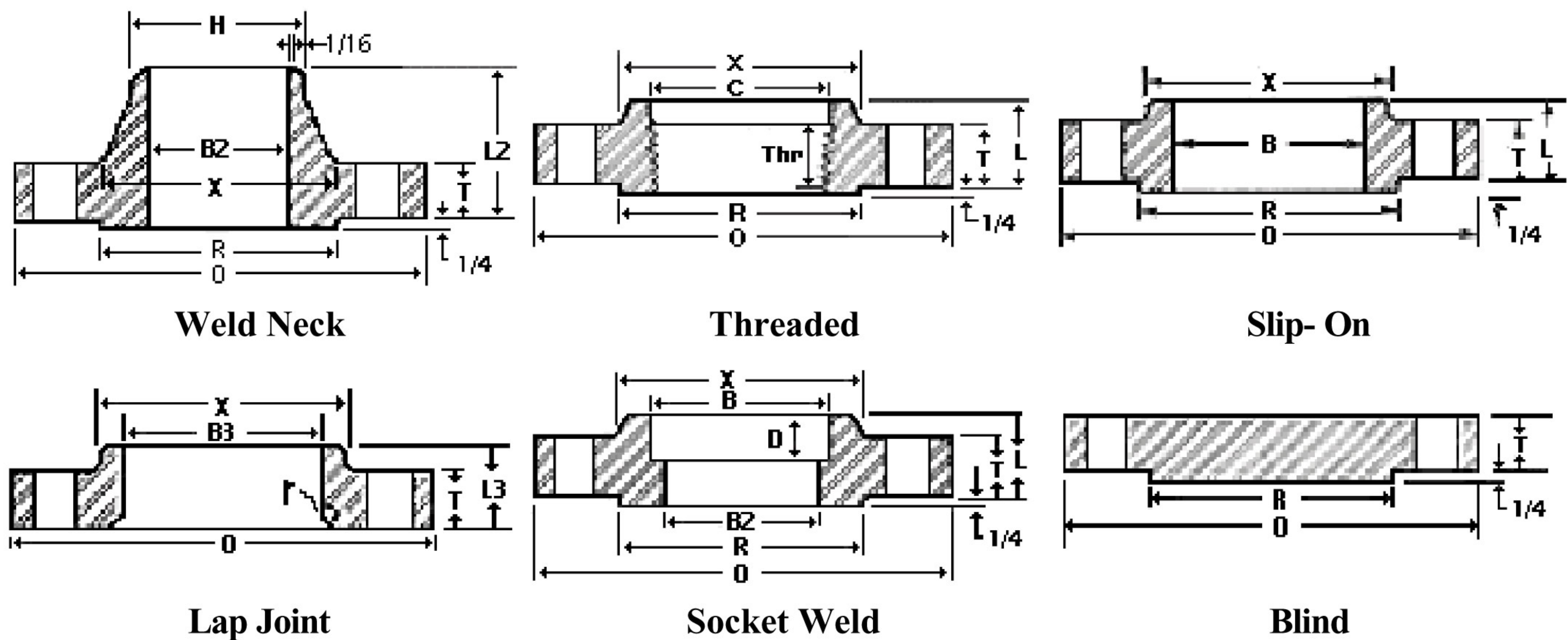


Nom. Pipe Size	O	T ₁	R	X	No. ² and Dia. of Bolt Holes	Bolt Circle Dia.	L2 ₁	H	B2	L	B	r	L3	B3	Thr
Sizes ½" Thru 2 ½" Are Identical To Class 1500															
3	9.50	1.50	5.00	5.00	8-1.00	7.50	4.00	3.5	Specified by purchaser	2.13	3.57	0.38	2.13	3.6	1.63
4	11.50	1.75	6.19	6.25	8-1.25	9.25	4.50	4.5		2.75	4.57	0.44	2.75	4.6	1.88
5	13.75	2.00	7.31	7.50	8-1.38	11.00	5.00	5.56		3.13	5.66	0.44	3.13	5.69	2.13
6	15.00	2.19	8.50	9.25	12-1.25	12.50	5.50	6.63		3.38	6.72	0.5	3.38	6.75	2.25
8	18.50	2.50	10.63	11.75	12-1.50	15.50	6.38	8.63		4.00	8.72	0.5	4.50	8.75	2.50
10	21.50	2.75	12.75	14.50	16-1.50	18.50	7.25	10.75		4.25	10.88	0.5	5.00	10.92	2.81
12	24.00	3.13	15.00	16.50	20-1.50	21.00	7.88	12.75		4.63	12.88	0.5	5.63	12.92	3.00
14	25.25	3.38	16.25	17.75	20-1.63	22.00	8.38	14		5.13	14.14	0.5	6.13	14.18	3.25
16	27.75	3.50	18.50	20.00	20-1.75	24.25	8.50	16		5.25	16.16	0.5	6.50	16.19	3.38
18	31.00	4.00	21.00	22.25	20-2.00	27.00	9.00	18		6.00	18.18	0.5	7.50	18.2	3.50
20	33.75	4.25	23.00	24.50	20-2.13	29.50	9.75	20	Specified by purchaser	6.25	20.2	0.5	8.25	20.25	3.63
24	41.00	5.50	27.25	29.50	20-2.63	35.50	11.50	24		8.00	24.25	0.5	10.5	24.25	4.00

Dimensions in inches.
Sizes NPS 1/2 through 2-1/2 are same as Class 1500 flanges.
1- 1/4 in. raised face not included in dimensions T, L and L2.
2- Bolt hole diameter 1/8 in. larger than bolt diameter.



ANSI B16.5 Class 1500 Forged Flanges



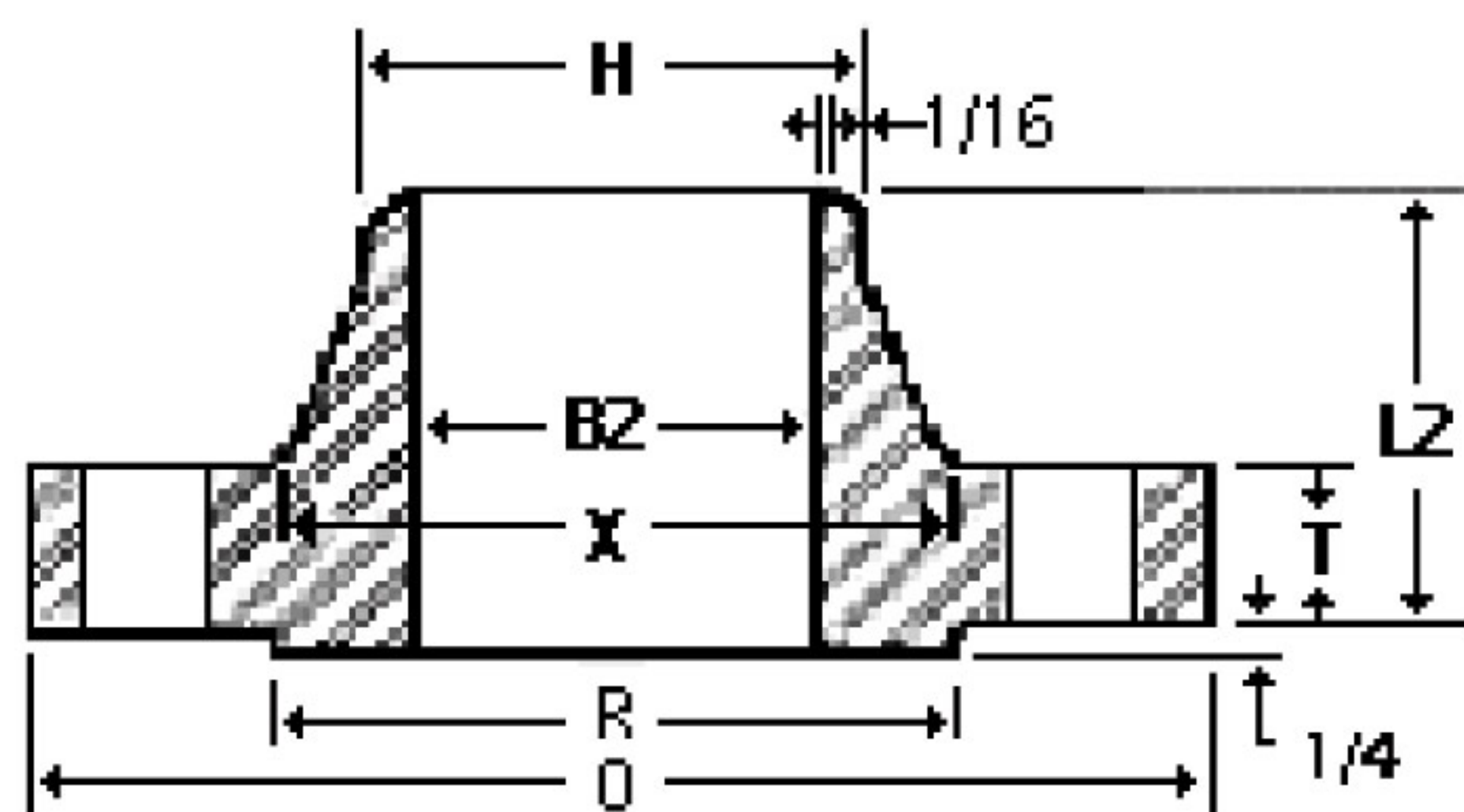
Nom. Pipe Size	O	T1	R	X	No.2 & Dia. of Bolt Holes	Bolt Circle Dia.	L21	H	B2	L	B	r	L3	D	B3	Thr
1/2"	4.75	0.88	1.38	1.50	4-0.88	3.25	2.38	0.84		1.25	0.88	0.13	1.25	0.38	0.90	0.88
3/4	5.13	1.00	1.69	1.75	4-0.88	3.50	2.75	1.05		1.38	1.09	0.13	1.38	0.44	1.11	1.00
1	5.88	1.13	2.00	2.06	4-1.00	4.00	2.88	1.32		1.63	1.36	0.13	1.63	0.50	1.38	1.13
1 1/4	6.25	1.13	2.50	2.50	4-1.00	4.38	2.88	1.66		1.63	1.70	0.19	1.63	0.56	1.72	1.19
1 1/2	7.00	1.25	2.88	2.75	4-1.13	4.88	3.25	1.90		1.75	1.95	0.25	1.75	0.63	1.97	1.25
2	8.50	1.50	3.63	4.13	8-1.00	6.50	4.00	2.38		2.25	2.44	0.31	2.25	0.69	2.46	1.50
2 1/2	9.63	1.63	4.13	4.88	8-1.13	7.50	4.13	2.88		2.50	2.94	0.31	2.50	0.75	2.97	1.88
3	10.50	1.88	5.00	5.25	8-1.25	8.00	4.63	3.50		2.88	3.57	0.38	2.88	-	3.60	2.00
4	12.25	2.13	6.19	6.38	8-1.38	9.50	4.88	4.50		3.56	4.57	0.44	3.56	-	4.60	2.25
5	14.75	2.88	7.31	7.75	8-1.63	11.50	6.13	5.56		4.13	5.66	0.44	4.13	-	5.69	2.50
6	15.50	3.25	8.50	9.00	12-1.50	12.50	6.75	6.63		4.69	6.72	0.50	4.69	-	6.75	2.75
8	19.00	3.63	10.63	11.50	12-1.75	15.50	8.38	8.63		5.63	8.72	0.50	5.63	-	8.75	3.00
10	23.00	4.25	12.75	14.50	12-2.00	19.00	10.00	10.75		6.25	10.88	0.50	7.00	-	10.92	3.31
12	26.50	4.88	15.00	17.75	16-2.13	22.50	11.13	12.75		7.13	12.88	0.50	8.63	-	12.92	3.63
14	29.50	5.25	16.25	19.50	16-2.38	25.00	11.75	14.00		-	-	0.50	9.50	-	14.18	-
16	32.50	5.75	18.50	21.75	16-2.63	27.75	12.25	16.00		-	-	0.50	10.25	-	16.19	-
18	36.00	6.38	21.00	23.50	16-2.88	30.50	12.88	18.00		-	-	0.50	10.88	-	18.20	-
20	38.75	7.00	23.00	25.25	16-3.13	32.75	14.00	20.00		-	-	0.50	11.50	-	20.25	-
24	46.00	8.00	27.25	30.00	16-3.63	39.00	16.00	24.00		-	-	0.50	13.00	-	24.25	-

1- 1/4 in. raised face not included in dimensions T, L and L2.

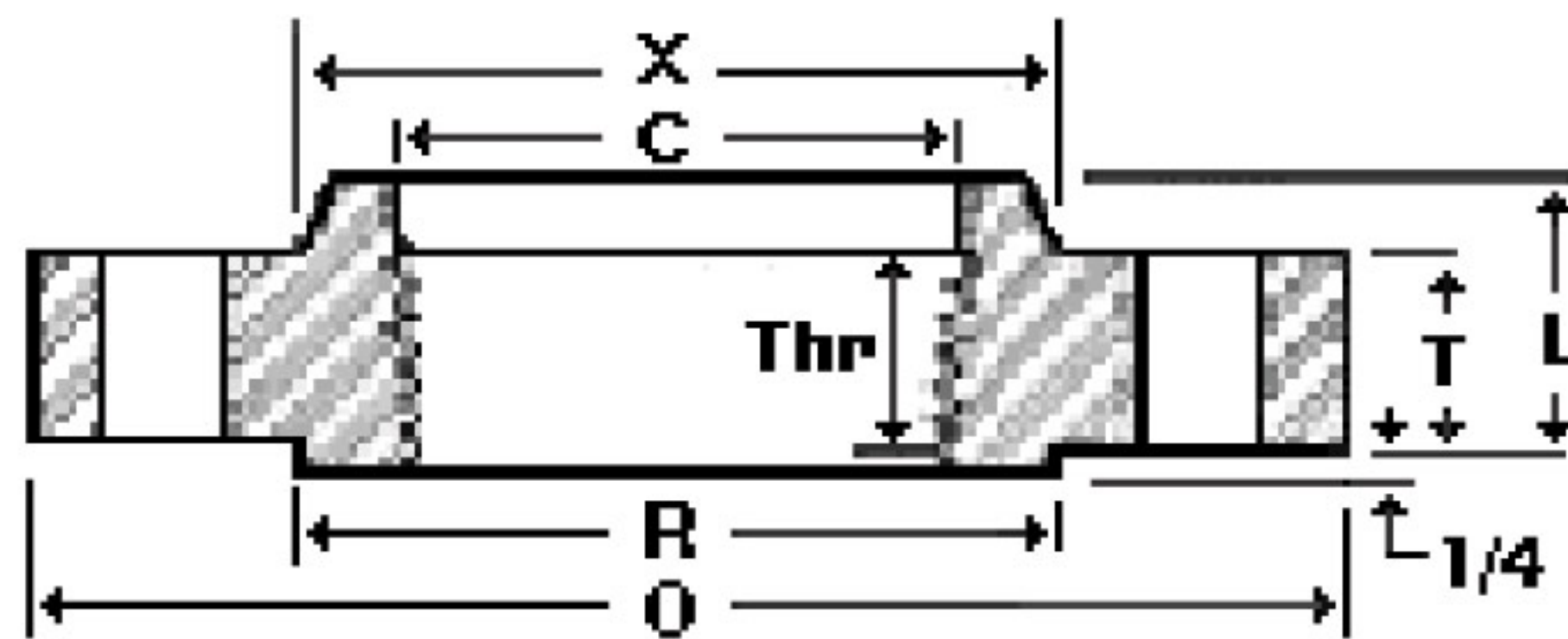
2- Bolt hole diameter 1/8 in. larger than bolt diameter.



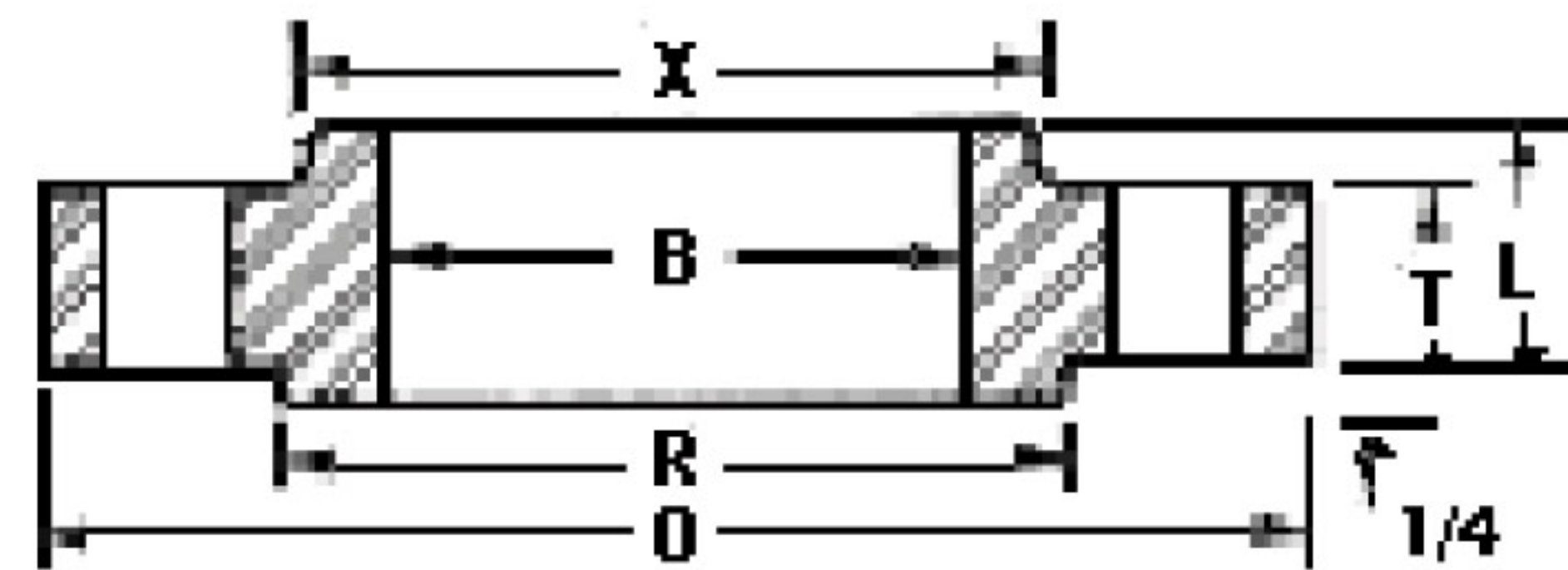
ANSI B16.5 Class 2500 Forged Flanges



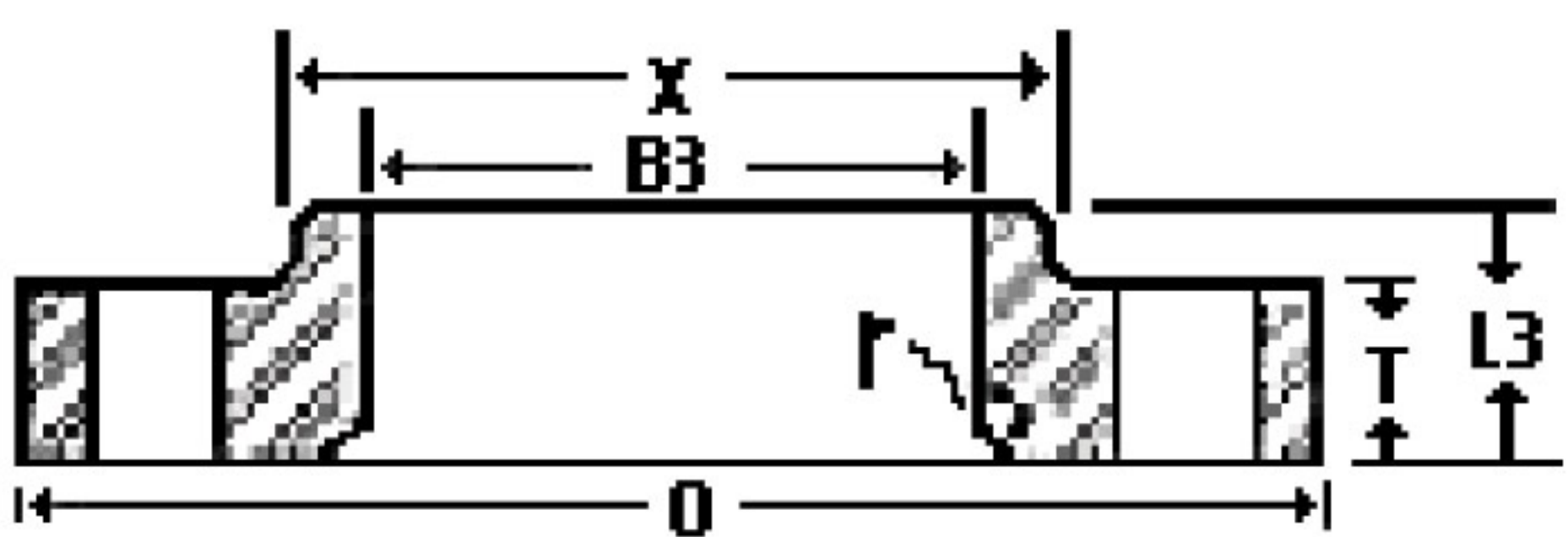
Weld Neck



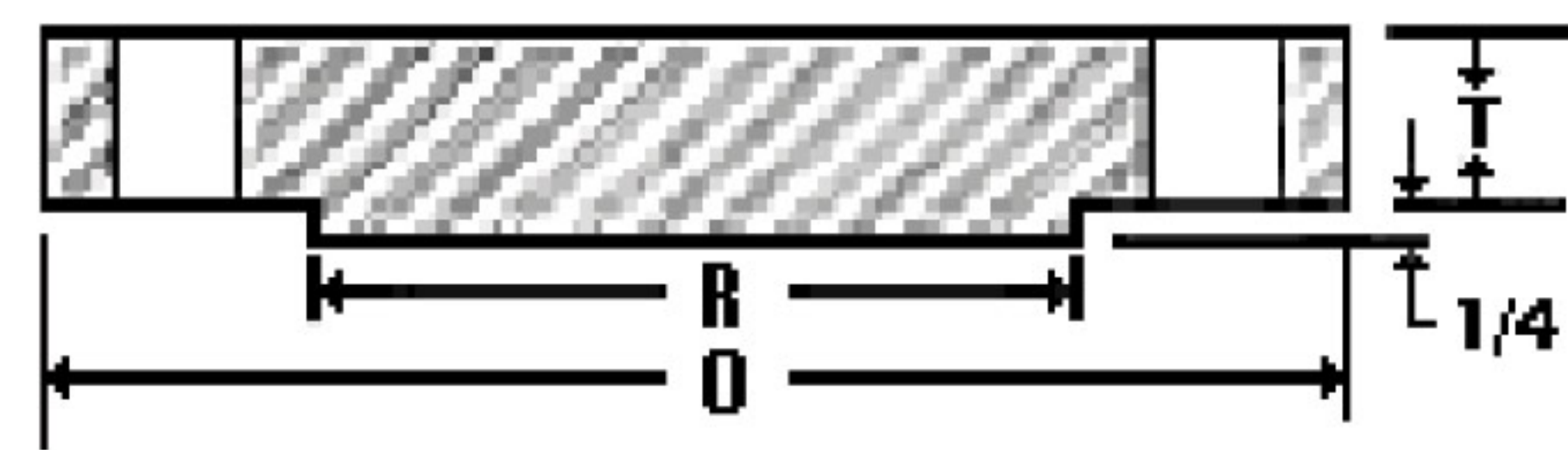
Threaded



Slip-On



Lap Joint



Blind

Nom. Pipe Size	O	T1	R	X	No.2 & Dia. of Bolt Holes	Bolt Circle Dia.	L21	H	B2	L	B	r	L3	B3	Thr
1/2"	5.25	1.19	1.38	1.69	4-0.88	3.50	2.88	0.84	Specified by Purchaser	1.56	0.88	0.13	1.56	0.90	1.13
3/4	5.50	1.25	1.69	2.00	4-0.88	3.75	3.13	1.05		1.69	1.09	0.13	1.69	1.11	1.25
1	6.25	1.38	2.00	2.25	4-1.00	4.25	3.50	1.32		1.88	1.36	0.13	1.88	1.38	1.38
1 1/4	7.25	1.50	2.50	2.88	4-1.13	5.13	3.75	1.66		2.06	1.70	0.18	2.06	1.72	1.50
1 1/2	8.00	1.75	2.88	3.13	4-1.25	5.75	4.38	1.90		2.38	1.95	0.25	2.38	1.97	1.75
2	9.25	2.00	3.63	3.75	8-1.13	6.75	5.00	2.38		2.75	2.44	0.31	2.75	2.46	2.00
2 1/2	10.50	2.25	4.13	4.50	8-1.25	7.75	5.63	2.88		3.13	2.94	0.31	3.13	2.97	2.25
3	12.00	2.63	5.00	5.25	8-1.38	9.00	6.63	3.50		3.63	3.57	0.37	3.63	3.60	2.50
4	14.00	3.00	6.19	6.50	8-1.63	10.75	7.50	4.50		4.25	4.57	0.44	4.25	4.60	2.75
5	16.50	3.63	7.31	8.00	8-1.88	12.75	9.00	5.56		5.13	5.66	0.44	5.13	5.69	3.00
6	19.00	4.25	8.50	9.25	8-2.13	14.50	10.75	6.63		6.00	6.72	0.50	6.00	6.75	3.25
8	21.75	5.00	10.63	12.00	12-2.13	17.25	12.50	8.63		7.00	8.72	0.50	7.00	8.75	3.75
10	26.50	6.50	12.75	14.75	12-2.63	21.25	16.50	10.75		9.00	10.88	0.50	9.00	10.92	4.25
12	30.00	7.25	15.00	17.38	12-2.88	24.38	18.25	12.75		10.00	12.88	0.50	10.00	12.92	4.75

Dimensions in inches.

1- 1/4 in. raised face not included in dimensions T, L and L2.

2- Bolt hole diameter 1/8 in. larger than bolt diameter.



FORGED FLANGES ANSI B16.5

APPROX. WEIGHT LIST

UNIT POUND AND (kg)

DIMENSIONS IN INCHES

CLASS	NOMINAL PIPE SIZE	SLIP ON TYPE				BLIND	WELDING NECK
		SLIP ON	THREADED	SOCKET	LAP JOINT		
150lb	1/2	1 (0.45)	1 (0.45)	2 (0.91)	1 (0.45)	2 (0.91)	2 (0.91)
	3/4	1-1/2 (0.68)	1-1/2 (0.68)	2 (0.91)	1-1/2 (0.68)	2 (0.91)	2 (0.91)
	1	2 (0.91)	2 (0.91)	2 (0.91)	2 (0.91)	2 (0.91)	2-1/2 (1.14)
	1-1/4	2-1/2 (1.14)	2-1/2 (1.14)	3 (1.36)	2-1/2 (1.14)	3 (1.36)	2-1/2 (1.14)
	1-1/2	3 (1.36)	3 (1.36)	3 (1.36)	3 (1.36)	3 (1.36)	4 (1.81)
	2	5 (2.18)	5 (2.27)	5 (2.27)	5 (2.27)	4 (1.82)	6 (2.72)
	2-1/2	8 (3.45)	8 (3.63)	7 (3.18)	8 (3.63)	7 (3.18)	10 (4.54)
	3	9 (4.01)	10 (4.54)	8 (3.63)	9 (4.09)	9 (4.09)	11-1/2 (5.22)
	3-1/2	11 (4.99)	12 (5.45)	11 (4.99)	11 (4.99)	13 (5.90)	12 (5.45)
	4	13 (5.63)	13 (5.90)	13 (5.90)	12 (5.45)	17 (7.72)	16-1/2 (7.49)
	5	15 (6.74)	15 (6.81)	15 (6.81)	13 (5.90)	20 (9.08)	21 (9.53)
	6	17 (7.90)	19-1/2 (8.85)	19 (8.63)	18 (8.17)	27 (12.26)	26 (11.80)
	8	28 (12.90)	30 (13.62)	30 (13.62)	28 (12.71)	47 (21.34)	42 (19.07)
	10	40 (17.60)	41 (18.61)	43 (19.52)	36 (16.34)	67 (30.42)	54 (24.52)
	12	61 (27.69)	65 (29.51)	64 (29.06)	60 (27.24)	123 (45.00)	88 (39.95)
	14	83 (37.68)	85 (38.59)	85 (38.59)	77 (34.96)	139 (63.11)	114 (51.76)
	16	106 (48.12)	93 (42.22)	93 (42.22)	104 (47.22)	187 (84.90)	142 (64.47)
	18	109 (49.49)	120 (54.48)	120 (54.48)	146 (66.28)	217 (98.52)	165 (74.90)
	20	148 (67.19)	155 (70.37)	155 (70.37)	159 (72.19)	283 (128.48)	197 (89.44)
	24	204 (92.62)	210 (95.34)	210 (95.34)	195 (88.53)	415 (188.41)	268 (121.67)
300lb	1/2	1-1/2 (0.68)	1-1/2 (0.68)	3 (1.36)	1-1/2 (0.68)	2 (0.91)	2 (0.91)
	3/4	2-1/2 (1.14)	2-1/2 (1.14)	3 (1.36)	2-1/2 (1.14)	3 (1.36)	3 (1.36)
	1	3 (1.36)	3 (1.36)	3 (1.36)	3 (1.36)	4 (1.82)	4 (1.82)
	1-1/4	4-1/2 (2.04)	4-1/2 (2.04)	4 (1.82)	4-1/2 (2.04)	6 (2.72)	5 (2.27)
	1-1/2	6-1/2 (2.95)	6-1/2 (2.95)	6 (2.72)	6-1/2 (2.95)	7 (3.18)	7 (3.18)
	2	7 (3.18)	7 (3.18)	7 (3.18)	7 (3.18)	8 (3.63)	8 (3.63)
	2-1/2	10 (4.54)	10 (4.54)	10 (4.54)	10 (4.54)	12 (5.45)	12 (5.45)
	3	13 (5.90)	14 (6.36)	13 (5.90)	14-1/2 (6.58)	16 (7.26)	18 (8.17)
	3-1/2	16 (7.26)	16 (7.26)	17 (7.72)	16 (7.26)	21 (9.53)	20 (9.10)
	4	23-1/2 (10.67)	24 (10.90)	22 (9.99)	24 (10.90)	28 (12.71)	26-1/2 (12.03)
	5	29 (13.17)	31 (14.07)	-	26 (11.80)	37 (16.80)	36 (16.34)
	6	36 (16.34)	36 (16.34)	-	38 (17.25)	48 (21.79)	45 (20.43)
	8	56 (25.42)	56 (25.42)	-	55 (24.97)	79 (35.87)	69 (31.33)
	10	77 (34.96)	80 (36.32)	-	88 (39.95)	122 (55.39)	100 (45.40)
	12	113 (51.30)	110 (49.94)	-	139 (63.11)	183 (83.08)	142 (64.47)
	14	159 (72.19)	164 (74.46)	-	184 (83.54)	241 (109.41)	206 (93.52)
	16	210 (95.34)	220 (99.88)	-	234 (106.24)	315 (143.01)	249 (113.05)
	18	253 (114.86)	280 (127.12)	-	305 (138.47)	414 (187.96)	306 (138.92)
	20	307 (139.38)	325 (147.55)	-	375 (170.25)	515 (233.81)	369 (167.53)
	24	490 (222.46)	490 (222.46)	-	530 (240.62)	800 (363.20)	519 (235.63)



FORGED FLANGES ANSI B16.5

APPROX. WEIGHT LIST

UNIT POUND AND (kg)

DIMENSIONS IN INCHES

CLASS	NOMINAL PIPE SIZE	SLIP ON TYPE			BLIND	WELDING NECK
		SLIP ON	THREADED	LAP JOINT		
400lb	1/2	2 (0.91)	2 (0.91)	2 (0.91)	2 (0.91)	3 (1.36)
	3/4	3 (1.36)	3 (1.36)	3 (1.36)	3 (1.36)	3-1/2 (1.59)
	1	3-1/2 (1.59)	3-1/2 (1.59)	3-1/2 (1.59)	4 (1.82)	4 (1.82)
	1-1/4	4-1/2 (2.04)	4-1/2 (2.04)	4-1/2 (2.04)	6 (2.72)	5-1/2 (2.50)
	1-1/2	6-1/2 (2.95)	6-1/2 (2.95)	6-1/2 (2.95)	8 (3.63)	8 (3.63)
	2	8 (3.63)	8 (3.63)	8 (3.63)	10 (4.54)	10 (4.54)
	2-1/2	12 (5.45)	12 (5.45)	11 (4.99)	15 (6.81)	14 (6.36)
	3	15 (6.81)	15 (6.81)	14 (6.36)	20 (9.08)	18 (8.17)
	3-1/2	21 (9.53)	21 (9.53)	20 (9.08)	29 (13.17)	26 (11.80)
	4	24 (10.90)	24 (10.90)	22 (9.99)	33 (14.98)	30 (13.62)
	5	31 (14.07)	31 (14.07)	29 (13.17)	44 (19.98)	39 (17.71)
	6	39 (17.71)	39 (17.71)	37 (16.80)	61 (27.69)	49 (22.45)
	8	63 (28.60)	63 (28.60)	59 (26.79)	100 (45.40)	78 (35.41)
	10	91 (41.31)	91 (41.31)	95 (43.13)	155 (70.37)	110 (49.94)
	12	129 (58.57)	129 (58.57)	152 (69.01)	226 (102.60)	160 (72.64)
	14	191 (86.71)	191 (86.71)	210 (95.34)	310 (140.74)	233 (105.78)
	16	253 (114.86)	253 (114.86)	280 (127.12)	398 (180.69)	294 (133.78)
	18	310 (140.74)	310 (140.74)	345 (156.63)	502 (227.91)	360 (163.44)
	20	378 (171.61)	378 (171.61)	420 (190.68)	621 (281.93)	445 (202.03)
	24	539 (244.71)	539 (244.71)	615 (279.21)	936 (424.94)	640 (290.56)
600lb	1/2	2 (0.91)	2 (0.91)	2 (0.91)	2 (0.91)	3 (1.36)
	3/4	3 (1.36)	3 (1.36)	3 (1.36)	3 (1.36)	3-1/2 (1.59)
	1	3-1/2 (1.59)	3-1/2 (1.59)	3-1/2 (1.59)	4 (1.82)	4 (1.82)
	1-1/4	4-1/2 (2.04)	4-1/2 (2.04)	4-1/2 (2.04)	6 (2.72)	5-1/2 (2.50)
	1-1/2	6-1/2 (2.95)	6-1/2 (2.95)	6-1/2 (2.95)	8 (3.63)	8 (3.63)
	2	8 (3.63)	8 (3.63)	8 (3.63)	10 (4.54)	10 (4.54)
	2-1/2	12 (5.45)	12 (5.45)	11 (4.99)	15 (6.81)	14 (6.36)
	3	15 (6.81)	15 (6.81)	14 (6.36)	20 (9.08)	18 (8.17)
	3-1/2	21 (9.53)	21 (9.53)	20 (9.08)	29 (13.17)	26 (11.80)
	4	33 (14.98)	33 (14.98)	31 (14.07)	41 (18.61)	37 (16.80)
	5	63 (28.60)	63 (28.60)	63 (28.60)	68 (30.87)	68 (30.87)
	6	80 (36.32)	80 (36.32)	78 (35.41)	86 (39.04)	73 (33.14)
	8	97 (44.04)	97 (44.04)	112 (50.85)	139 (63.11)	112 (50.85)
	10	177 (80.36)	177 (80.36)	195 (88.53)	231 (104.87)	189 (85.81)
	12	215 (97.61)	215 (97.61)	240 (108.96)	295 (133.93)	226 (102.60)
	14	259 (117.59)	259 (117.59)	290 (131.66)	378 (148.91)	347 (157.54)
	16	366 (166.16)	366 (166.16)	400 (181.60)	527 (239.26)	481 (218.37)
	18	476 (216.10)	476 (216.10)	469 (212.93)	665 (301.91)	555 (251.97)
	20	612 (277.85)	612 (277.85)	604 (274.22)	855 (388.17)	690 (313.26)
	24	876 (397.70)	876 (397.70)	866 (393.16)	1175 (533.45)	977 (443.56)





FORGED FLANGES ANSI B16.5

APPROX. WEIGHT LIST

UNIT POUND AND (kg)

DIMENSIONS IN INCHES

CLASS	NOMINAL PIPE SIZE	SLIP ON TYPE			BLIND	WELDING NECK
		SLIP ON	THREADED	LAP JOINT		
900lb	1/2	6 (2.72)	6 (2.72)	6 (2.72)	4 (1.82)	7 (3.18)
	3/4	6 (2.72)	6 (2.72)	6 (2.72)	6 (2.72)	7 (3.18)
	1	7-1/2 (3.41)	7-1/2 (3.41)	7-1/2 (3.41)	9 (4.09)	8-1/2 (3.86)
	1-1/4	10 (4.54)	10 (4.54)	10 (4.54)	10 (4.54)	10 (4.54)
	1-1/2	14 (6.36)	14 (6.36)	14 (6.36)	14 (6.36)	14 (6.36)
	2	22 (9.99)	22 (9.99)	21 (9.53)	25 (11.35)	24 (10.90)
	2-1/2	36 (16.34)	36 (16.34)	29 (13.17)	35 (15.89)	36 (16.34)
	3	31 (14.07)	31 (14.07)	25 (11.35)	32 (14.53)	29 (13.17)
	4	53 (24.06)	53 (24.06)	51 (23.15)	54 (24.52)	51 (23.15)
	5	83 (37.68)	83 (37.68)	81 (36.77)	87 (39.50)	86 (39.04)
	6	108 (49.03)	108 (49.03)	105 (47.67)	113 (51.30)	110 (49.94)
	8	172 (78.09)	172 (78.09)	188 (85.35)	197 (89.44)	187 (84.90)
	10	245 (111.23)	245 (111.23)	277 (125.76)	290 (131.66)	268 (121.67)
	12	326 (148.00)	326 (148.00)	371 (168.43)	413 (187.50)	372 (168.89)
	14	380 (172.52)	380 (172.52)	397 (180.24)	494 (224.28)	562 (255.15)
	16	459 (208.39)	459 (208.39)	488 (221.55)	619 (281.03)	685 (310.99)
	18	647 (293.74)	647 (293.74)	670 (304.18)	880 (399.52)	924 (419.50)
	20	792 (359.57)	792 (359.57)	868 (394.07)	1107 (502.58)	1164 (528.46)
	24	1480 (671.92)	1480 (671.92)	1659 (753.19)	2099 (952.95)	2107 (956.58)
1500lb	1/2	6 (2.72)	6 (2.72)	6 (2.72)	4 (1.82)	7 (3.18)
	3/4	6 (2.72)	6 (2.72)	6 (2.72)	6 (2.72)	7 (3.18)
	1	7-1/2 (3.41)	7-1/2 (3.41)	7-1/2 (3.41)	9 (4.09)	8-1/2 (3.86)
	1-1/4	10 (4.54)	10 (4.54)	10 (4.54)	10 (4.54)	10 (4.54)
	1-1/2	14 (6.36)	14 (6.36)	14 (6.36)	14 (6.36)	14 (6.36)
	2	22 (9.99)	22 (9.99)	21 (9.53)	25 (11.35)	24 (10.90)
	2-1/2	36 (16.34)	36 (16.34)	29 (13.17)	35 (15.89)	36 (16.34)
	3	48 (21.79)	48 (21.79)	38 (17.25)	48 (21.79)	48 (21.79)
	4	73 (33.14)	73 (33.14)	75 (34.05)	73 (33.14)	69 (31.33)
	5	132 (59.93)	132 (59.93)	138 (62.65)	142 (64.47)	132 (59.93)
	6	164 (74.46)	164 (74.46)	170 (77.18)	159 (72.19)	164 (74.46)
	8	258 (117.13)	258 (117.13)	286 (129.84)	302 (137.11)	273 (123.94)
2500lb	1/2	7 (3.18)	7 (3.18)	7 (3.18)	7 (13.18)	8 (3.63)
	3/4	9 (4.09)	9 (4.09)	8 (3.63)	10 (4.54)	9 (4.09)
	1	12 (5.45)	12 (5.45)	12 (5.45)	12 (5.45)	13 (5.90)
	1-1/4	18 (8.17)	18 (8.17)	17 (7.72)	18 (8.17)	20 (9.08)
	1-1/2	25 (11.35)	25 (11.35)	24 (10.90)	25 (11.35)	28 (12.71)
	2	38 (17.25)	38 (17.25)	37 (16.80)	39 (17.71)	42 (19.07)
	2-1/2	55 (24.97)	55 (24.97)	53 (24.06)	56 (25.42)	52 (23.61)
	3	83 (37.68)	83 (37.68)	80 (36.32)	86 (39.04)	94 (42.68)
	4	127 (57.66)	127 (57.66)	122 (55.39)	133 (60.38)	146 (66.28)
	5	210 (95.34)	210 (95.34)	204 (92.62)	223 (101.24)	244 (110.78)
	6	323 (146.64)	323 (146.64)	314 (142.56)	345 (156.63)	378 (171.61)
	8	485 (220.19)	485 (220.19)	471 (213.83)	533 (241.98)	576 (261.50)
	10	925 (419.95)	925 (419.95)	897 (407.24)	1025 (465.35)	1068 (484.87)
	12	1300 (590.20)	1300 (590.20)	1262 (572.95)	1464 (644.66)	1608 (730.03)





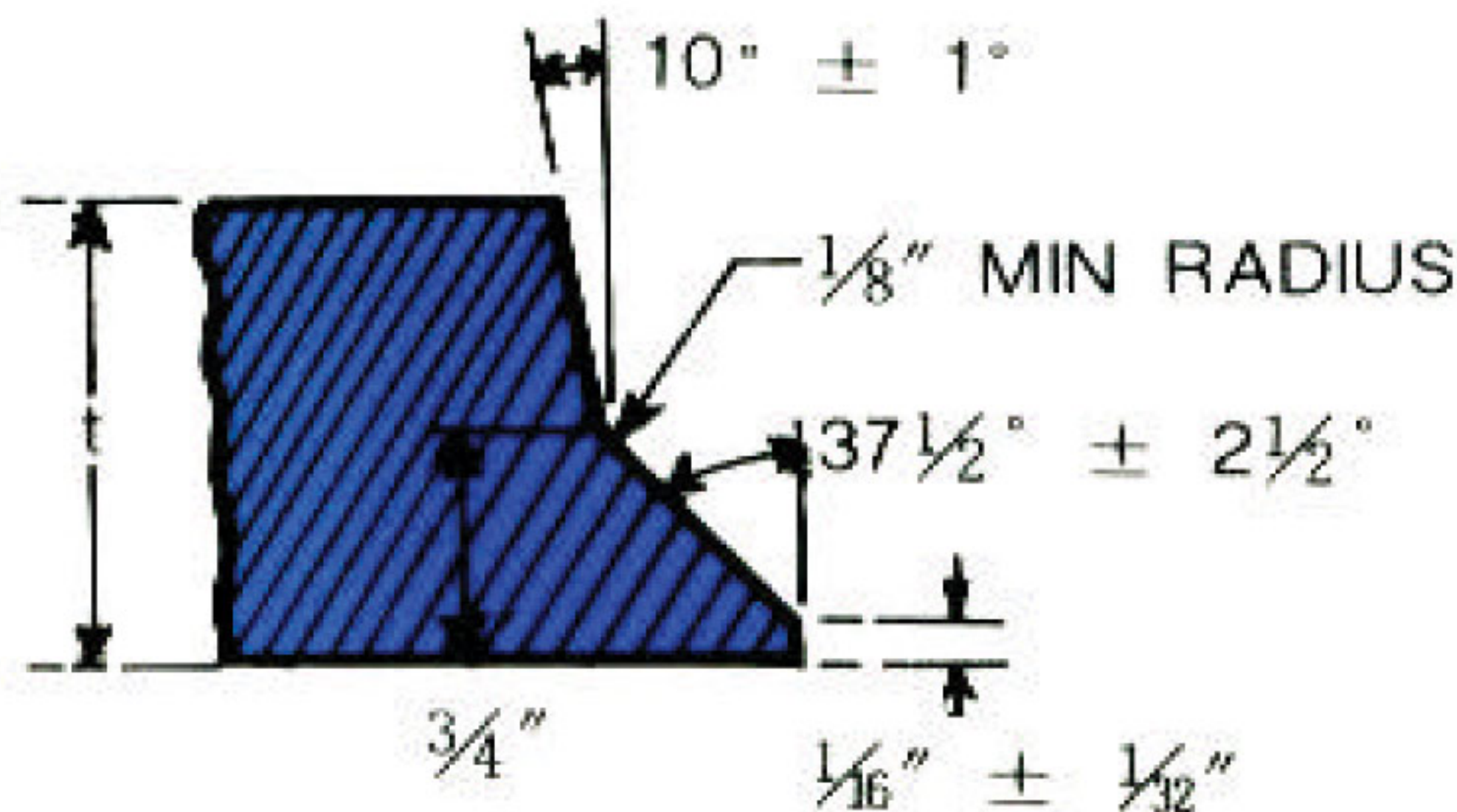
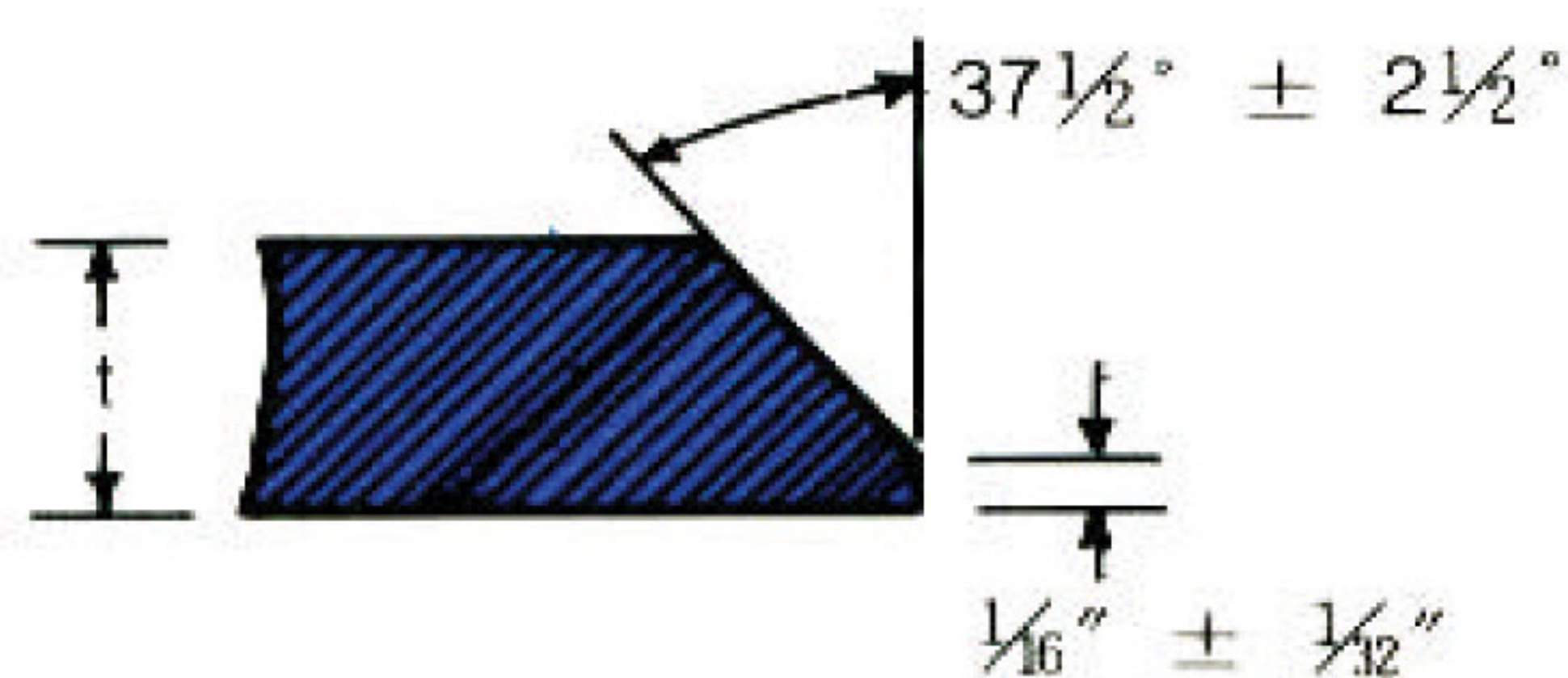
DIMENSIONAL TOLERANCES ANSI B16.5 - 1992a

Thread, Socket-welding, slip-on, Lap joint and Blind			Welding Neck		
Outside Diameter	when O.D. is 24" or less	±1/16" (1.6mm)	Outside Diameter	when O.D. is 24" or less	±1/16" (1.6mm)
	when O.D. is Over 24"	±1/8" (3.2mm)		when O.D. is Over 24"	±1/8" (3.2mm)
Inside Diameter	Threaded	Within limits on boring gauge	Inside Diameter	10" and Smaller	±1/32"(0.8mm)
	socket-welding, slip-on and Lap joint	10" & Smaller + 1/32"(0.8mm), -0" 12" & Larger + 1/16"(1.6mm), -0"		12" thru 18"	±1/16"(1.6mm)
Outside Diameter of Hub	12" and Smaller	+3/32"(2.4mm) -1/16"(1.6mm)	Diameter of Contact Face	20" and Larger	+1/8"(3.2mm) -1/16"(1.6mm)
	14" and Larger	±1/8"(3.2mm)		1/16" Raised Face 1/4" Raised Face Tongue & Groove Male, Female	±1/32"(0.8mm) ±1/64"(0.4mm)
Diameter of Contact Face	1/16" Raised Face	±1/32"(0.8mm)	Diameter of Hub at Base	When Hub Base is 24" or Smaller	±1/16"(1.6mm)
	1/4" Raised Face Tongue & Groove Male, Female	±1/64"(0.4mm)		When Hub Base is Over 24"	±1/8"(3.2mm)
Diameter of counterbore	Same as for Inside Diameter		Diameter of Hub at Point of Welding	5" and Smaller	+3/32"(2.4mm) -1/32"(0.8mm)
Drilling	Bolt Circle	±1/16"(1.6mm)		6" and Larger	+5/32(4.0mm) -1/32(0.8mm)
	Bolt hole spacing	±1/32"(0.8mm)	Drilling	Bolt Circle	±1/16"(1.6mm)
	Eccentricity of Bolt Circle with Respect to Facing	2-1/2" & Smaller 1/32"(0.8mm) max 3" & Larger 1/16"(1.6mm) max		Bolt hole spacing	±1/32"(0.8mm)
Thickness	18" and Smaller	+1/8"(3.2mm), -0"		Eccentricity of Bolt Circle with Respect to Facing	2-1/2" & Smaller 1/32"(0.8mm) max 3" & Larger 1/16"(1.6mm) max
	20" and Larger	+3/16"(4.8mm), -0"	Thickness	18" and Smaller	+1/8"(3.2mm), -0"
Length Thru Hub	18" and Smaller	+1/8"(3.2mm), -1/32(0.8mm)		20" and Larger	+3/16"(4.8mm), -0"
	20" and Larger	+3/16"(4.8mm), -1/16"(1.6mm)	Length Thru Hub	10" and Smaller	±1/16"(1.6mm)
				12" and Larger	±1/8"(3.2mm)

WELDING BEVEL STANDARDS

For Wall thickness "t" 3/16" to 3/4" incl.

For Wall thickness "t" greater than 3/4"



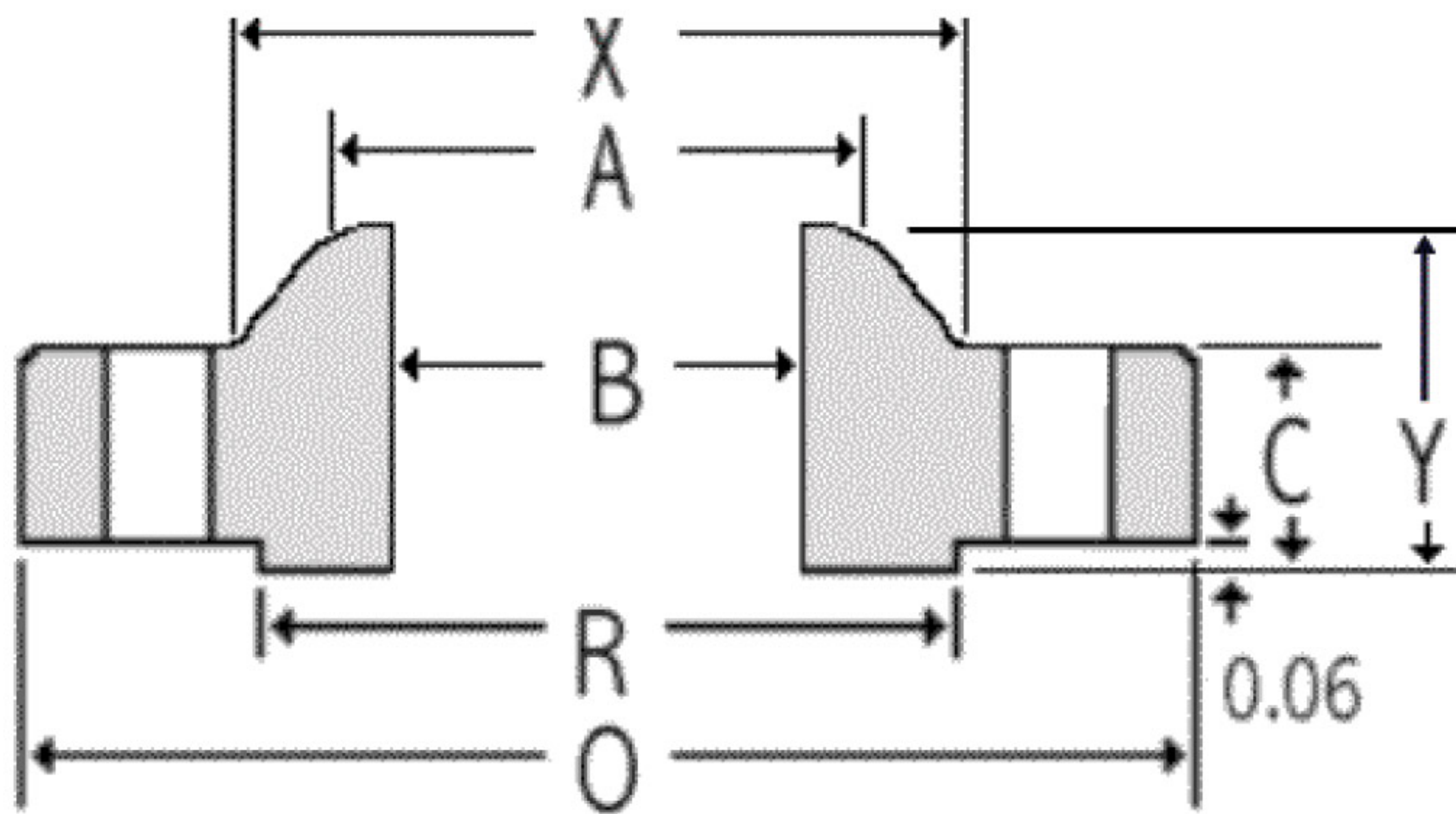
A Quick Note on B16.47

ASME has incorporated the MSS-SP44 specification into B16.47 Series A and the API 605 Specification into B16.47 series B. They have also added Blinds to these two specs. You may note that these specs include only Weld Necks and Blinds. For Slip-On's over 24" you must refer to either Industry Standard (which are not automatically covered by ASME) or Boiler Code Flanges. If you need help deciding which flange best suits your application feel free to contact us.

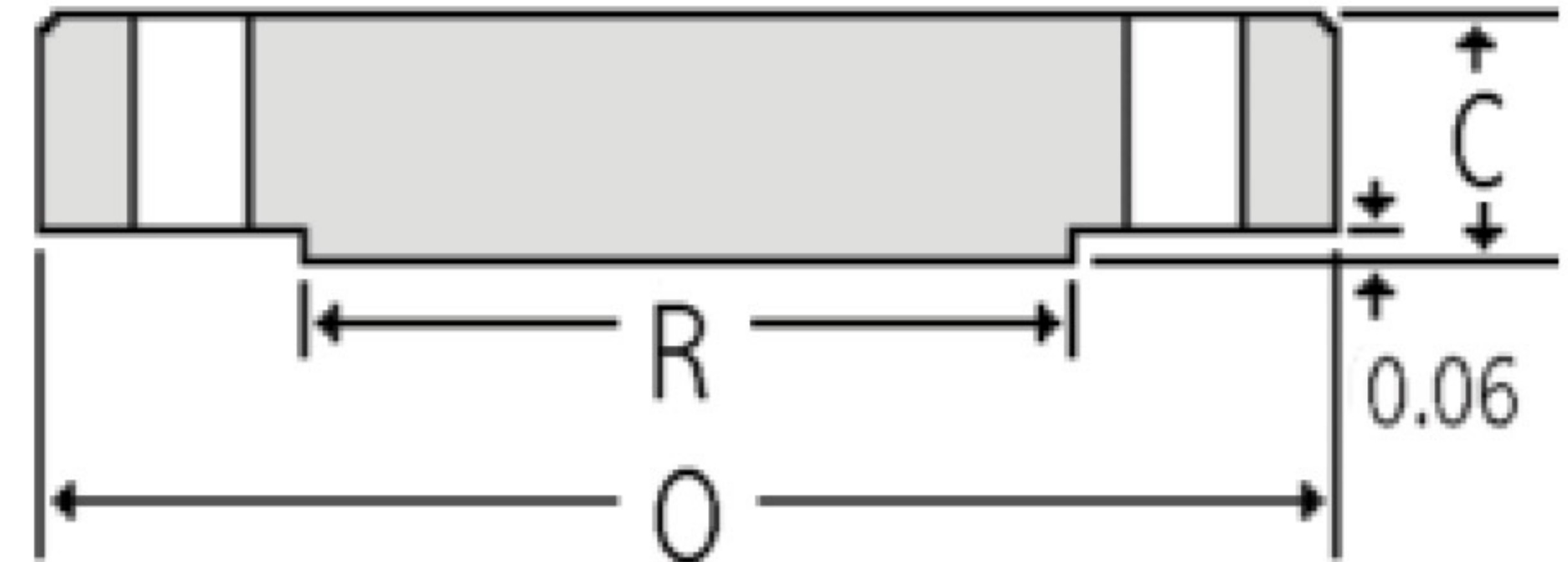


KUMKANG

B16.47 Series A Class 150 Weld Neck & Blind



Weld Neck



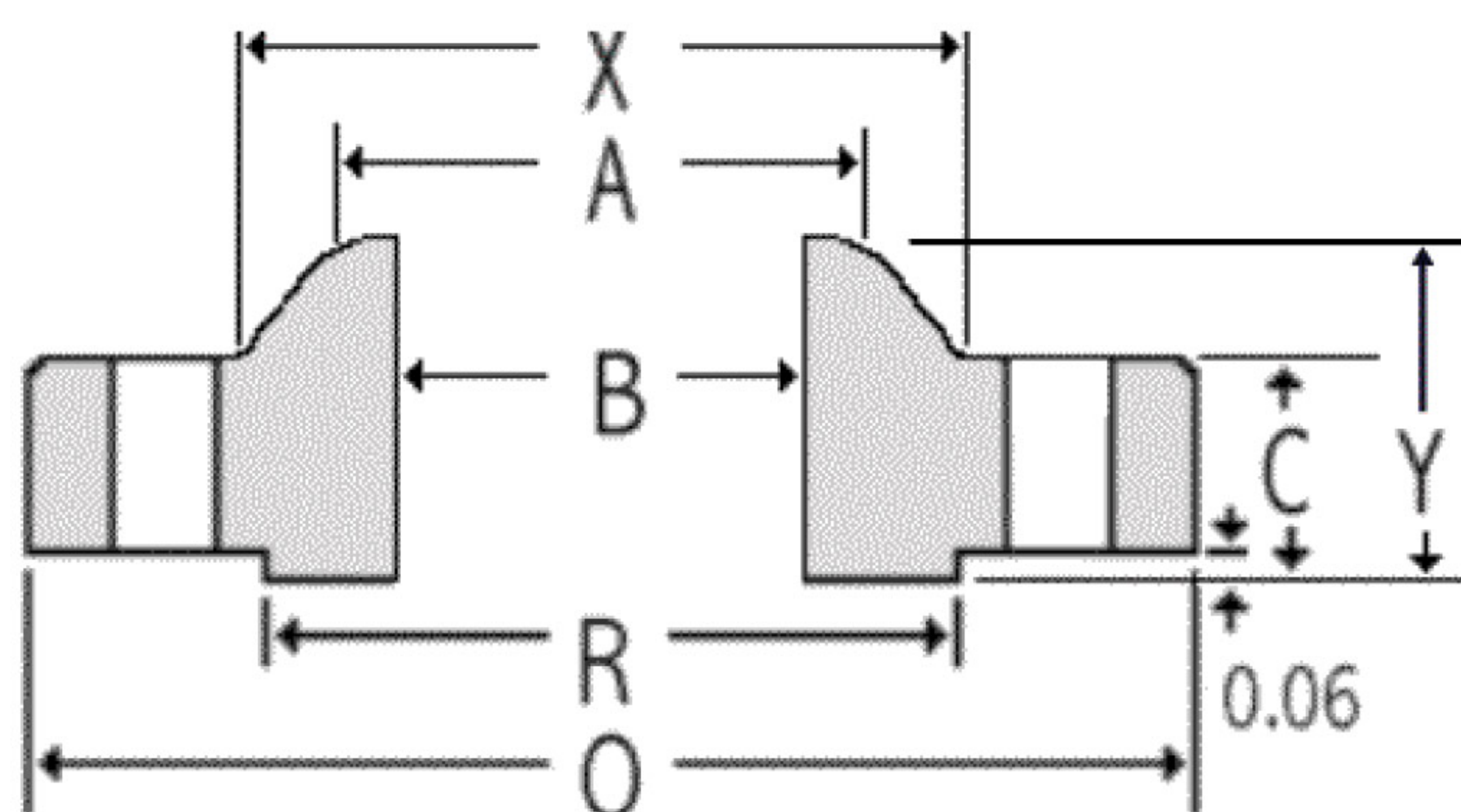
Blind

Nom Size	THICKNESS						Drilling					Weight	
	OD	Weld Neck	Blind	OD RF	Dia at Base	Bore	LTH	Dia Bevel	Bolt Circle	Dia Holes	# Holes	Weld Neck	Blind
	O	C	C	R	X	B	Y	A					
26	34.25	2.69	2.69	29.50	26.62	To be specified by Purchaser.	4.75	26.00	31.75	1.38	24	300	702
28	36.50	2.81	2.81	31.50	28.62		4.94	28.00	34.00	1.38	28	345	833
30	38.75	2.94	2.94	33.75	30.75		5.38	30.00	36.00	1.38	28	400	982
32	41.75	3.19	3.19	36.00	32.75		5.69	32.00	38.50	1.62	28	505	1237
34	43.75	3.25	3.25	38.00	34.75		5.88	34.00	40.50	1.62	32	540	1384
36	46.00	3.56	3.56	40.25	36.75		6.19	36.00	42.75	1.62	32	640	1676
38	48.75	3.44	3.44	42.25	39.00		6.19	38.00	45.25	1.62	32	720	1819
40	50.75	3.56	3.56	44.25	41.00		6.44	40.00	47.25	1.62	36	775	2040
42	53.00	3.81	3.81	47.00	43.00		6.75	42.00	49.50	1.62	36	890	2381
44	55.25	4.00	4.00	49.00	45.00		7.00	44.00	51.75	1.62	40	990	2717
46	57.25	4.06	4.06	51.00	47.12		7.31	46.00	53.75	1.62	40	1060	2961
48	59.50	4.25	4.25	53.50	49.12		7.56	48.00	56.00	1.62	44	1185	3348
50	61.75	4.38	4.38	55.50	51.25		8.00	50.00	58.25	1.88	44	1270	3716
52	64.00	4.56	4.56	57.50	53.25		8.25	52.00	60.50	1.88	44	1410	4156
54	66.25	4.75	4.75	59.50	55.25		8.50	54.00	62.75	1.88	44	1585	4639
56	68.75	4.88	4.88	62.00	57.38		9.00	56.00	65.00	1.88	48	1760	5132
58	71.00	5.06	5.06	64.00	59.38		9.25	58.00	67.25	1.88	48	1915	5675
60	73.00	5.19	5.19	66.00	61.38		9.44	60.00	69.25	1.88	52	2045	6154

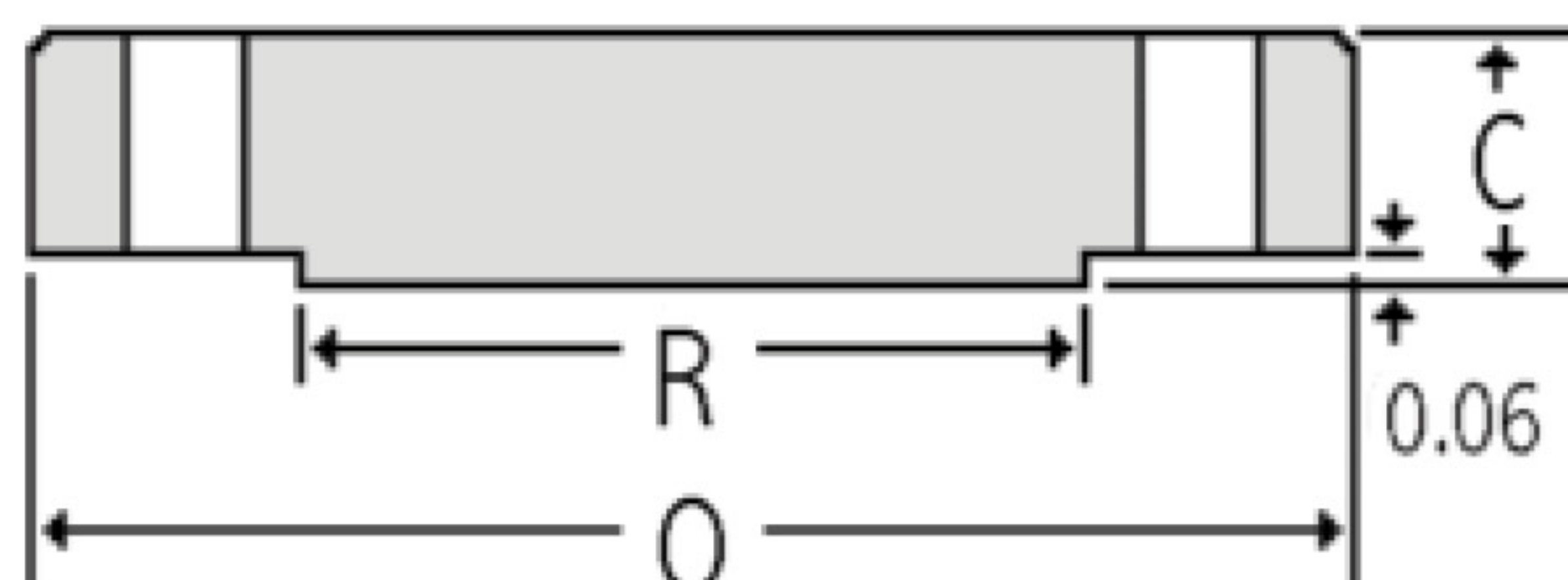
Dimensions in inches.

Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series A Class 300 Weld Neck & Blind



Weld Neck



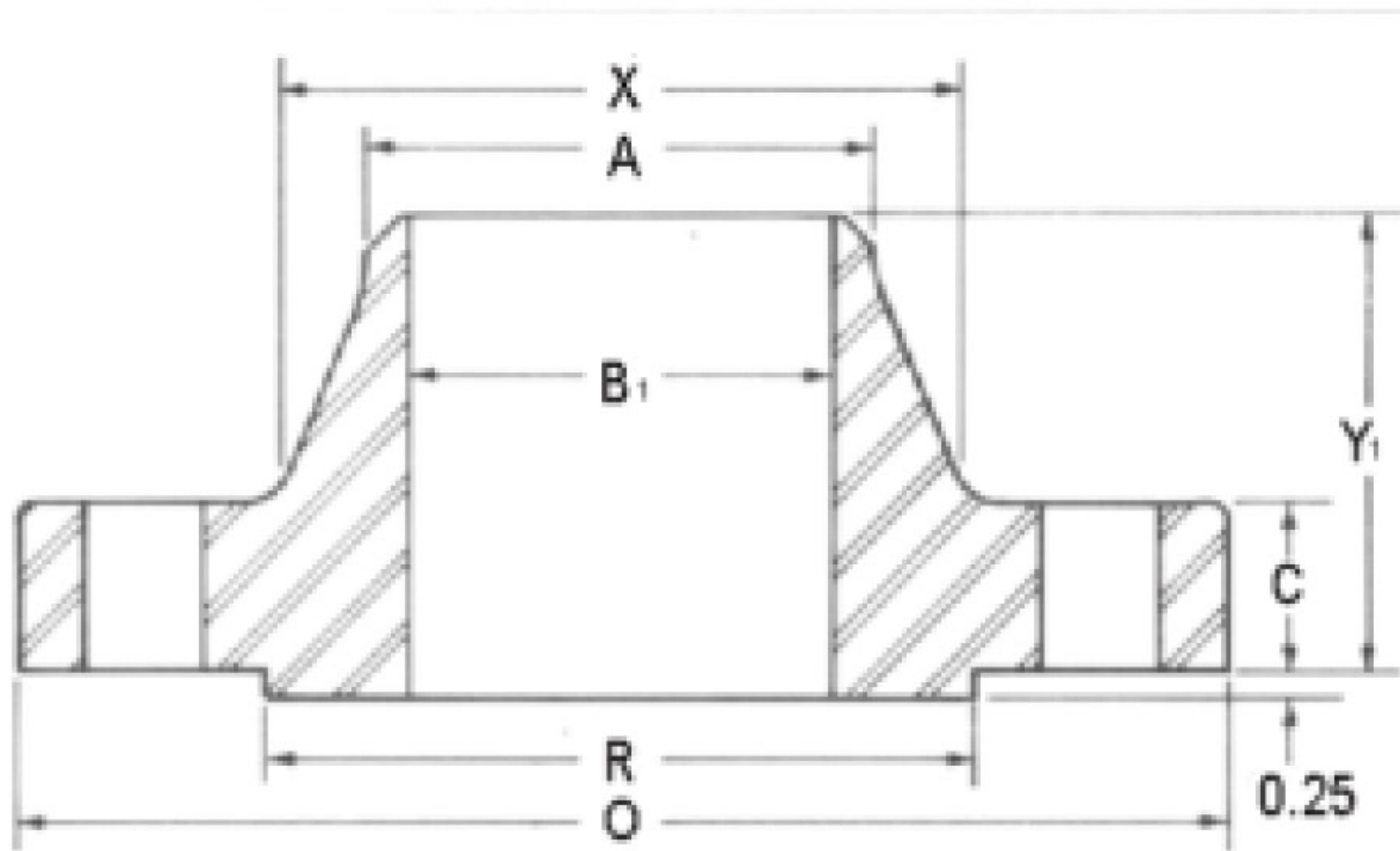
Blind

Nom Size	THICKNESS						Drilling					Weight	
	OD	Weld Neck	Blind	OD RF	Dia at Base	Bore	LTH	Dia Bevel	Bolt Circle	Dia Holes	# Holes	Weld Neck	Blind
	O	C	C	R	X	B	Y	A					
26	38.25	3.12	3.31	29.50	28.38	To be specified by Purchaser.	7.25	26.00	34.50	1.75	28	605	1078
28	40.75	3.38	3.56	31.50	30.50		7.75	28.00	37.00	1.75	28	745	1315
30	43.00	3.62	3.75	33.75	32.56		8.25	30.00	39.25	1.88	28	870	1543
32	45.25	3.88	3.94	36.00	34.69		8.75	32.00	41.50	2.00	28	1005	1795
34	47.50	4.00	4.12	38.00	36.88		9.12	34.00	43.50	2.00	28	1145	2068
36	50.00	4.12	4.38	40.25	39.00		9.50	36.00	46.00	2.12	32	1275	2436
38	46.00	4.25	4.25	40.50	39.12		7.12	38.00	43.00	1.62	32	695	2001
40	48.75	4.50	4.50	42.75	41.25		7.62	40.00	45.50	1.75	32	840	2380
42	50.75	4.69	4.69	44.75	43.25		7.88	42.00	47.50	1.75	32	950	2688
44	53.25	4.88	4.88	47.00	45.25		8.12	44.00	49.75	1.88	32	1055	3079
46	55.75	5.06	5.06	49.00	47.38		8.50	46.00	52.00	2.00	28	1235	3499
48	57.75	5.25	5.25	51.25	49.38		8.81	48.00	54.00	2.00	32	1380	3896
50	60.25	5.50	5.50	53.50	51.38		9.12	50.00	56.25	2.12	32	1530	4442
52	62.25	5.69	5.69	55.50	53.38		9.38	52.00	58.25	2.12	32	1660	4906
54	65.25	6.00	6.00	57.75	55.50		9.94	54.00	61.00	2.38	28	2050	5684
56	67.25	6.06	6.06	59.75	57.62		10.25	56.00	63.00	2.38	28	2155	6098
58	69.25	6.25	6.25	62.00	59.62		10.50	58.00	65.00	2.38	32	2270	6669
60	71.25	6.44	6.44	64.00	61.62		10.75	60.00	67.00	2.38	32	2470	7274

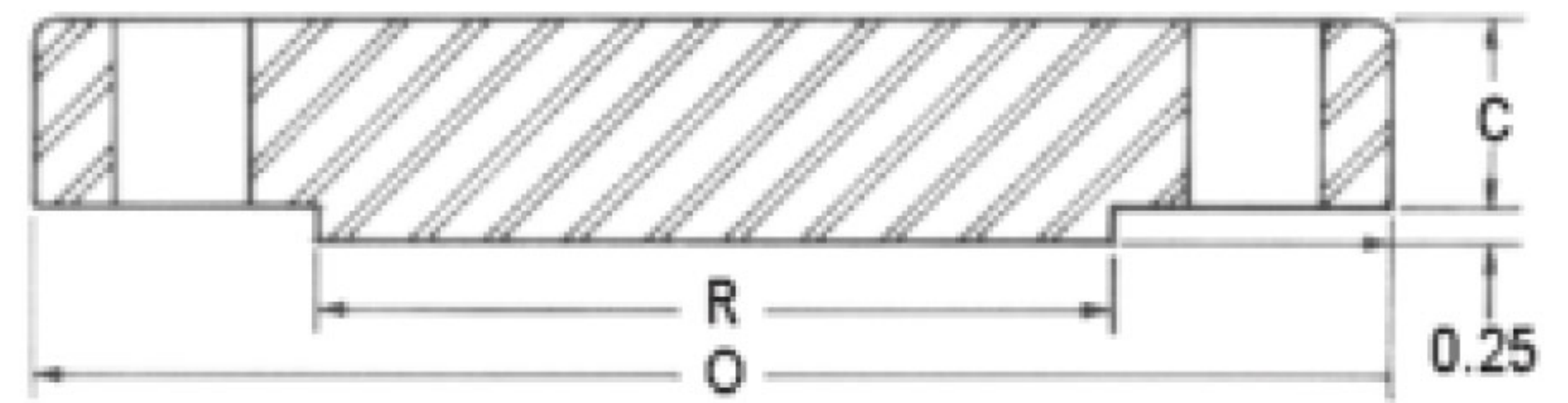
Dimensions in inches.

Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series A Class 400 Weld Neck & Blind



Weld Neck



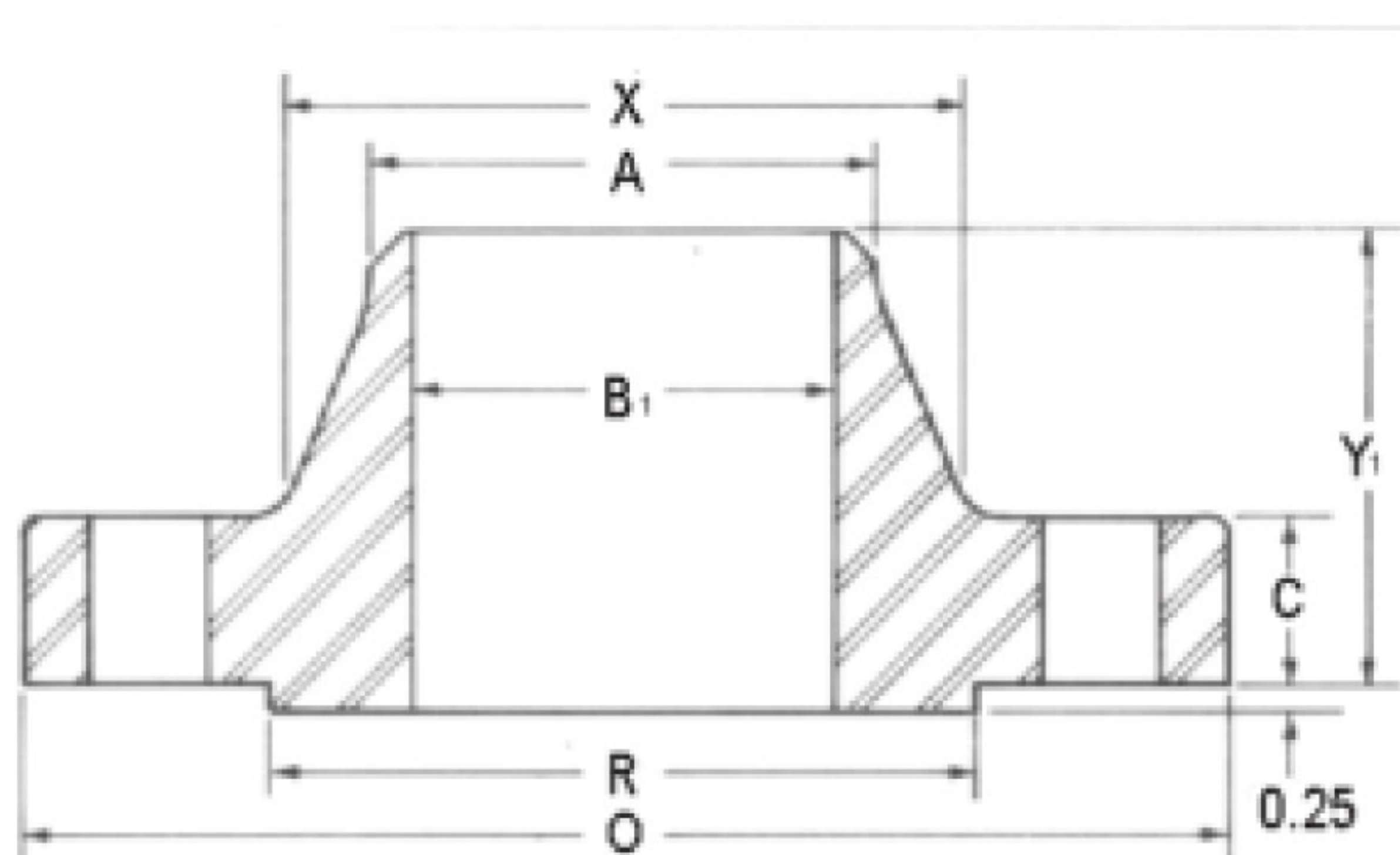
Blind

Nom Size	THICKNESS							Drilling			Weight	
	OD	Weld Neck	Blind	LTH	Dia at Base	Dia Bevel	OD RF	Bolt Circle	# Holes	Dia Holes	Weld Neck	Blind
	O	C	C	Y	X	A	R					
26	38.25	3.50	3.88	7.62	28.62	26.00	29.50	34.50	28	1.88	650	1263
28	40.75	3.75	4.12	8.12	30.81	28.00	31.50	37.00	28	2.00	785	1522
30	43.00	4.00	4.38	8.62	32.94	30.00	33.75	39.25	28	2.12	905	1802
32	45.25	4.25	4.56	9.12	35.00	32.00	36.00	41.50	28	2.12	1065	2077
34	47.50	4.38	4.81	9.50	37.19	34.00	38.00	43.50	28	2.12	1200	2415
36	50.00	4.50	5.06	9.88	39.38	36.00	40.25	46.00	32	2.12	1340	2815
38	47.50	4.88	4.88	8.12	39.50	38.00	40.75	44.00	32	1.88	935	2450
40	50.00	5.12	5.12	8.50	41.50	40.00	43.00	46.25	32	2.00	1090	2848
42	52.00	5.25	5.25	8.81	43.62	42.00	45.00	48.25	32	2.00	1190	3159
44	54.50	5.50	5.50	9.18	45.62	44.00	47.25	50.50	32	2.12	1375	3635
46	56.75	5.75	5.75	9.62	47.75	46.00	49.50	52.75	36	2.12	1525	4120
48	59.50	6.00	6.00	10.12	49.88	48.00	51.50	55.25	28	2.38	1790	4726
50	61.75	6.19	6.25	10.56	52.00	50.00	53.62	57.50	32	2.38	1950	5303
52	63.75	6.38	6.44	10.88	54.00	52.00	55.62	59.50	32	2.38	2125	5823
54	67.00	6.69	6.75	11.38	56.12	54.00	57.88	62.25	28	2.62	2565	6742
56	69.00	6.88	6.94	11.75	58.25	56.00	60.12	64.25	32	2.62	2710	7352
58	71.00	7.00	7.12	12.06	60.25	58.00	62.12	66.25	32	2.62	3230	7986
60	74.25	7.31	7.44	12.56	62.38	60.00	64.38	69.00	32	2.88	3820	9126

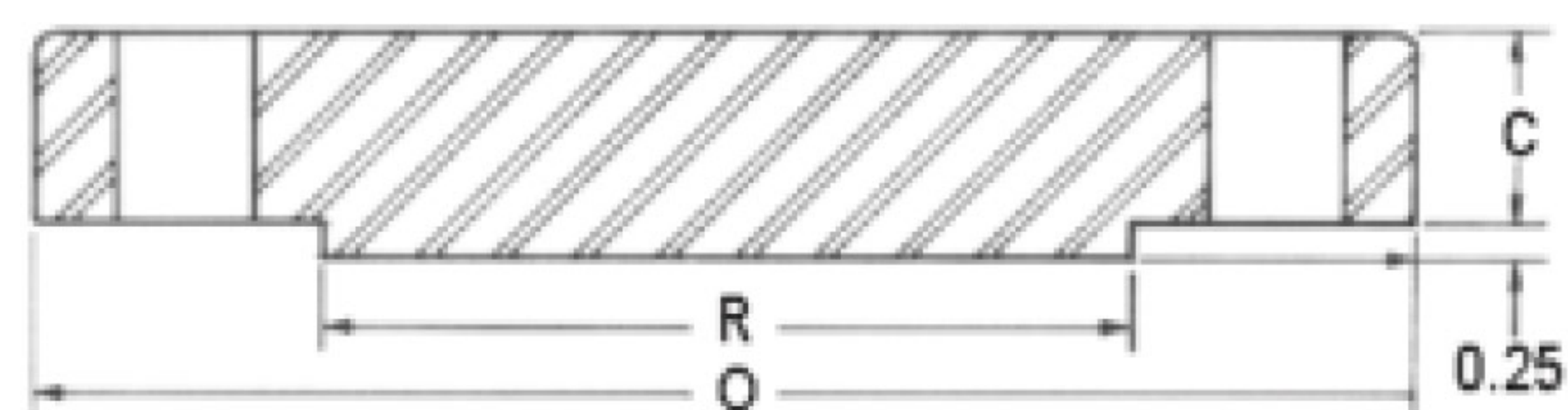
Dimensions in inches.

Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series A Class 600 Weld Neck & Blind



Weld Neck



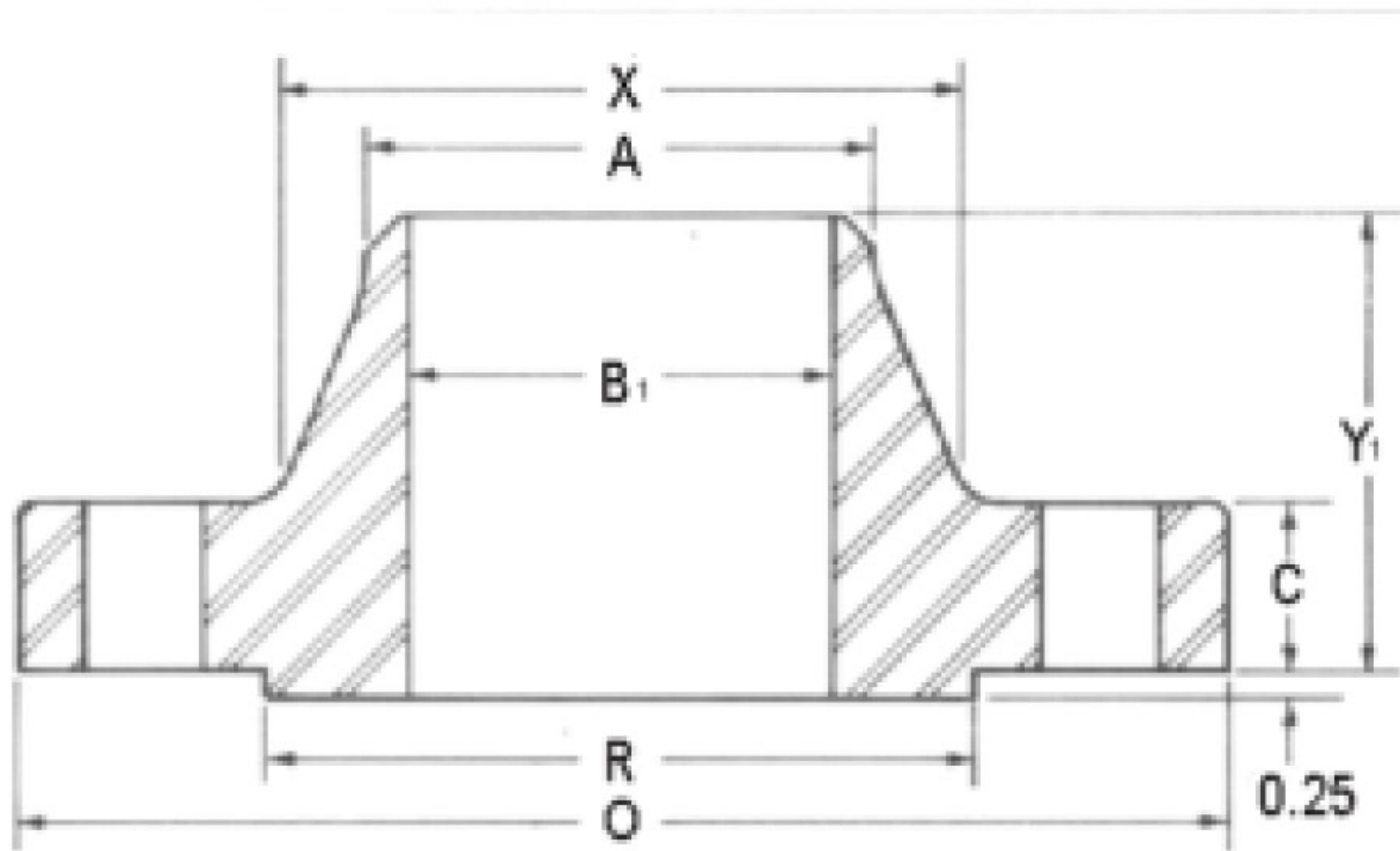
Blind

Nom Size	THICKNESS							Drilling			Weight	
	OD	Weld Neck	Blind	LTH	Dia at Base	Dia Bevel	OD RF	Bolt Circle	# Holes	Dia Holes	Weld Neck	Blind
	O	C	C	Y	X	A	R					
26	40.00	4.25	4.94	8.75	29.44	26.00	29.50	36.00	28	2.00	940	1759
28	42.25	4.38	5.19	9.25	31.62	28.00	31.50	38.00	28	2.12	1060	2061
30	44.50	4.50	5.50	9.75	33.94	30.00	33.75	40.25	28	2.12	1210	2423
32	47.00	4.62	5.81	10.25	36.12	32.00	36.00	42.50	28	2.38	1375	2856
34	49.00	4.75	6.06	10.62	38.31	34.00	38.00	44.50	28	2.38	1540	3237
36	51.75	4.88	6.38	11.12	40.62	36.00	40.25	47.00	28	2.62	1705	3802
38	50.00	6.00	6.12	10.00	40.25	38.00	41.50	45.75	28	2.38	1470	3404
40	52.00	6.25	6.38	10.38	42.25	40.00	43.75	47.75	32	2.38	1630	3838
42	55.25	6.62	6.75	11.00	44.38	42.00	46.00	50.50	28	2.62	2030	4585
44	57.25	6.81	7.00	11.38	46.50	44.00	48.25	52.50	32	2.62	2160	5105
46	59.50	7.06	7.31	11.81	48.62	46.00	50.25	54.75	32	2.62	2410	5758
48	62.75	7.44	7.69	12.44	50.75	48.00	52.50	57.50	32	2.88	2855	6737
50	65.75	7.75	8.00	12.94	52.88	50.00	54.50	60.00	28	3.12	3330	7695
52	67.75	8.00	8.25	13.25	54.88	52.00	56.50	62.00	32	3.12	3560	8426
54	70.00	8.25	8.56	13.75	57.00	54.00	58.75	64.25	32	3.12	3920	9333
56	73.00	8.56	8.88	14.25	59.12	56.00	60.75	66.75	32	3.38	4280	10,529
58	75.00	8.75	9.12	14.56	61.12	58.00	63.00	68.75	32	3.38	4640	11,414
60	78.50	9.19	9.56	15.31	63.38	60.00	65.25	71.75	28	3.62	5000	13,108

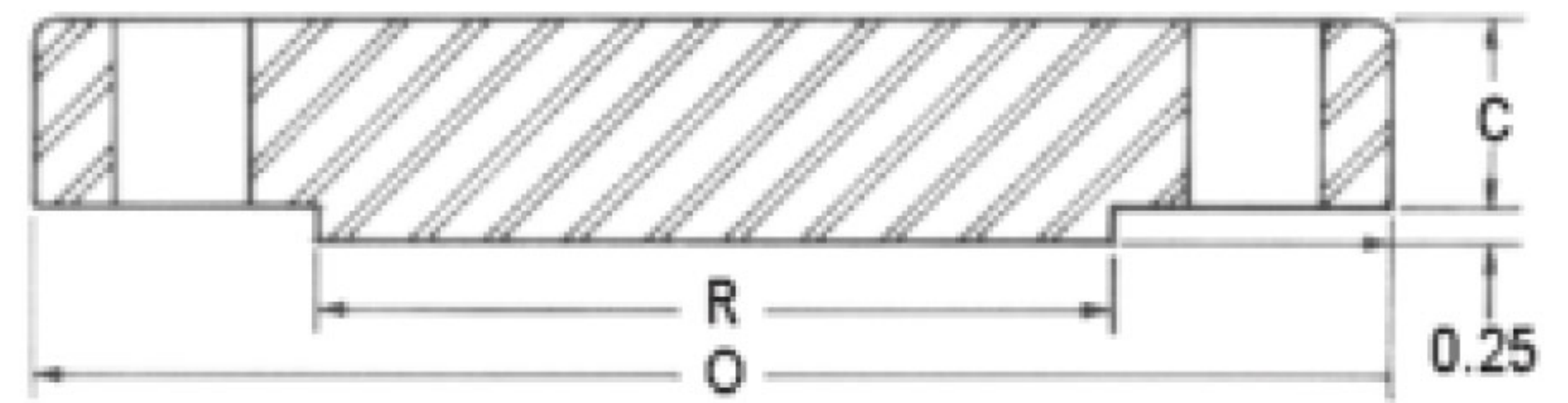
Dimensions in inches.

Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series A Class 900 Weld Neck & Blind



Weld Neck



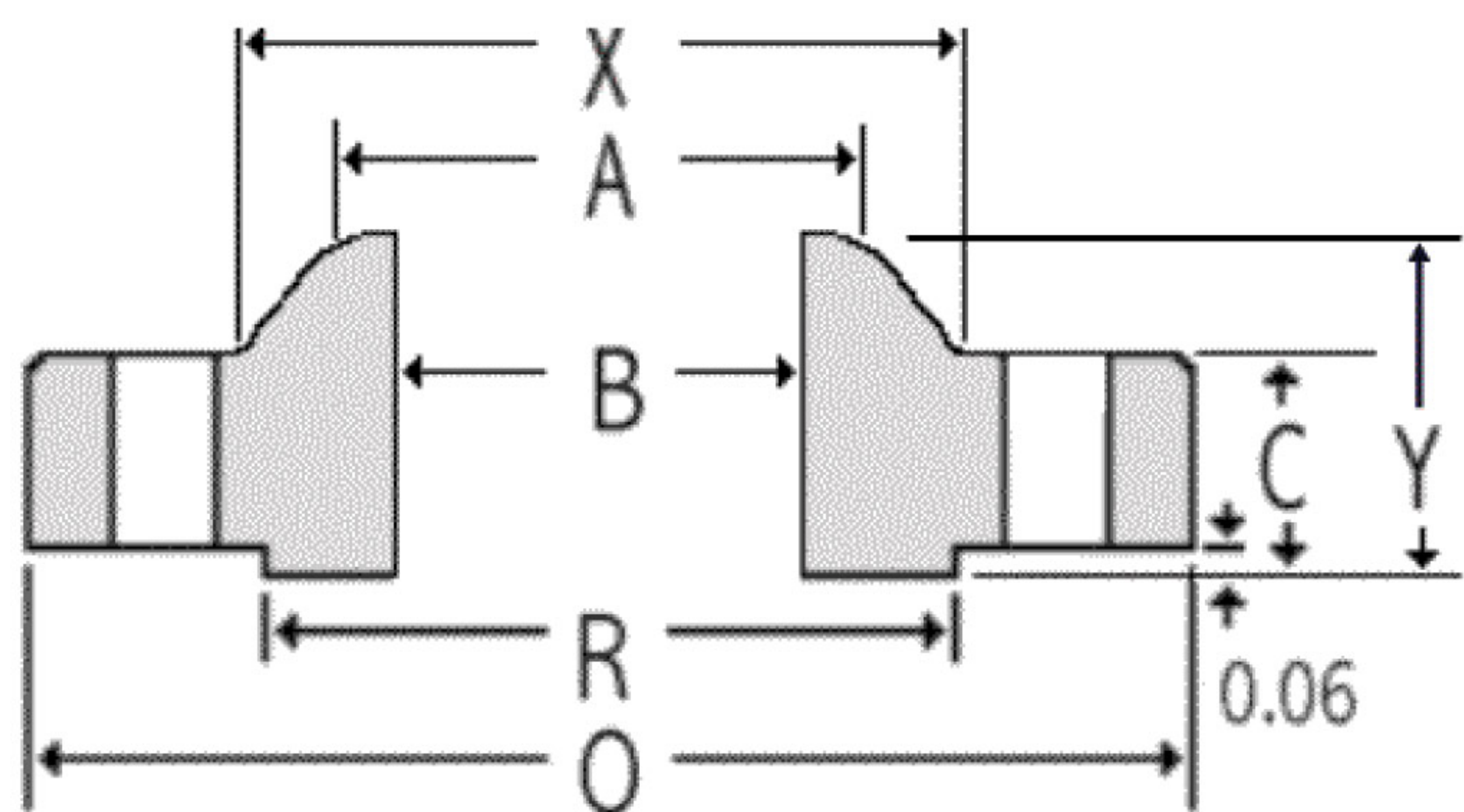
Blind

Nom Size	THICKNESS							Drilling			Weight	
	OD	Weld Neck	Blind	LTH	Dia at Base	Dia Bevel	OD RF	Bolt Circle	# Holes	Dia Holes	Weld Neck	Blind
	O	C	C	Y	X	A	R					
26	42.75	5.50	6.31	11.25	30.50	26.00	29.50	37.50	20	2.88	1525	2566
28	46.00	5.62	6.75	11.75	32.75	28.00	31.50	40.25	20	3.12	1810	3178
30	48.50	5.88	7.18	12.25	35.00	30.00	33.75	42.75	20	3.12	2120	3758
32	51.75	6.25	7.62	13.00	37.25	32.00	36.00	45.50	20	3.38	2545	4541
34	55.00	6.50	8.06	13.75	39.62	34.00	38.00	48.25	20	3.62	2970	5425
36	57.50	6.75	8.44	14.25	41.88	36.00	40.25	50.75	20	3.62	3395	6209
38	57.50	7.50	8.50	13.88	42.25	38.00	43.25	50.75	20	3.62	3385	6253
40	59.50	7.75	8.81	14.31	44.38	40.00	45.75	52.75	24	3.62	3620	6940
42	61.50	8.12	9.12	14.62	46.31	42.00	47.75	54.75	24	3.62	3960	7675
44	64.88	8.44	9.56	15.38	48.62	44.00	50.00	57.62	24	3.88	4300	8954
46	68.25	8.88	10.06	16.18	50.88	46.00	52.50	60.50	24	4.12	4640	10,426
48	70.25	9.19	10.38	16.50	52.88	48.00	54.50	62.50	24	4.12	4980	11,398

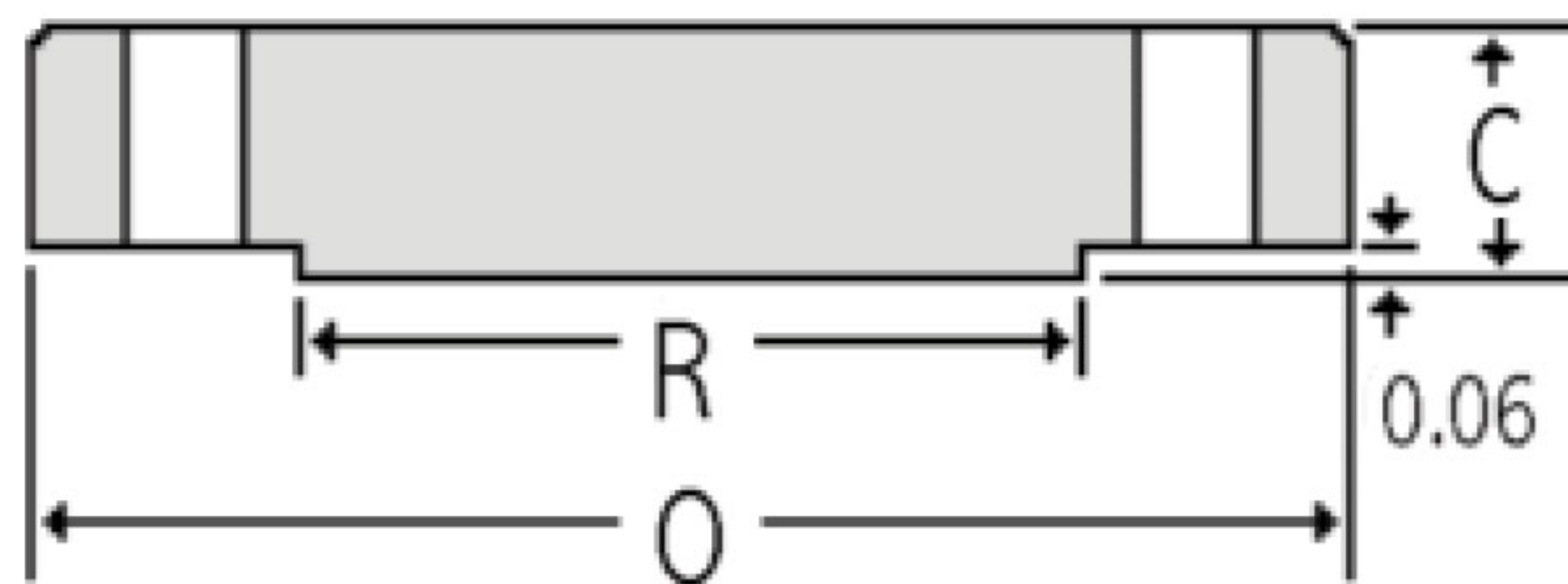
Dimensions in inches.

Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series B Class 75 Weld Neck & Blind



Weld Neck



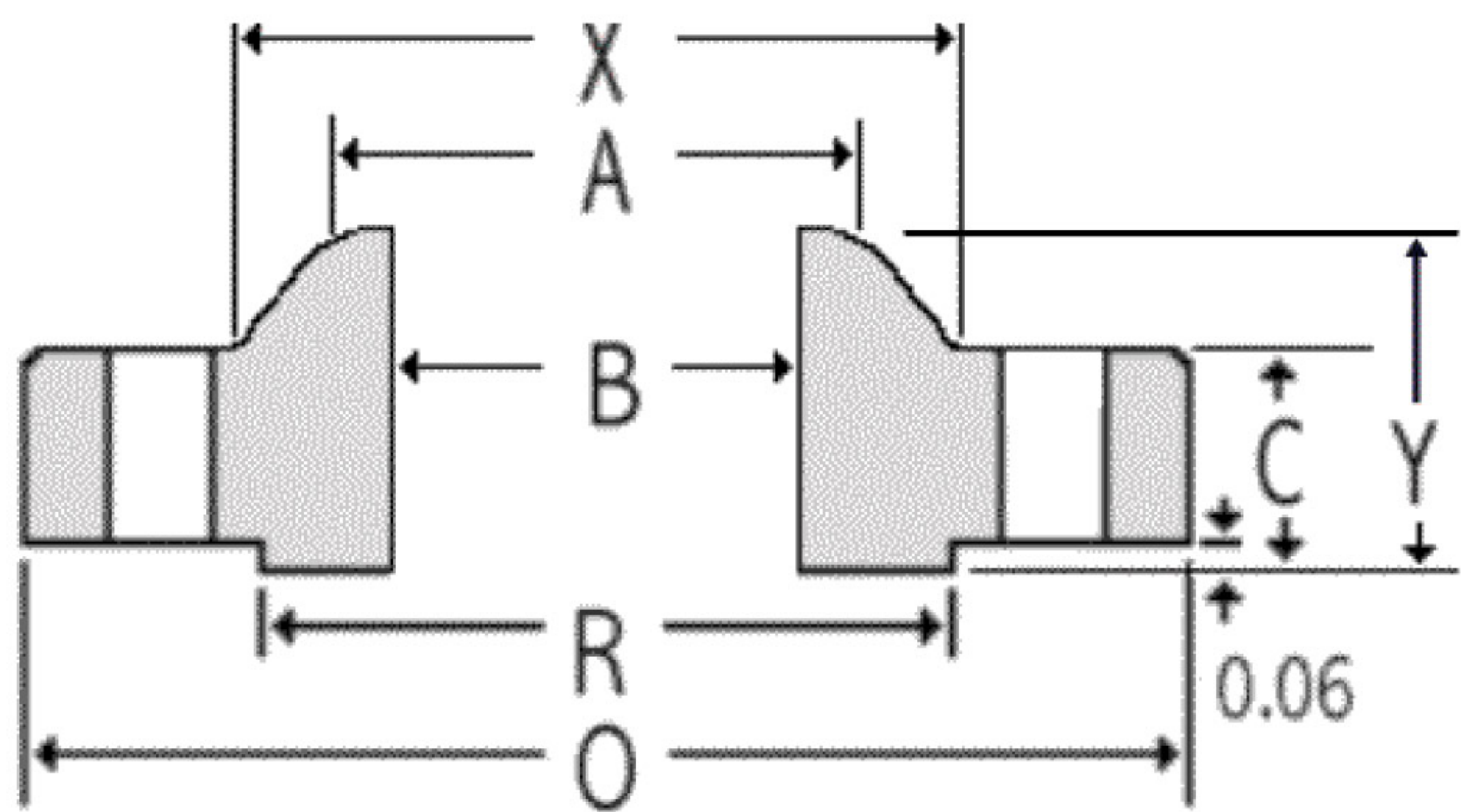
Blind

Nom Size	THICKNESS								Drilling			Weight	
	OD	Weld Neck	Blind	OD RF	Dia at Base	Bore	LTH	Dia Bevel	Bolt Circle	Dia Holes	# Holes	Weld Neck	Blind
	O	C	C	R	X	B	Y	A					
26	30.00	1.31	1.31	27.75	26.62	To be specified by Purchaser.	2.31	26.06	28.50	0.75	36	80	255
28	32.00	1.31	1.31	29.75	28.62		2.44	28.06	30.50	0.75	40	85	290
30	34.00	1.31	1.31	31.75	30.62		2.56	30.06	32.50	0.75	44	90	330
32	36.00	1.38	1.44	33.75	32.62		2.75	32.06	34.50	0.75	48	105	390
34	38.00	1.38	1.50	35.75	34.62		2.88	34.06	36.50	0.75	52	110	430
36	40.69	1.44	1.67	38.00	36.81		3.38	36.06	39.06	0.88	40	145	518
38	42.69	1.50	1.75	40.00	38.81		3.50	38.06	41.06	0.88	40	160	595
40	44.69	1.50	1.75	42.00	40.81		3.62	40.06	43.06	0.88	44	170	760
42	46.69	1.56	1.88	44.00	42.81		3.75	42.06	45.06	0.88	48	185	895
44	49.25	1.69	1.94	46.25	44.88		4.12	44.06	47.38	1.00	36	230	1065
46	51.25	1.75	2.00	48.25	46.88		4.25	46.06	49.38	1.00	40	245	1185
48	53.25	1.81	2.12	50.25	48.88		4.38	48.06	51.38	1.00	44	270	1315
50	55.25	1.88	2.18	52.25	50.94		4.56	50.06	53.38	1.00	44	290	1505
52	57.38	1.88	2.25	54.25	52.94		4.75	52.06	55.50	1.00	48	310	1665
54	59.38	1.94	2.38	56.25	55.00		4.94	54.06	57.50	1.00	48	340	1840
56	62.00	2.00	2.44	58.50	57.12		5.31	56.06	59.88	1.12	40	400	2110
58	64.00	2.06	2.50	60.50	59.12		5.44	58.06	61.88	1.12	44	430	2300
60	66.00	2.19	2.62	62.50	61.12		5.69	60.06	63.88	1.12	44	475	2500

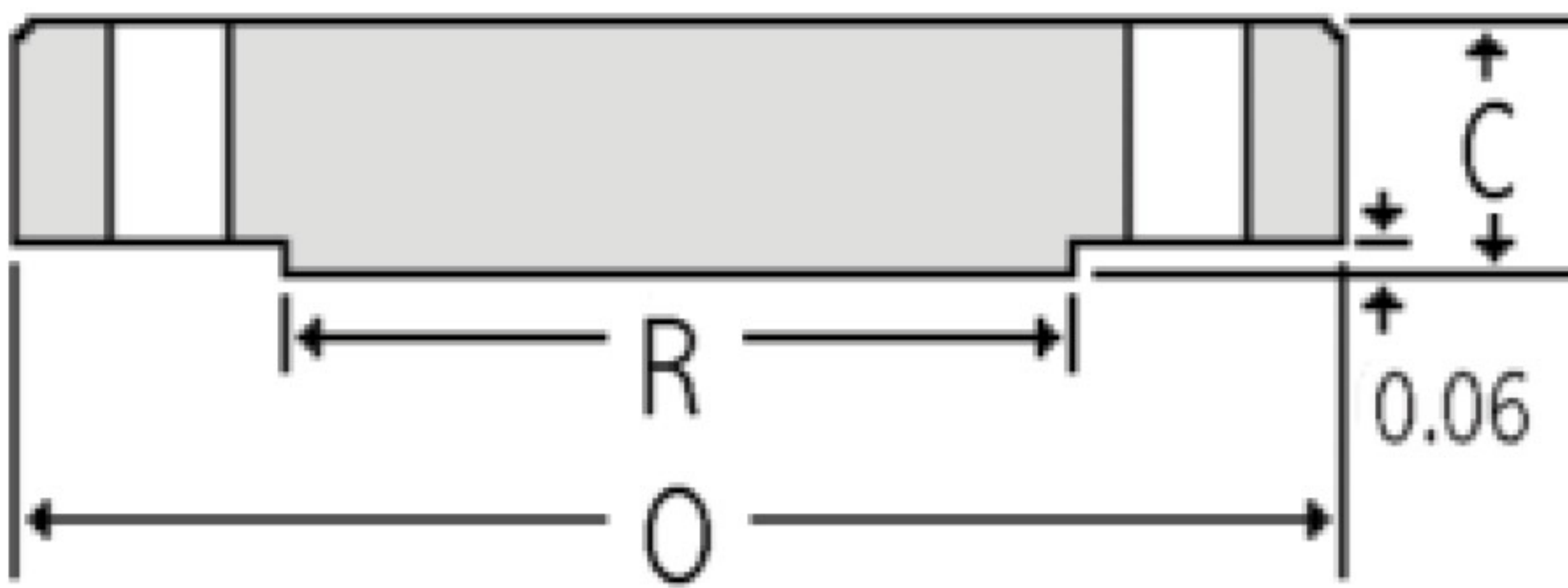
Dimensions in inches.
Note: Larger sizes as well as intermediate sizes can be furnished.



B16.47 Series B Class 150 Weld Neck & Blind



Weld Neck

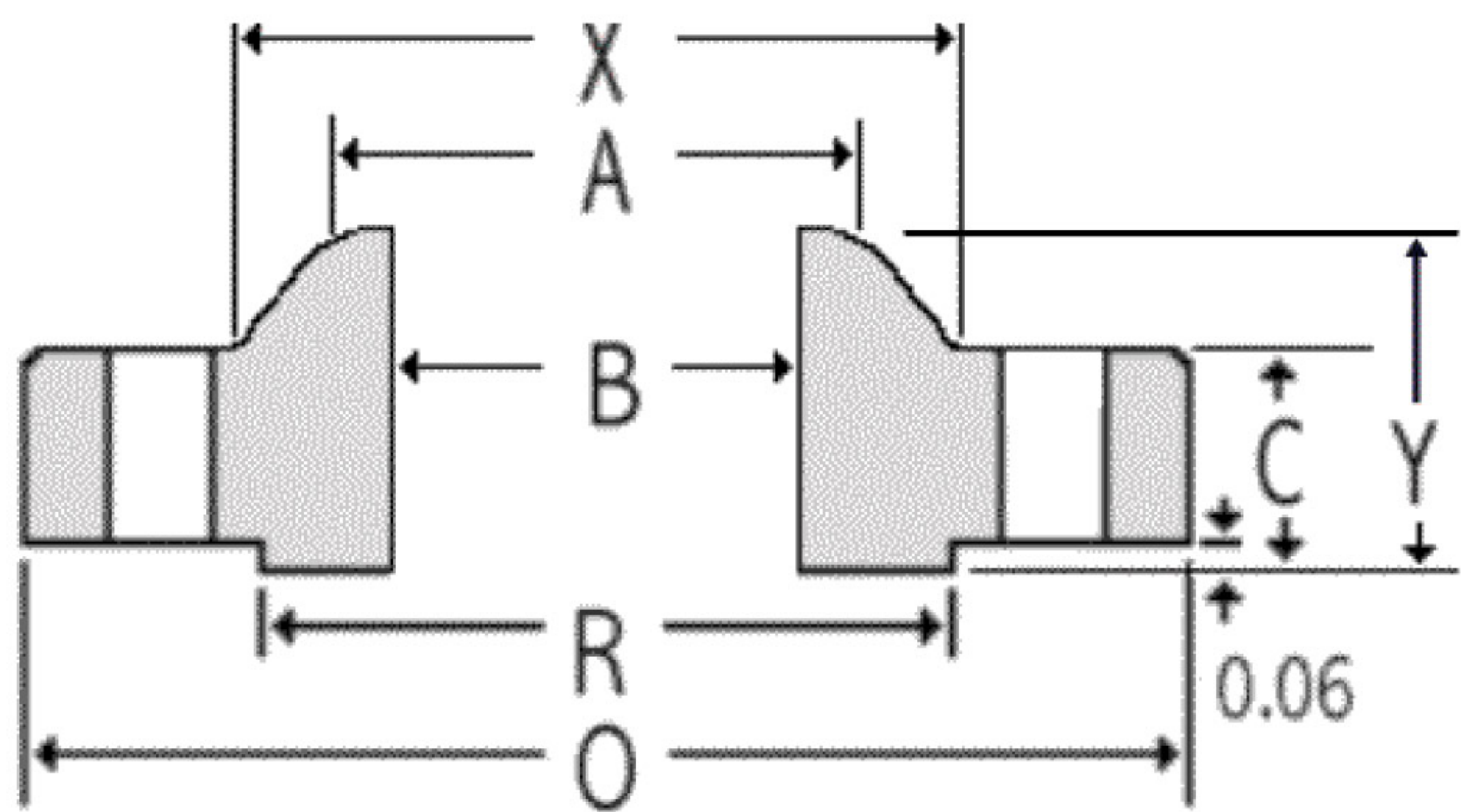


Blind

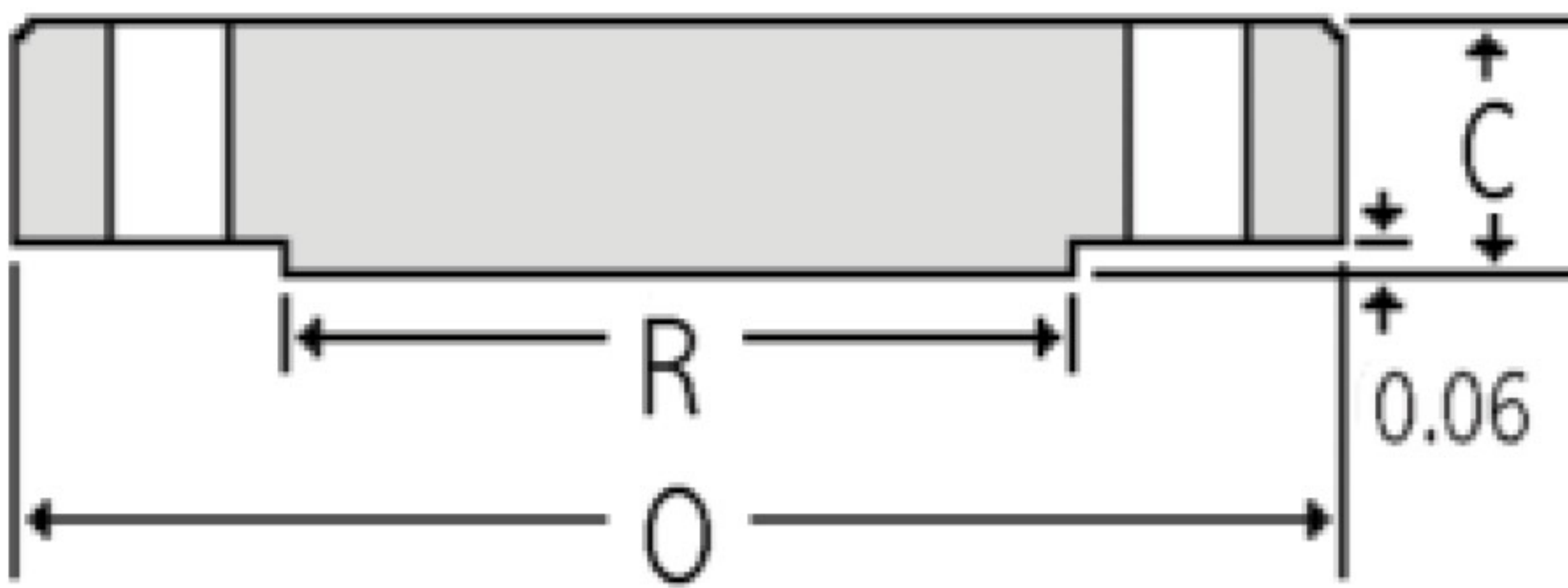
Nom Size	THICKNESS						Drilling					Weight	
	OD	Weld Neck	Blind	OD RF	Dia at Base	Bore	LTH	Dia Bevel	Bolt Circle	Dia Holes	# Holes	Weld Neck	Blind
	O	C	C	R	X	B	Y	A					
26	30.94	1.62	1.75	28.00	26.94	To be specified by Purchaser.	3.50	26.06	29.31	0.88	36	120	373
28	32.94	1.75	1.88	30.00	28.94		3.75	28.06	31.31	0.88	40	140	454
30	34.94	1.75	2.00	32.00	31.00		3.94	30.06	33.31	0.88	44	150	543
32	37.06	1.81	2.12	34.00	33.06		4.25	32.06	35.44	0.88	48	170	648
34	39.56	1.94	2.25	36.25	35.12		4.34	34.06	37.69	1.00	40	210	783
36	41.62	2.06	2.31	38.25	37.19		4.62	36.06	39.75	1.00	44	240	890
38	44.25	2.12	2.50	40.25	39.25		4.88	38.12	42.12	1.12	40	290	1089
40	46.25	2.19	2.62	42.50	41.31		5.06	40.12	44.12	1.12	44	310	1247
42	48.25	2.31	2.69	44.50	43.38		5.25	42.12	46.12	1.12	48	345	1393
44	50.25	2.38	2.81	46.50	45.38		5.38	44.12	48.12	1.12	52	370	1579
46	52.81	2.44	2.94	48.62	47.44		5.69	46.12	50.56	1.25	40	435	1824
48	54.81	2.56	3.06	50.75	49.50		5.88	48.12	52.56	1.25	44	480	2045
50	56.81	2.69	3.18	52.75	51.50		6.06	50.12	54.56	1.25	48	520	2284
52	58.81	2.75	3.31	54.75	53.56		6.19	52.12	56.56	1.25	52	550	2547
54	61.00	2.81	3.44	56.75	55.62		6.38	54.12	58.75	1.25	56	620	2848
56	63.00	2.88	3.56	58.75	57.69		6.56	56.12	60.75	1.25	60	650	3144
58	65.94	2.94	3.68	60.75	59.69		6.88	58.12	63.44	1.38	48	780	3560
60	67.94	3.00	3.81	63.00	61.81		7.06	60.12	65.44	1.38	52	850	3913

Dimensions in inches.
Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series B Class 300 Weld Neck & Blind



Weld Neck

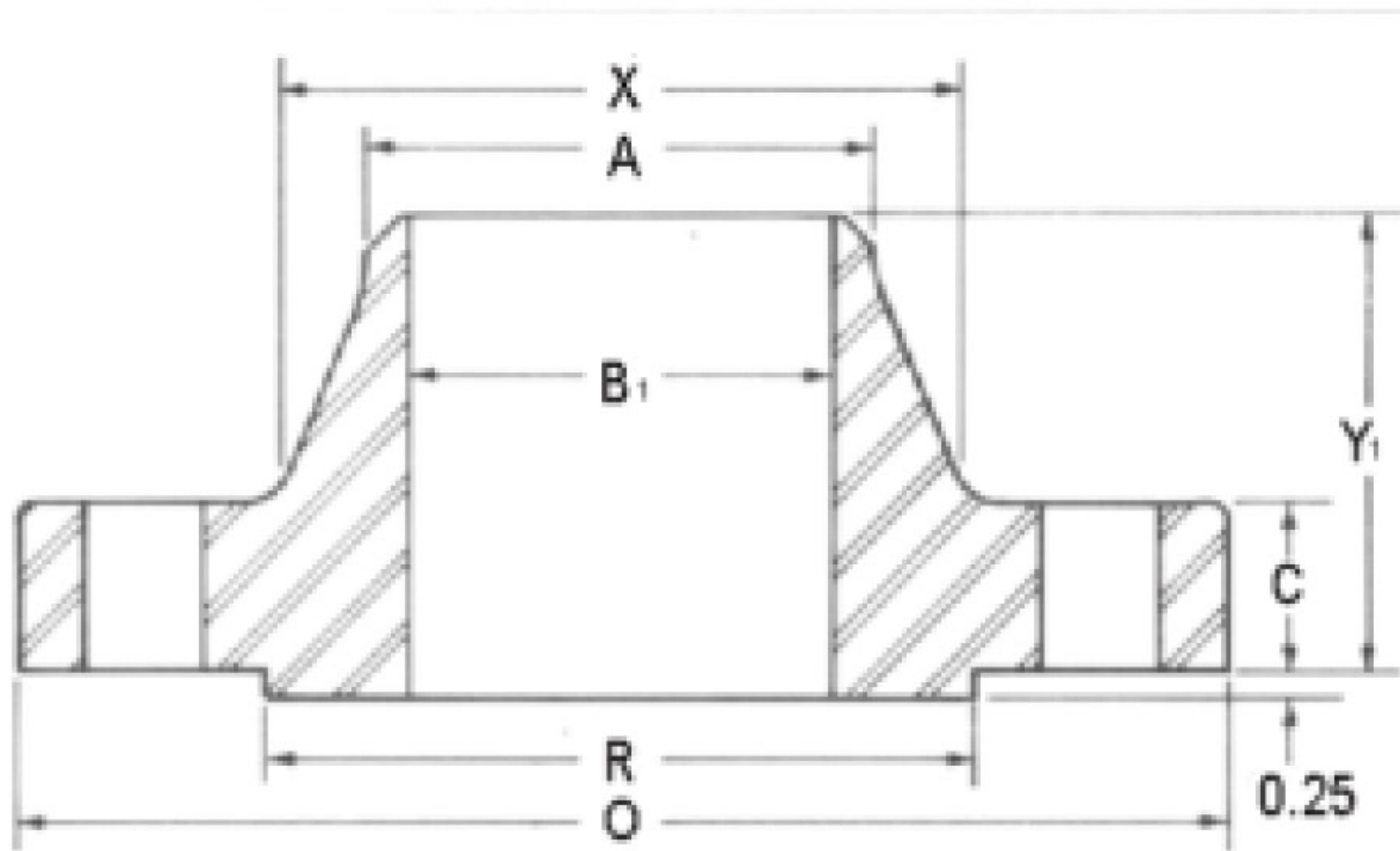


Blind

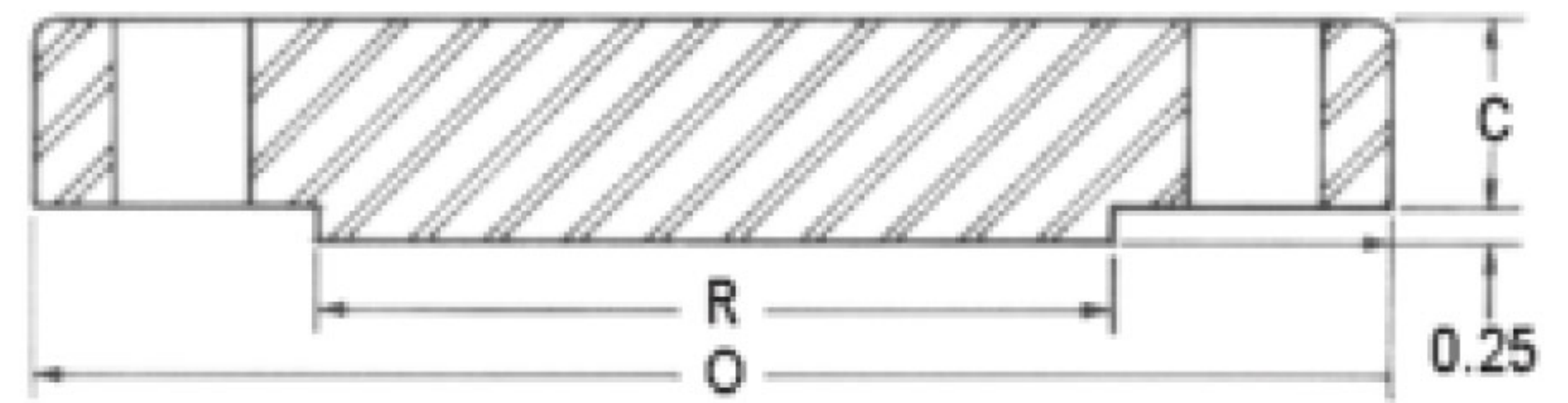
Nom Size	THICKNESS								Drilling			Weight	
	OD	Weld Neck	Blind	OD RF	Dia at Base	Bore	LTH	Dia Bevel	Bolt Circle	Dia Holes	# Holes	Weld Neck	Blind
	O	C	C	R	X	B	Y	A					
26	34.12	3.50	3.50	29.00	27.62	To be specified by Purchaser.	5.69	26.19	31.62	1.38	32	400	907
28	36.25	3.50	3.50	31.00	29.75		5.88	28.19	33.75	1.38	36	450	1023
30	39.00	3.69	3.69	33.25	32.00		6.22	30.25	36.25	1.50	36	550	1249
32	41.50	4.06	4.06	35.50	34.00		6.62	32.25	38.50	1.62	32	685	1556
34	43.62	4.06	4.06	37.50	36.12		6.81	34.25	40.62	1.62	36	750	1719
36	46.12	4.06	4.06	39.75	38.00		7.12	36.25	42.88	1.75	32	840	1921
38	48.12	4.38	4.38	41.75	40.00		7.56	38.25	44.88	1.75	36	915	2257
40	50.12	4.56	4.56	43.88	42.00		7.81	40.25	46.88	1.75	40	990	2549
42	52.50	4.69	4.69	46.00	44.00		8.06	42.31	49.00	1.88	36	1135	2876
44	54.50	5.00	5.00	48.00	46.19		8.44	44.31	51.00	1.88	40	1235	3304
46	57.50	5.06	5.12	50.00	48.38		8.75	46.31	53.75	2.00	36	1470	3766
48	59.50	5.06	5.31	52.25	50.31		8.81	48.31	55.75	2.00	40	1575	4183
50	61.50	5.44	5.50	54.25	52.38		9.25	50.31	57.75	2.00	44	1710	4629
52	63.50	5.62	5.68	56.25	54.44		9.56	52.31	59.75	2.00	48	1840	5096
54	65.88	5.38	5.88	58.25	56.50		9.44	54.31	62.12	2.00	48	1980	5678
56	69.50	6.06	6.18	60.50	58.81		10.56	56.31	65.00	2.38	36	2595	6642
58	71.94	6.06	6.38	62.75	60.94		10.81	58.31	67.44	2.38	40	2770	7347
60	73.94	5.94	6.56	65.00	62.94		10.69	60.31	69.44	2.38	40	2870	7980

Dimensions in inches.
Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series B Class 400 Weld Neck & Blind



Weld Neck



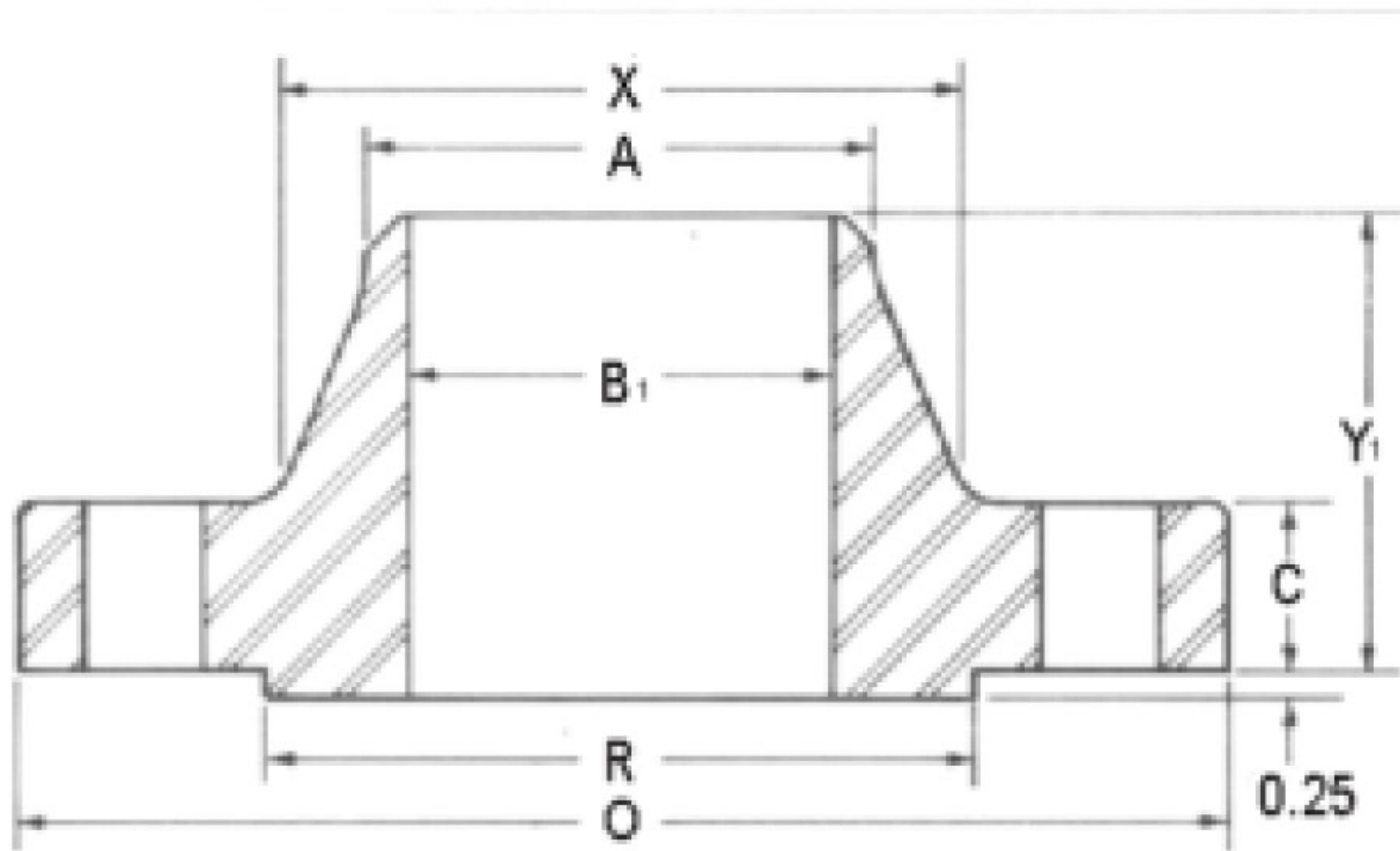
Blind

Nom Size	THICKNESS							Drilling			Weight	
	OD	Weld Neck	Blind	LTH	Dia at Base	Dia Bevel	OD RF	Bolt Circle	# Holes	Dia Holes	Weld Neck	Blind
	O	C	C	Y	X	A	R					
26	33.50	3.50	3.50	5.88	27.12	26.00	28.00	30.75	28	1.50	360	874
28	36.00	3.75	3.75	6.25	29.12	28.00	30.00	33.00	24	1.62	450	1081
30	38.25	4.00	4.00	6.69	31.25	30.00	32.25	35.25	28	1.62	530	1302
32	40.75	4.25	4.25	7.06	33.25	32.00	34.38	37.50	28	1.75	635	1570
34	42.75	4.38	4.38	7.38	35.38	34.00	36.50	39.50	32	1.75	690	1781
36	45.50	4.69	4.69	7.88	37.50	36.00	38.62	42.00	28	1.88	855	2160
38	47.50	4.88	4.88	8.12	39.50	38.00	40.75	44.00	32	1.88	935	2450
40	50.00	5.12	5.12	8.50	41.50	40.00	43.00	46.25	32	2.00	1090	2848
42	52.00	5.25	5.25	8.81	43.62	42.00	45.00	48.25	32	2.00	1190	3159
44	54.50	5.50	5.50	9.18	45.62	44.00	47.25	50.50	32	2.12	1375	3635
46	56.75	5.75	5.75	9.62	47.75	46.00	49.50	52.75	36	2.12	1525	4120
48	59.50	6.00	6.00	10.12	49.88	48.00	51.50	55.25	28	2.38	1790	4726
50	61.75	6.19	6.25	10.56	52.00	50.00	53.62	57.50	32	2.38	1950	5303
52	63.75	6.38	6.44	10.88	54.00	52.00	55.62	59.50	32	2.38	2125	5823
54	67.00	6.69	6.75	11.38	56.12	54.00	57.88	62.25	28	2.62	2565	6742
56	69.00	6.88	6.94	11.75	58.25	56.00	60.12	64.25	32	2.62	2710	7352
58	71.00	7.00	7.12	12.06	60.25	58.00	62.12	66.25	32	2.62	3230	7986
60	74.25	7.31	7.44	12.56	62.38	60.00	64.38	69.00	32	2.88	3820	9126

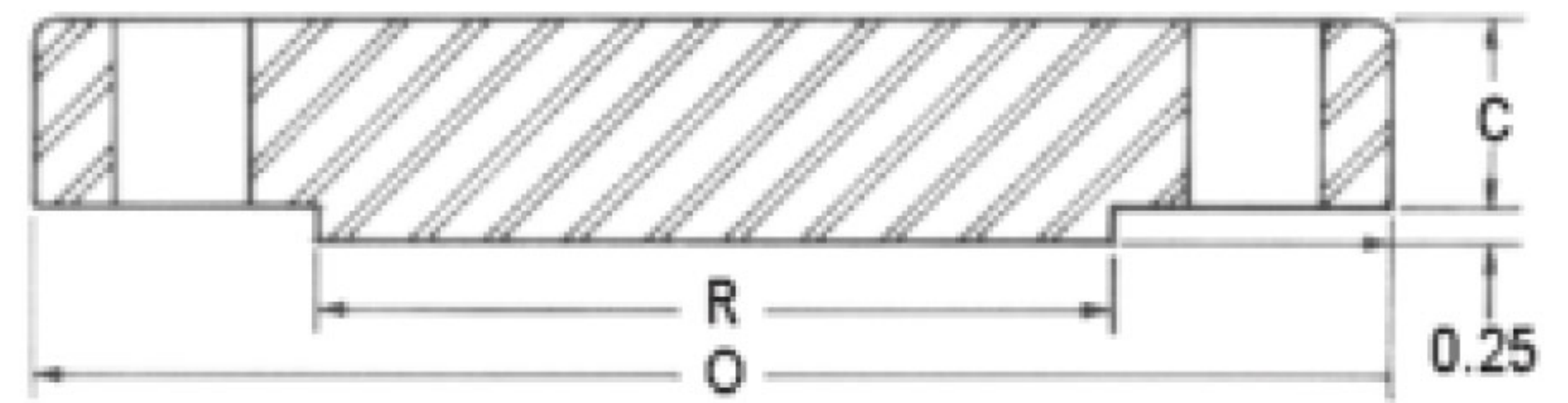
Dimensions in inches.

Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series B Class 600 Weld Neck & Blind



Weld Neck



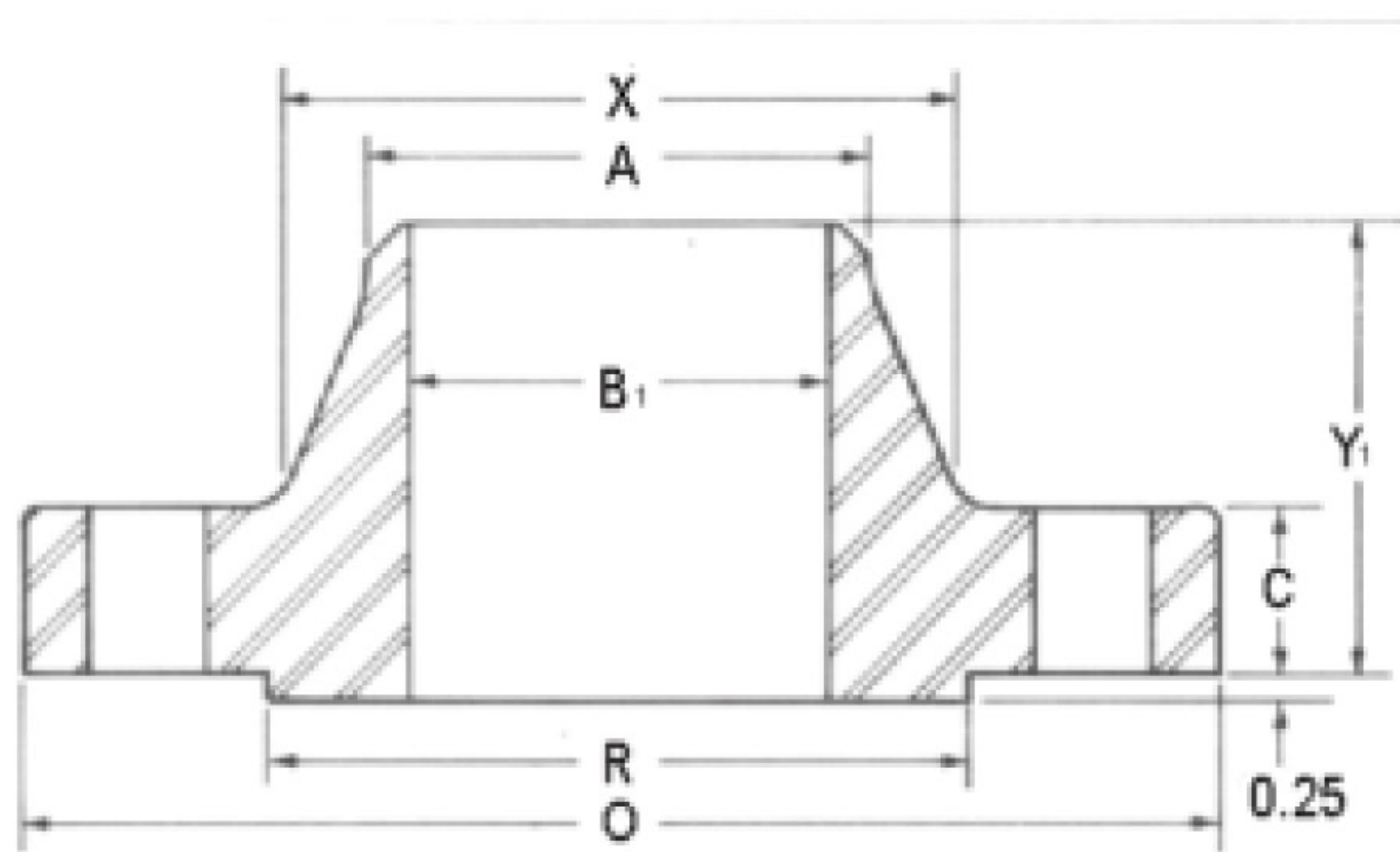
Blind

Nom Size	THICKNESS							Drilling			Weight	
	OD	Weld Neck	Blind	LTH	Dia at Base	Dia Bevel	OD RF	Bolt Circle	# Holes	Dia Holes	Weld Neck	Blind
	O	C	C	Y	X	A	R					
26	35.00	4.38	4.38	7.12	27.50	26.00	28.62	31.75	28	1.75	550	1194
28	37.50	4.56	4.56	7.50	29.62	28.00	30.88	34.00	28	1.88	650	1427
30	40.25	4.94	5.00	8.06	31.75	30.00	33.12	36.50	28	2.00	810	1802
32	42.75	5.12	5.31	8.50	33.88	32.00	35.25	38.75	28	2.12	950	2159
34	45.75	5.56	5.68	9.19	36.00	34.00	37.50	41.50	24	2.38	1205	2645
36	47.75	5.75	5.94	9.56	38.12	36.00	39.75	43.50	28	2.38	1340	3013
38	50.00	6.00	6.12	10.00	40.25	38.00	41.50	45.75	28	2.38	1470	3404
40	52.00	6.25	6.38	10.38	42.25	40.00	43.75	47.75	32	2.38	1630	3838
42	55.25	6.62	6.75	11.00	44.38	42.00	46.00	50.50	28	2.62	2030	4585
44	57.25	6.81	7.00	11.38	46.50	44.00	48.25	52.50	32	2.62	2160	5105
46	59.50	7.06	7.31	11.81	48.62	46.00	50.25	54.75	32	2.62	2410	5758
48	62.75	7.44	7.69	12.44	50.75	48.00	52.50	57.50	32	2.88	2855	6737
50	65.75	7.75	8.00	12.94	52.88	50.00	54.50	60.00	28	3.12	3330	7695
52	67.75	8.00	8.25	13.25	54.88	52.00	56.50	62.00	32	3.12	3560	8426
54	70.00	8.25	8.56	13.75	57.00	54.00	58.75	64.25	32	3.12	3920	9333
56	73.00	8.56	8.88	14.25	59.12	56.00	60.75	66.75	32	3.38	4280	10,529
58	75.00	8.75	9.12	14.56	61.12	58.00	63.00	68.75	32	3.38	4640	11,414
60	78.50	9.19	9.56	15.31	63.38	60.00	65.25	71.75	28	3.62	5000	13,108

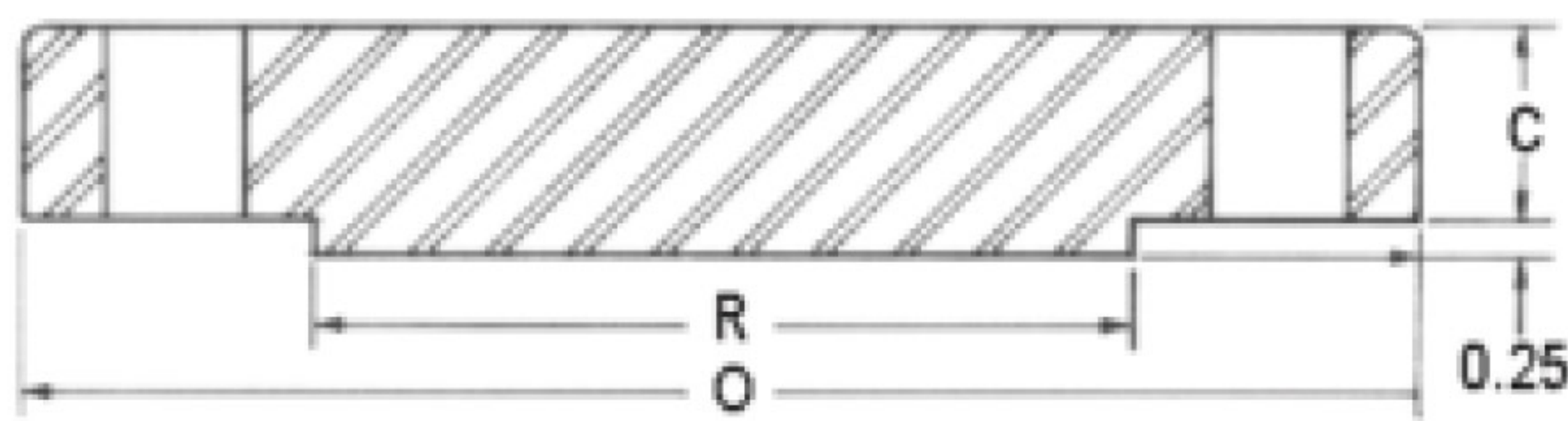
Dimensions in inches.

Note: Larger sizes as well as intermediate sizes can be furnished.

B16.47 Series B Class 900 Weld Neck & Blind



Weld Neck

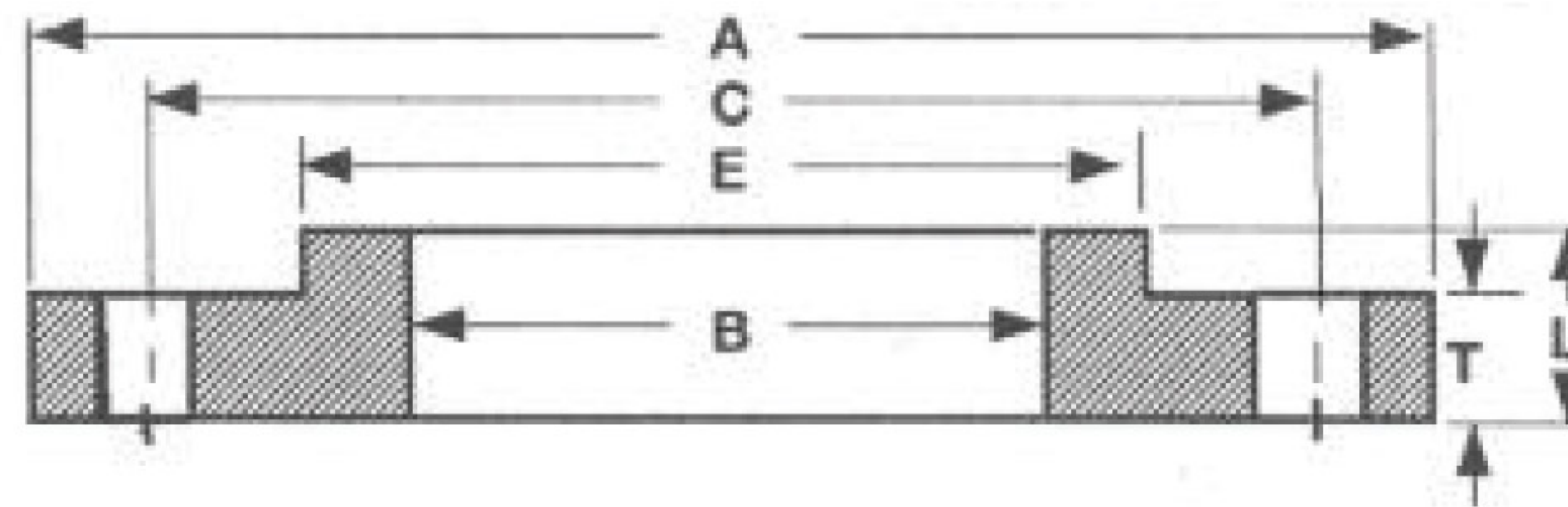


Blind

Nom Size	THICKNESS							Drilling			Weight	
	OD	Weld Neck	Blind	LTH	Dia at Base	Dia Bevel	OD RF	Bolt Circle	# Holes	Dia Holes	Weld Neck	Blind
	O	C	C	Y	X	A	R					
26	40.25	5.31	6.06	10.19	29.25	26.00	30.00	35.50	20	2.62	1050	2184
28	43.50	5.81	6.56	10.88	31.38	28.00	32.25	38.25	20	2.88	1520	2762
30	46.50	6.12	6.93	11.38	33.50	30.00	34.50	40.75	20	3.12	1820	3334
32	48.75	6.31	7.31	11.94	35.75	32.00	36.50	43.00	20	3.12	2065	3865
34	51.75	6.75	7.68	12.56	37.88	34.00	39.00	45.50	20	3.38	2450	4576
36	53.00	6.81	7.94	12.81	40.00	36.00	40.50	47.25	24	3.12	2520	4963
38	57.50	7.50	8.50	13.88	42.25	38.00	43.25	50.75	20	3.62	3385	6253
40	59.50	7.75	8.81	14.31	44.38	40.00	45.75	52.75	24	3.62	3620	6940
42	61.50	8.12	9.12	14.62	46.31	42.00	47.75	54.75	24	3.62	3960	7675
44	64.88	8.44	9.56	15.38	48.62	44.00	50.00	57.62	24	3.88	4300	8954
46	68.25	8.88	10.06	16.18	50.88	46.00	52.50	60.50	24	4.12	4640	10,426
48	70.25	9.19	10.38	16.50	52.88	48.00	54.50	62.50	24	4.12	4980	11,398

Dimensions in inches.
Note: Larger sizes as well as intermediate sizes can be furnished.

Same as AWWA Class D Hub

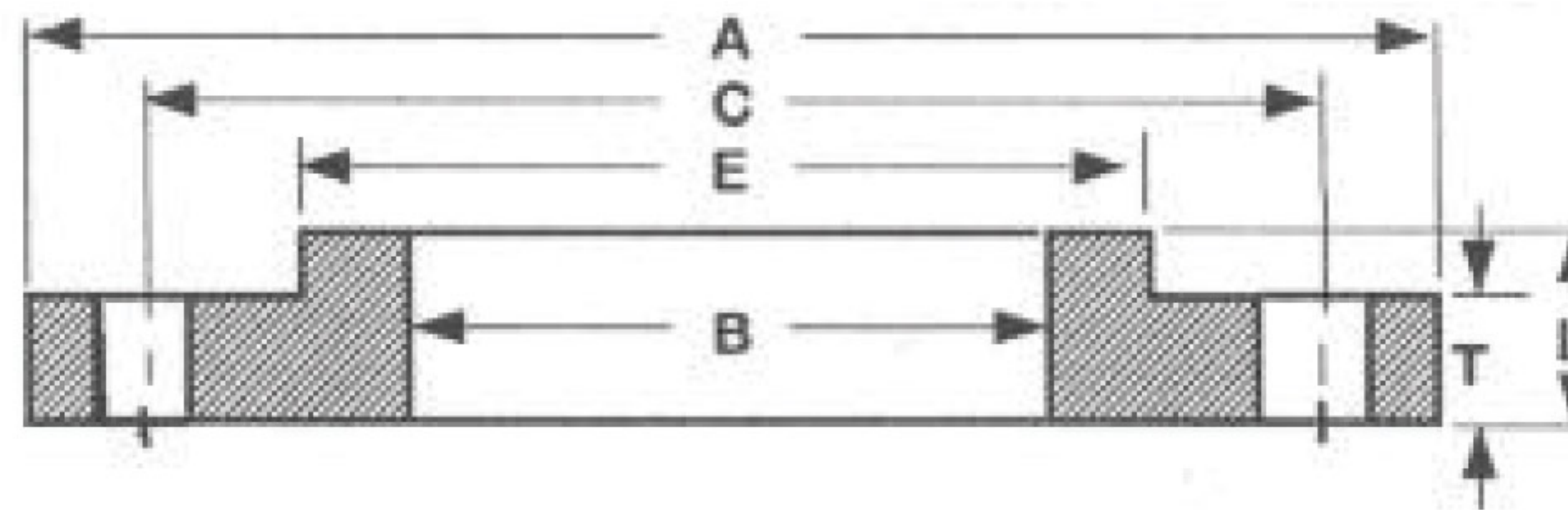


Class 125LW* (175-150 psi)

Nom Pipe Size						Drilling Template			Weight
	OD of Flange	ID of Flange	Thickness of Flange	Overall Thickness	Diam. Of Hub	Number of Bolt Holes	Diam. of Bolt Holes	Diam. of Bolt Circle	
	(A)	(B)	(T)	(L)	(E)			(C)	
4	9.00	4.57	0.500	0.875	5.312	8	0.750	7.50	7
5	10.00	5.66	0.562	1.250	6.312	8	0.875	8.50	9
6	11.00	6.72	0.562	1.250	7.562	8	0.875	9.50	11
8	13.50	8.72	0.562	1.250	9.688	8	0.875	11.75	15
10	16.00	10.88	0.688	1.250	12.000	12	1.000	14.25	22
12	19.00	12.88	0.688	1.250	14.375	12	1.000	17.00	33
14	21.00	14.19	0.750	1.250	15.750	12	1.125	18.75	43
16	23.50	16.19	0.750	1.250	18.000	16	1.125	21.25	52
18	25.00	18.19	0.750	1.250	19.875	16	1.250	22.75	52
20	27.50	20.19	0.750	1.250	22.000	20	1.250	25.00	61
22	29.50	22.19	1.000	1.750	24.250	20	1.375	27.25	92
24	32.00	24.19	1.000	1.750	26.125	20	1.375	29.50	105
26	34.25	26.19	1.000	1.750	28.500	24	1.375	31.75	119
28	36.50	28.19	1.000	1.750	30.500	28	1.375	34.00	130
30	38.75	30.19	1.000	1.750	32.500	28	1.375	36.00	144
32	41.75	32.19	1.125	1.750	34.750	28	1.625	38.50	182
34	43.75	34.19	1.125	1.750	36.750	32	1.625	40.50	191
36	46.00	36.19	1.125	1.750	38.750	32	1.625	42.75	207
38	48.75	38.19	1.125	1.750	40.750	32	1.625	45.25	237
40	50.75	40.19	1.125	1.750	43.000	36	1.625	47.25	249
42	53.00	42.19	1.250	1.750	45.000	36	1.625	49.50	287
44	55.25	44.19	1.250	2.250	47.000	40	1.625	51.75	334
46	57.25	46.19	1.250	2.250	49.000	40	1.625	53.75	348
48	59.50	48.19	1.375	2.500	51.000	44	1.625	56.00	407
50	61.75	50.19	1.375	2.500	53.000	44	1.875	58.25	421
52	64.00	52.19	1.375	2.500	55.000	44	1.875	60.50	448
54	66.25	54.19	1.375	2.500	57.000	44	1.875	62.75	475
60	73.00	60.19	1.500	2.750	63.000	52	1.875	69.25	605
66	80.00	66.19	1.500	2.750	69.000	52	1.875	76.00	718
72	86.50	72.19	1.500	2.750	75.000	60	1.875	82.50	803
78	93.00	78.19	1.750	3.000	81.250	64	2.125	89.00	1010
84	99.75	84.19	1.750	3.000	87.500	64	2.125	95.50	1160
90	106.50	90.19	2.000	3.250	93.750	68	2.438	102.00	1430
96	113.25	96.19	2.000	3.250	100.000	68	2.438	108.50	1618

Notes: All dimensions measured in inches. All weights in pounds and are approximate. Hub flanges are to be used on pipe that has an OD equal to the nominal pipe size in the first column. *Pressure Ratings are from AWWA Table 3 Class D. Pressure rating at atmospheric temperature: sizes 4-12 in. inclusive, 175 psi; sizes larger than 12 in., 150 psi. These flanges have the same diameter and drilling as ANSI/ASME B16.1 class 125 cast-iron flanges. In sizes 24in. and smaller they also match up to ANSI/ASME B16.5 150-psi standard for steel flanges.

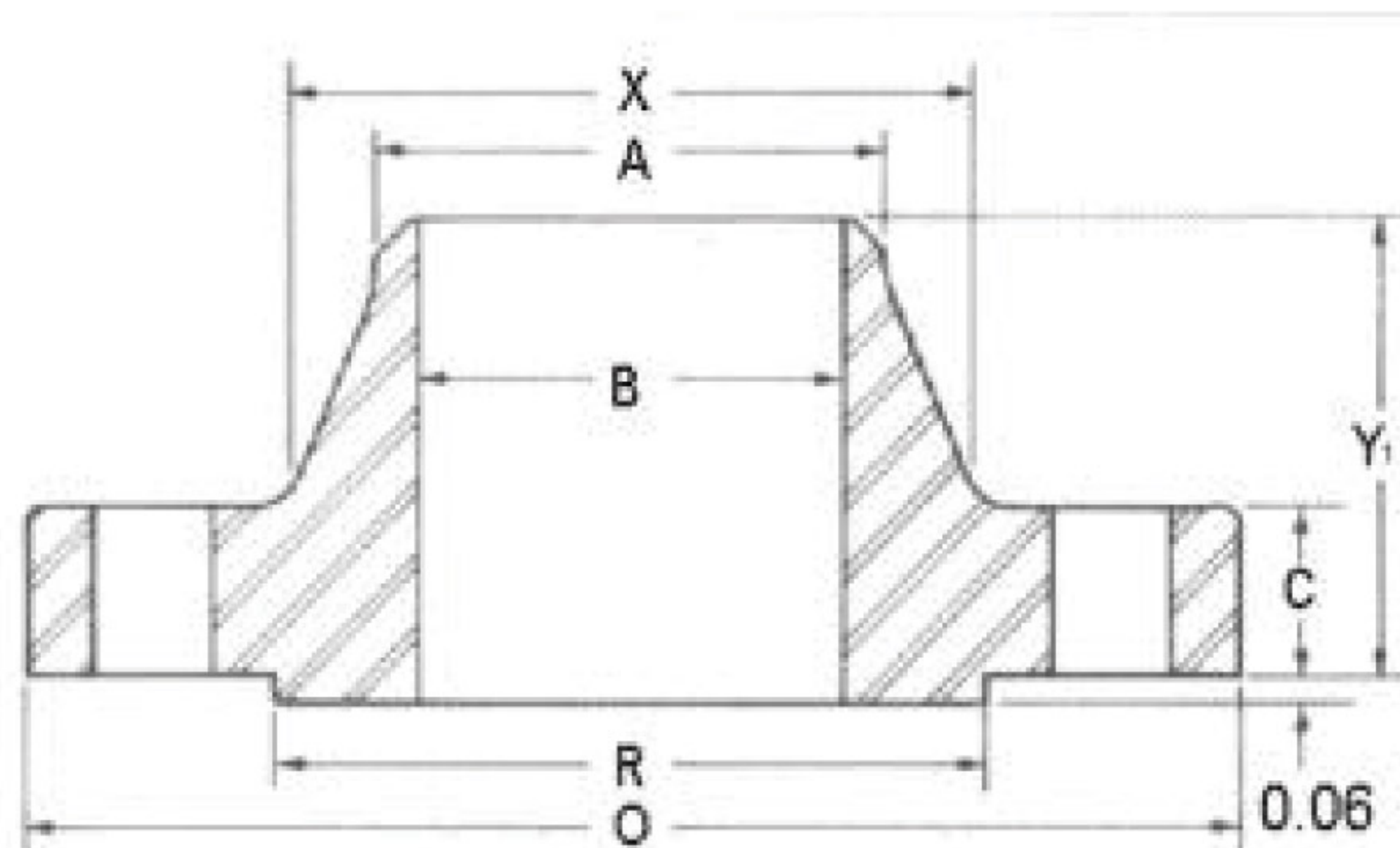
Same as AWWA Table 4 Class E



Class 125 SO* (275psi)

Nom Pipe Size						Drilling Template			Weight
	OD of Flange	ID of Flange	Thickness of Flange	Overall Thickness	Diam. Of Hub	Number of Bolt Holes	Diam. of Bolt Holes	Diam. of Bolt Circle	
	(A)	(B)	(T)	(L)	(E)			(C)	
4	9.00	4.57	0.938	1.312	5.312	8	0.750	7.50	13
5	10.00	5.66	0.938	1.438	6.438	8	0.875	8.50	14
6	11.00	6.72	1.000	1.562	7.562	8	0.875	9.50	17
8	13.50	8.72	1.125	1.750	9.688	8	0.875	11.75	28
10	16.00	10.88	1.188	1.938	12.000	12	1.000	14.25	37
12	19.00	12.88	1.250	2.188	14.375	12	1.000	17.00	59
14	21.00	14.19	1.375	2.250	15.750	12	1.125	18.75	78
16	23.50	16.19	1.438	2.500	18.000	16	1.125	21.25	101
18	25.00	18.19	1.562	2.688	19.875	16	1.250	22.75	110
20	27.50	20.19	1.688	2.875	22.000	20	1.250	25.00	139
22	29.50	22.19	1.812	3.125	24.000	20	1.375	27.25	162
24	32.00	24.19	1.875	3.250	26.125	20	1.375	29.50	197
26	34.25	26.19	2.000	3.375	28.500	24	1.375	31.75	235
28	36.50	28.19	2.062	3.438	30.750	28	1.375	34.00	269
30	38.75	30.19	2.125	3.500	32.750	28	1.375	36.00	303
32	41.75	32.19	2.250	3.625	35.000	28	1.625	38.50	375
34	43.75	34.19	2.312	3.688	37.000	32	1.625	40.50	401
36	46.00	36.19	2.375	3.750	39.250	32	1.625	42.75	452
38	48.75	38.19	2.375	3.750	41.750	32	1.625	45.25	528
40	50.75	40.19	2.500	3.875	43.750	36	1.625	47.25	573
42	53.00	42.19	2.625	4.000	46.000	36	1.625	49.50	648
44	55.25	44.19	2.625	4.000	48.000	40	1.625	51.75	688
46	57.25	46.19	2.688	4.062	50.000	40	1.625	53.75	733
48	59.50	48.19	2.750	4.125	52.250	44	1.625	56.00	799
50	61.75	50.19	2.750	4.125	54.250	44	1.875	58.25	827
52	64.00	52.19	2.875	4.250	56.500	44	1.875	60.50	922
54	66.25	54.19	3.000	4.375	58.750	44	1.875	62.75	1024
60	73.00	60.19	3.125	4.500	65.250	52	1.875	69.25	1253
66	80.00	66.19	3.375	4.875	71.500	52	1.875	76.00	1623
72	86.50	72.19	3.500	5.000	78.500	60	1.875	82.50	1922
78	93.00	78.19	3.875	5.375	84.500	64	2.125	89.00	2279
84	99.75	84.19	3.875	5.375	90.500	64	2.125	95.50	2586
90	106.50	90.19	4.250	5.750	96.750	68	2.438	102.00	3061
96	113.25	96.19	4.250	5.750	102.750	68	2.438	108.50	3432

Notes: Commonly referred to as a class 150# in large diameter. Can be furnished with a raised face. All dimensions measured in inches. All weights in pounds and are approximate. *Pressure ratings from AWWA table 4 Class E. Pressure rating at atmospheric temperature is 275 psi. These flanges have the same diameter and drilling as ANSI/ASME B16.1 class 125 cast-iron flanges. In sizes 24in. and smaller they also match ANSI/ASME B16.5 150-psi standard for steel flanges. The thickness of a 150-psi flange from which the raised face has been removed shall be no less than dimension T minus 0.06 in.

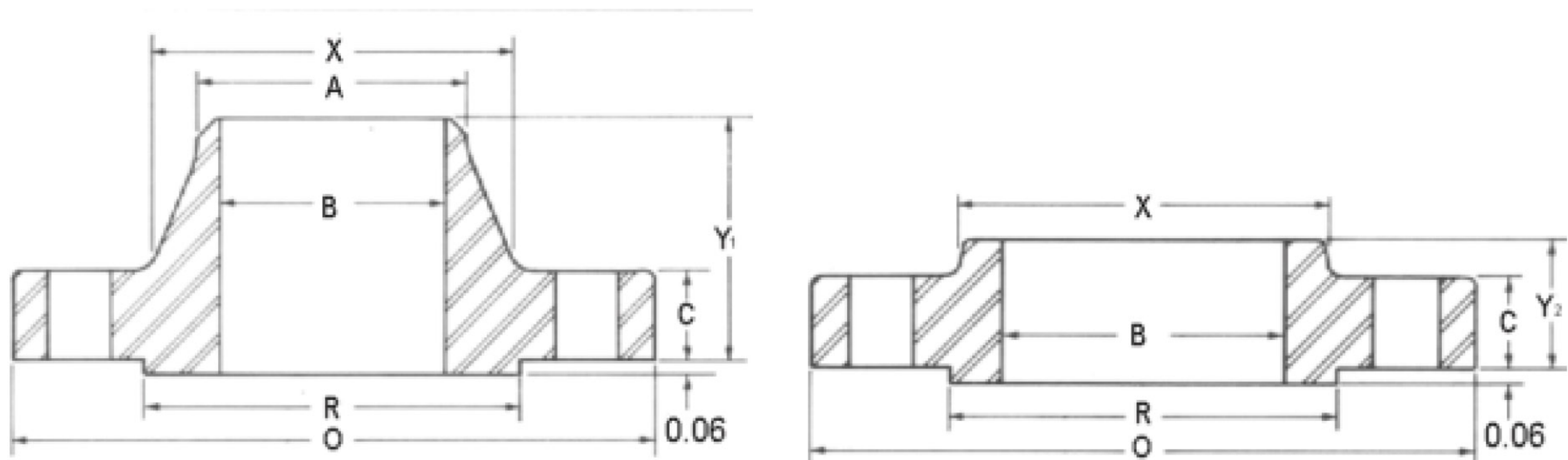


Class 125 WN

Nom Pipe Size								Drilling Template			Weight
	OD of Flange	ID of Flange	Thick	Overall Thickness	Diam. Of Hub	OD of Raised Face	Diam. Hub At Bev.	# of Bolt Holes	Diam. of Bolt Holes	Diam. of Bolt Circle	
	(O)	(B)	(C)	(Y)	(X)	(R)	(A)				
6	11.00	To Be Specified by Purchaser.	1.000	3.50	7.562	8.50	6.63	8	0.875	9.50	24
8	13.50		1.125	4.00	9.688	10.63	8.63	8	0.875	11.75	39
10	16.00		1.188	4.00	12.000	12.75	10.75	12	1.000	14.25	52
12	19.00		1.250	4.50	14.375	15.00	12.75	12	1.000	17.00	80
14	21.00		1.375	5.00	15.750	16.25	14.00	12	1.125	18.75	110
16	23.50		1.438	5.00	18.000	18.50	16.00	16	1.125	21.25	140
18	25.00		1.562	5.50	19.875	21.00	18.00	16	1.250	22.75	150
20	27.50		1.688	5.69	22.000	23.00	20.00	20	1.250	25.00	180
22	29.50		1.812	5.88	24.000	25.25	22.00	20	1.375	27.25	225
24	32.00		1.875	6.00	26.125	27.25	24.00	20	1.375	29.50	255
26	34.25		2.000	5.00	28.500	29.50	26.00	24	1.375	31.75	265
28	36.50		2.062	5.06	30.750	31.50	28.00	28	1.375	34.00	295
30	38.75		2.125	5.13	32.750	33.75	30.00	28	1.375	36.00	340
32	41.75		2.250	5.25	35.000	36.00	32.00	28	1.625	38.50	410
34	43.75		2.312	5.31	37.000	38.00	34.00	32	1.625	40.50	440
36	46.00		2.375	5.38	39.250	40.25	36.00	32	1.625	42.75	495
38	48.75		2.375	5.38	41.750	42.25	38.00	32	1.625	45.25	570
40	50.75		2.500	5.50	43.750	44.25	40.00	36	1.625	47.25	620
42	53.00		2.625	5.63	46.000	47.00	42.00	36	1.625	49.50	710
44	55.25		2.625	5.63	48.000	49.00	44.00	40	1.625	51.75	750
46	57.25		2.688	5.68	50.000	51.00	46.00	40	1.625	53.75	800
48	59.50		2.750	5.75	52.250	53.50	48.00	44	1.625	56.00	870
50	61.75		2.750	5.75	54.250	55.50	50.00	44	1.875	58.25	900
52	64.00		2.875	5.88	56.500	57.50	52.00	44	1.875	60.50	1000
54	66.25		3.000	6.00	58.750	59.75	54.00	44	1.875	62.75	1100
60	73.00		3.125	6.13	65.250	66.00	60.00	52	1.875	69.25	1350
66	80.00		3.375	6.38	71.500	-	66.00	52	1.875	76.00	1775
72	86.50		3.500	6.50	78.500	-	72.00	60	1.875	82.50	2100
84	99.75		3.875	6.88	90.500	-	84.00	64	2.125	95.50	3800
96	113.25		4.250	7.25	102.750	-	96.00	68	2.438	108.50	

Notes: Can be furnished with a flat face. All dimensions measured in inches. All weights in pounds and are approximate. These flanges have the same diameter and drilling as ANSI/ASME B16.1 class 125 cast-iron flanges.

Class 250* (300psi)



Matches B16.1 Class 250 Valves and Pumps

				LTH			Drilling Template					
Nominal Pipe Size	OD of Flange	ID of Flange	Thick	WN	SO	Hub Dia	Number of Bolt Holes	Diam. of Bolt Holes	Diam. of Bolt Circle	Weights		
	(O)	(B)	(C)	(Y)	(Y)	(X)				Weld Neck	Slip- on	Blind
26	38.25	26.25	2.81	5.81	4.75	30.50	28	1.875	34.50	534	531	916
28	40.75	28.25	2.94	5.94	5.00	33.00	28	1.875	37.00	629	637	1095
30	43.00	30.25	3.00	6.00	5.00	35.25	28	1.875	39.25	702	707	1236
32	45.25	32.25	3.12	6.12	5.12	37.50	28	1.875	41.50	793	801	1424
34	47.50	34.25	3.25	6.25	5.25	39.50	28	1.875	43.50	882	889	1649
36	50.00	36.25	3.38	6.38	5.38	41.50	32	2.125	46.00	969	970	1884
38	52.25	38.25	3.44	6.44	5.50	43.50	32	2.125	48.00	1057	1062	2094
40	54.25	40.25	3.56	6.56	5.50	45.75	36	2.125	50.25	1158	1172	2336
42	57.00	42.25	3.69	6.94	5.62	47.75	36	2.125	52.75	1318	1288	2673
44	59.25	44.25	3.75	7.00	5.75	49.75	36	2.125	55.00	1423	1397	2935
46	61.50	46.25	3.88	7.12	5.88	51.75	40	2.125	57.25	1536	1510	3272
48	65.00	48.25	4.00	7.25	6.00	54.00	40	2.125	60.75	1824	1797	3768

Notes: All dimensions measured in inches. All weights in pounds and are approximate.

*AWWA Pressure rating at atmospheric temperature is 300 psi. These flanges have the same diameter and drilling as ANSI/ASME B16.1 class 250 cast iron pipe and flanged fittings.



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