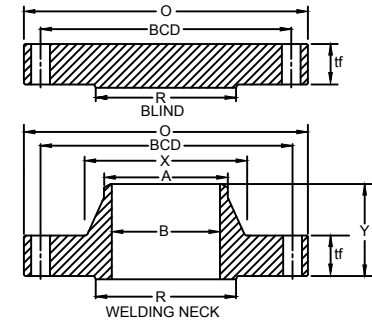
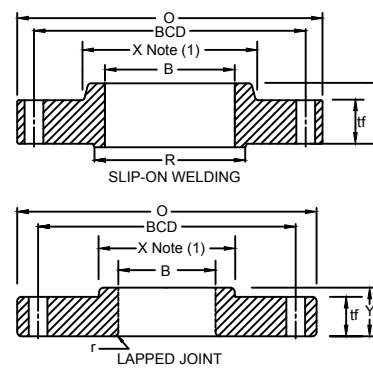
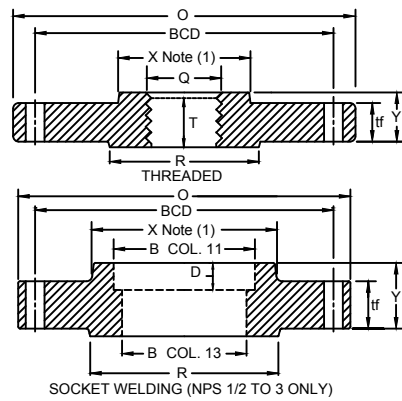




ALLIED GROUP

FLANGES

CLASS 150



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
SIZE		FLANGE			Diameter	LENGTH THROUGH HUB			Thread		BORE		Welding	Corner Radius			DRILLING		LENGTH OF BOLTS		
		Thickness			of Hub	Threaded			Length	Slip-on			Neck	of Bore of		Diameter			STUD*		Machine
	Outside	of Flange			at point	Slip-on			Threaded	Socket	Lapped	Socket	Lapped Joint	Depth	of	No. of	Diameter	Diameter	1/6"		1/6"
Nominal	Diameter	Min.,	Thickness	Diameter	of welding	Socket	Lapped	Welding	Min.,	Welding	Joint	Welding	Flange and	of	Raised	Bolt	of	of Bolt	Raised	Ring	Raised
Pipe Size	O	[Note (2)-(4)]	Lap Joint	of Hub	A	Welding	Joint	Neck	T	Min.,	Min.,	B	Pipe	Socket	Face	Holes	Boles ~	Circle	Face	Joint	Face
					[note (5)]	Y	Y	Y	[Note 6]	B	B	[Note (7)]	r	D	R			BCD			
1/2	3.50	0.38	0.44	1.19	0.84	0.56	0.62	1.81	0.62	0.88	0.90	0.62	0.12	0.38	1.375	4	1/2	2.375	2.25	...	2
3/4	3.88	0.44	0.50	1.50	1.05	0.56	0.62	2.00	0.62	1.09	1.11	0.82	0.12	0.44	1.688	4	1/2	2.75	2.5	...	2
1	4.25	0.50	0.56	1.94	1.32	0.62	0.69	2.12	0.69	1.36	1.38	1.05	0.12	0.50	2	4	1/2	3.125	2.5	3	2.25
1 1/4	4.62	0.56	0.62	2.31	1.66	0.75	0.81	2.19	0.81	1.70	1.72	1.38	0.19	0.56	2.5	4	1/2	3.5	2.75	3.25	2.25
1 1/2	5.00	0.62	0.69	2.56	1.90	0.81	0.88	2.38	0.88	1.95	1.97	1.61	0.25	0.62	2.875	4	1/2	3.875	2.75	3.25	2.5
2	6.00	0.69	0.75	3.06	2.38	0.94	1.00	2.44	1.00	2.44	2.46	2.07	0.31	0.69	3.625	4	5/8	4.75	3.25	3.75	2.75
2 1/2	7.00	0.81	0.88	3.56	2.88	1.06	1.12	2.69	1.12	2.94	2.97	2.47	0.31	0.75	4.125	4	5/8	5.5	3.5	4	3
3	7.50	0.88	0.94	4.25	3.50	1.12	1.19	2.69	1.19	3.57	3.60	3.07	0.38	0.81	5	4	5/8	6	3.5	4	3
3 1/2	8.50	0.88	0.94	4.81	4.00	1.19	1.25	2.75	1.25	4.07	4.10	3.55	0.38	...	5.5	8	5/8	7	3.5	4	3
4	9.00	0.88	0.94	5.31	4.50	1.25	1.31	2.94	1.31	4.57	4.60	4.03	0.44	...	6.188	8	5/8	7.5	3.5	4	3
5	10.00	0.88	0.94	6.44	5.56	1.38	1.44	3.44	1.44	5.66	5.69	5.05	0.44	...	7.313	8	3/4	8.5	3.75	4.25	3.25
6	11.00	0.94	1.00	7.56	6.63	1.50	1.56	3.44	1.56	6.72	6.75	6.07	0.50	...	8.5	8	3/4	9.5	4	4.5	3.25
8	13.50	1.06	1.12	9.69	8.63	1.69	1.75	3.94	1.75	8.72	8.75	7.98	0.50	...	10.625	8	3/4	11.75	4.25	4.75	3.5
10	16.00	1.12	1.19	12.00	10.75	1.88	1.94	3.94	1.94	10.88	10.92	10.02	0.50	...	12.75	12	7/8	14.25	4.5	5	4
12	19.00	1.19	1.25	14.38	12.75	2.12	2.19	4.44	2.19	12.88	12.92	12.00	0.50	...	15	12	7/8	17	4.75	5.25	4
14	21.00	1.31	1.38	15.75	14.00	2.19	3.12	4.94	2.25	14.14	14.18	To	0.50	...	16.25	12	1	18.75	5.25	5.75	4.5
16	23.50	1.38	1.44	18.00	16.00	2.44	3.44	4.94	2.50	16.16	16.19	be	0.50	...	18.5	16	1	21.25	5.25	5.75	4.5
18	25.00	1.50	1.56	19.88	18.00	2.62	3.81	5.44	2.69	18.18	18.20	Specified	0.50	...	21	16	1 1/8	22.75	5.75	6.25	5
20	27.50	1.62	1.69	22.00	20.00	2.81	4.06	5.62	2.88	20.20	20.25	by	0.50	...	23	20	1 1/8	25	6.25	6.75	5.5
22	29.50	1.75	1.81	24.00	22.00	3.06	4.25	5.82	...	22.22	22.25		0.50	...	25.25	20	1 1/4	27.25	6.75	7.25	6
24	32.00	1.81	1.88	26.12	24.00	3.19	4.38	5.94	3.25	24.25	24.25	Purchaser	0.50	...	27.25	20	1 1/4	29.5	6.75	7.25	6

"All paragraph, table and figure numbers refer to ASME B16.5"

GENERAL NOTES:

- Dimensions are in inches.
 - For tolerances, see para. 7.
 - For facings, see para. 6.4.
 - For flange bolt holes, see para. 6.5 and Table II-7.
 - For spot facing, see para. 6.6.
 - For reducing threaded and slip-on flanges, see Table II-6.
 - Blind flanges may be made with or without hubs at the manufacturer's option.
 - For reducing welding neck flanges, see para. 6.8.
- ~ Bolt holes are 1/8" larger than bolt diameter.
- * The length of the stud bolt does not include the height of the points. (see para. 6.10.2).

NOTES:

- This dimension is for large end of hub, which may be straight or tapered. Taper shall not exceed 7 deg on threaded, slip-on, socket-welding, and lapped flanges.
- The minimum thickness of these loose flanges, in sizes NPS 3 1/2 and smaller, is slightly greater than the thickness of flanges on fittings, Table II-9, which are reinforced by being cast integral with the body of the fitting.
- When these flanges are required with flat face. The flat face may be either the full tf dimension of thickness plus 0.06 in., or the or the tf dimension thickness without the raised face height. See para. 6.3.2 for additional restrictions.
- The flange dimensions illustrated are for regularly furnished 0.06 in. raised face (except lapped): for requirements of other facings, see Fig II-7
- For welding end bevel, see para. 6.7.
- For thread of threaded flanges, see para. 6.9
- Dimensions in Column 13 correspond to the inside diameters of pipe as given in ASME B36.10M for Standard Wall pipe. Thickness of Standard Wall is the same as Schedule 40 in sizes NPS 10 and smaller. Tolerances in para. 7.5.2. apply. These bore sizes are apply. These bore sizes are furnished unless otherwise specked by the purchaser.