

NPS	DN	FLANGE OUTSIDE DIAMETER O	FLANGE ¹ THICKNESS T	RAISED FACE DIA. A	BORE			LENGTH TRU HUB ¹			
					WELDING NECK & SOCKET ² WELDING B	SLIP-ON ² & SOCK. WELD. ² SOCKET MIN. C	LAP JOINT MIN. D	THREADED COUNTER-BORE MIN. E	WELDING NECK F	SLIP-ON ² THREADED SOCKET ² WELDING G	LAP JOINT H
1/2		5.25	1.19	1.38	To be specified by purchaser	0.88	.90	0.93	2.88	1.56	1.56
	15	133	30.5	34.9		22.2	22.9	23.5	73.0	40	40
3/4		5.50	1.25	1.69		1.09	1.11	1.14	3.12	1.69	1.69
	20	140	32.0	42.9		27.8	28.2	29.0	79.4	43	43
1		6.25	1.38	2.00		1.36	1.38	1.41	3.50	1.88	1.88
	25	159	35.0	50.8		34.5	34.9	36.0	88.9	48	48
1 1/4		7.25	1.50	2.50		1.70	1.72	1.75	3.75	2.06	2.06
	32	184	38.5	63.5		43.3	43.7	44.5	95.2	52	52
1 1/2		8.00	1.75	2.88		1.95	1.97	1.99	4.38	2.38	2.38
	40	203	44.5	73.0		49.6	50.0	50.5	111.4	60	60
2		9.25	2.00	3.62		2.44	2.46	2.50	5.00	2.75	2.75
	50	235	51.0	92.1		61.9	62.5	63.5	127.0	70	70
2 1/2		10.50	2.25	4.12		2.94	2.97	3.00	5.62	3.12	3.12
	65	267	57.5	104.8		74.6	75.4	76	142.9	79	79
3		12.00	2.62	5.00		3.57	3.60	3.63	6.62	3.62	3.62
	80	305	67.0	127.0		90.7	91.4	92	168.2	92	92
4		14.00	3.00	6.19		4.57	4.60	4.63	7.50	4.25	4.25
	100	356	76.5	157.2		116.1	116.8	118	190.5	108	108
5		16.50	3.62	7.31		5.66	5.69	5.69	9.00	5.12	5.12
	125	419	92.5	185.7		143.7	144.5	145	228.6	130	130
6		19.00	4.25	8.50		6.72	6.75	6.75	10.75	6.0	6.0
	150	483	108.0	215.9		170.7	171.4	171	273.0	152	152
8		21.75	5.00	10.62		8.72	8.75	8.75	12.50	7.0	7.0
	200	552	127.0	269.9		221.5	222.2	222	317.5	178	178
10		26.50	6.50	12.75	10.88	10.92	10.88	16.50	9.0	9.0	
	250	675	165.5	323.8	276.2	277.4	276	419.4	229	229	
12		30.00	7.25	15.00	12.88	12.92	12.94	18.25	10.0	10.0	
	300	760	184.5	381.0	327.0	328.2	329	463.6	254	254	

¹ Dimensions do not include .25" (6.4 mm) raised face.

² Class 2500 (PN 420) Socket Welding and Slip-on Flanges not covered by ANSI B16.5

REDUCING FLANGES ASME/ANSI B16.5 —

Hub dimensions shall be at least as large as those of the standard flanges of the size to which the reduction is being made, except that flanges reduced to a size smaller than those shown in the accompanying table may be used without hubs.

For threaded flanges, tapped smaller than the reduced size in the table, Blind Flanges may be used.

Flange thickness, outside diameter, drilling template and

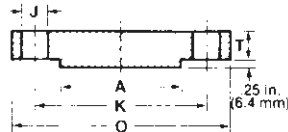
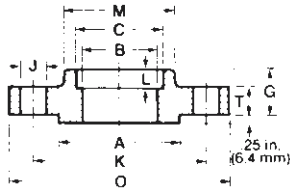
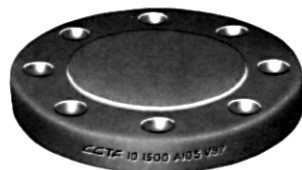
facing dimensions, shall be the same as those of a standard flange of the nominal pipe size from which the reduction is being made.

Reducing flanges are specified by giving firstly the size from which the reduction is made, followed by the reduced size.

Example: NPS 6 x 4 Class 300 reducing threaded flange. (DN 150 x 100, PN 50 reducing threaded flange.)

² SOCKET WELDING

BLIND



CLASS 2500 (PN 420) FLANGES* FORGED STEEL ASTM A-105 ¹ASME/ANSI B16.5

NPS	DN	DRILLING			DEPTH OF SOCKET ²	DIAMETER OF HUB			LAP JOINT FILLET RADIUS r	APPROXIMATE WEIGHT			
		NO. OF HOLES	DIA. OF HOLES J	DIA. OF BOLT CIRCLE K		AT BASE M	AT CHAMFER N	WELDING NECK		SLIP-ON, ² THREADED & SOCKET ² WELDING	BLIND	LAP JOINT	
1/2		4	.88	3.50	.38	1.69	.84	.12	7	7	7	7	
	15	4	23	88.9	10	42.9	21.4	3	3.2	3.2	3.2	3.2	
3/4		4	.88	3.75	.44	2.00	1.05	.12	8	8	8	8	
	20	4	23	95.2	11	50.8	26.6	3	3.6	3.6	3.6	3.6	
1		4	1.00	4.25	.50	2.25	1.32	.12	12	11	11	11	
	25	4	26	107.9	13	57.1	33.5	3	5.4	5.0	5.0	5.0	
1 1/4		4	1.12	5.12	.56	2.88	1.66	.19	17	16	17	16	
	32	4	29	130.2	14	73.0	42.1	5	7.7	7.3	7.7	7.3	
1 1/2		4	1.25	5.75	.62	3.12	1.90	.25	25	22	23	22	
	40	4	32	146.0	16	79.4	48.3	6	11.3	10	10.4	10	
2		8	1.12	6.75	.69	3.75	2.38	.31	42	38	39	37	
	50	8	29	171.4	17	95.2	60.3	8	19.0	17.2	17.7	16.8	
2 1/2		8	1.25	7.75	.75	4.50	2.88	.31	52	55	56	53	
	65	8	32	196.8	19.0	114.3	73.0	8	23.6	24.9	25.4	24	
3		8	1.38	9.00	-	5.25	3.50	.38	94	83	86	80	
	80	8	35	228.6	-	133.3	88.9	10	42.6	37.6	39	36.3	
4		8	1.62	10.75	-	6.50	4.50	.44	145	125	135	120	
	100	8	42	273.0	-	165.1	114.3	11	65.8	56.7	61.2	54.4	
5		8	1.88	12.75	-	8.00	5.56	.44	245	210	225	205	
	125	8	48	323.8	-	203.2	141.3	11	111	95.3	102	93.0	
6		8	2.12	14.50	-	9.25	6.63	.50	380	325	345	315	
	150	8	54	368.3	-	234.9	168.3	13	172	147	156	143	
8		12	2.12	17.25	-	12.00	8.63	.50	580	485	530	470	
	200	12	54	438.1	-	304.8	219.1	13	263	220	240	213	
10		12	2.62	21.25	-	14.75	10.75	.50	1075	930	1025	900	
	250	12	67	539.7	-	374.8	273.0	13	488	422	465	408	
12		12	2.88	24.38	-	17.38	12.75	.50	1525	1100	1300	1100	
	300	12	74	619.1	-	441.3	323.8	13	692	499	590	499	

CLASS 150 — 2500 (PN 20 - 420)

Nominal Pipe Size	DN	Smallest Size of Reducing Outlet Requiring Hub Flanges
1	25	1/2
1 1/4	32	1/2
1 1/2	40	1/2
2	50	1
2 1/2	65	1 1/4
3	80	1 1/4

Nominal Pipe Size	DN	Smallest Size of Reducing Outlet Requiring Hub Flanges
3 1/2	90	1 1/2
4	100	1 1/2
5	125	1 1/2
6	150	2 1/2
8	200	3 1/2
10	250	3 1/2

Nominal Pipe Size	DN	Smallest Size of Reducing Outlet Requiring Hub Flanges
12	300	3 1/2
14	350	3 1/2
16	400	4
18	450	4
20	500	4
24	600	4

POUNDS
KILOGRAMS

Reducing Flanges are generally supplied as Slip-on or Threaded; however Reducing Welding Neck flanges are available by special order.