

# Flange Dimensions

ANSI CLASS	NOMINAL PIPE SIZE	OUTSIDE DIAMETER OF FLANGE O	OUTSIDE DIAMETER OF RAISED FLANGE R	THICKNESS OF FLANGE $t_f$	DIAMETER OF BOLT CIRCLE A	DIAMETER OF BOLT HOLES	NUMBER OF BOLTS	DIAMETER OF BOLTS
150	3/4	3.88	1.69	0.44	2.75	0.62	4	0.50
	1	4.25	2.00	0.50	3.12	0.62	4	0.50
	1 1/2	5.00	2.88	0.62	3.88	0.62	4	0.50
	2	6.00	3.62	0.69	4.75	0.75	4	0.62
	3	7.50	5.00	0.88	6.00	0.75	4	0.62
	4	9.99	6.19	0.88	7.50	0.75	8	0.62
	6	11.00	8.50	0.94	9.50	0.88	8	0.75
	8	13.50	10.62	1.06	11.75	0.88	8	0.75
	10	16.00	12.75	1.12	14.25	1.00	12	0.87
	12	19.00	15.00	1.19	17.00	1.00	12	0.87
	14	21.00	16.25	1.31	18.75	1.12	12	1.00
	16	23.50	18.50	1.38	21.25	1.12	16	1.00
	18	25.00	21.00	1.50	22.75	1.25	16	1.12
	20	27.50	23.99	1.62	25.00	1.25	20	1.12
24	32.00	27.25	1.82	29.50	1.38	20	1.25	
300	3/4	4.62	1.69	0.56	3.25	0.75	4	0.62
	1	4.88	2.00	0.62	3.50	0.75	4	0.62
	1 1/2	6.12	2.88	0.75	4.25	0.88	4	0.75
	2	6.50	3.62	0.81	5.00	0.75	8	0.62
	3	8.25	5.00	1.06	6.62	0.88	8	0.75
	4	10.00	6.19	1.19	7.88	0.88	8	0.75
	6	12.50	8.50	1.38	10.62	0.88	12	0.75
	8	15.00	10.62	1.56	13.00	1.00	12	0.87
	10	17.50	12.75	1.82	15.25	1.12	16	1.00
	12	20.50	15.00	1.94	17.75	1.25	16	1.12
	14	23.00	16.25	2.06	20.25	1.25	20	1.12
	16	25.50	18.50	2.19	22.50	1.38	20	1.25
	18	28.00	21.00	2.31	24.75	1.38	24	1.25
	20	30.50	23.00	2.44	27.00	1.38	24	1.25
600	1	4.88	2.00	0.69	3.50	0.75	4	0.62
	1 1/2	6.12	2.88	0.88	4.50	0.88	4	0.75
	2	6.50	3.62	1.00	5.00	0.75	8	0.62
	3	8.25	5.00	1.25	6.62	0.88	8	0.75
	4	10.75	6.19	1.50	8.50	1.00	8	0.87
	6	14.00	8.50	1.88	11.50	1.12	12	1.00
	8	16.50	10.62	2.19	13.75	1.25	12	1.12
	10	20.00	12.75	2.50	17.00	1.38	16	1.25
	12	22.00	15.00	2.62	19.25	1.38	20	1.25
	14	23.75	16.25	2.75	20.75	1.50	20	1.37
900	16	27.00	18.50	3.00	23.75	1.62	20	1.50
	1 1/2	7.00	2.88	1.25	4.88	1.12	4	1.00
	2	8.50	3.62	1.50	6.50	1.00	8	0.87
	3	9.50	5.00	1.50	7.50	1.00	8	0.87
	4	11.50	6.19	1.75	9.25	1.25	8	1.12
	6	15.00	8.50	2.19	12.50	1.25	12	1.12
	8	18.50	10.62	2.50	15.50	1.50	12	1.37
1500	10	21.50	12.75	2.75	18.50	1.50	16	1.37
	1 1/2	7.00	2.88	1.25	4.88	1.12	4	1.00
	2	8.50	3.62	1.50	6.50	1.00	8	0.87
	3	10.50	5.00	1.88	8.00	1.25	8	1.12
	4	12.25	6.19	2.12	9.50	1.38	8	1.25
	6	15.50	8.50	3.25	12.50	1.50	12	1.37
	8	19.00	10.62	3.62	15.50	1.75	12	1.62

- Notes:**
1. Class 150 and 300 flanges have a 0.06" raised face which is not included in the " $t_f$ " dimension.
  2. Class 600 to 1500 have a 0.25" raised face which is not included in the " $t_f$ " dimension.
  3. DFT's standard flange finish is 125 - 250 Ra.
  4. All dimensions are in inches

ASME B16.5-2003 RAISED FACE