

Dimensions Socket Weld Flanges & Stud Bolts ASME B16.5

[1/2]						
CL	150	300	600	900	1500	2500
DIA A	30	38	38	...	38	...
DIA D	90	95	95	...	120	...
THK B	9.6	12.7	14.3	...	22.3	...
	11.2	14.3	20.7	...	28.7	...
DIA G	35.1	35.1	35.1	...	35.1	...
DIA K	60.3	66.7	66.7	...	82.6	...
H	14	21	22	...	32	...
	15.6	22.6	28.4	...	38.4	...
NO. L	4	4	4	...	4	...
DIA L	15.9	15.9	15.9	...	22.2	...
Stud Bolts Diameter x Length						
DIA (in)	1/2	1/2	1/2	...	3/4	...
Len mm	55	65	75	...	110	...

[3/4]						
CL	150	300	600	900	1500	2500
DIA A	38	48	48	...	44	...
DIA D	100	115	115	...	130	...
THK B	11.2	14.3	15.9	...	25.4	...
	12.8	15.9	22.3	...	31.8	...
DIA G	42.9	42.9	42.9	...	42.9	...
DIA K	69.9	82.6	82.6	...	88.9	...
H	14	24	25	...	35	...
	15.6	25.6	31.4	...	41.4	...
NO. L	4	4	4	...	4	...
DIA L	15.9	19.1	19.1	...	22.2	...
Stud Bolts Diameter x Length						
DIA (in)	1/2	5/8	5/8	...	3/4	...
Len mm	65	75	90	...	115	...

[1]						
CL	150	300	600	900	1500	2500
DIA A	49.2	54	54	...	52	...
DIA D	110	125	125	...	150	...
THK B	12.7	15.9	17.5	...	28.6	...
	14.3	17.5	23.9	...	35	...
DIA G	50.8	50.8	50.8	...	50.8	...
DIA K	79.4	88.9	88.9	...	101.6	...
H	16	25	27	...	41	...
	17.6	26.6	33.4	...	47.4	...
NO. L	4	4	4	...	4	...
DIA L	15.9	19.1	19.1	...	25.4	...
Stud Bolts Diameter x Length						
DIA (in)	1/2	5/8	5/8	...	7/8	...
Len mm	65	75	90	...	125	...

[1 1/4]						
CL	150	300	600	900	1500	2500
DIA A	59	64	64	...	64	...
DIA D	115	135	135	...	160	...
THK B	14.3	17.5	20.7	...	28.6	...
	15.9	19.1	27.1	...	35	...
DIA G	63.5	63.5	63.5	...	63.5	...
DIA K	88.9	98.4	98.4	...	111.1	...
H	19	25	29	...	41	...
	20.6	26.6	35.4	...	47.4	...
NO. L	4	4	4	...	4	...
DIA L	15.9	19.1	19.1	...	25.4	...
Stud Bolts Diameter x Length						
DIA (in)	1/2	5/8	5/8	...	7/8	...
Len mm	70	85	95	...	125	...

[1 1/2]						
CL	150	300	600	900	1500	2500
DIA A	65	70	70	...	70	...
DIA D	125	155	155	...	180	...
THK B	15.9	19.1	22.3	...	31.8	...
	17.5	20.7	28.7	...	38.2	...
DIA G	73.2	73.2	73.2	...	73.2	...
DIA K	98.4	114.3	114.3	...	123.8	...
H	21	29	32	...	44	...
	22.6	30.6	38.4	...	50.4	...
NO. L	4	4	4	...	4	...
DIA L	15.9	22.2	22.2	...	28.6	...
Stud Bolts Diameter x Length						
DIA (in)	1/2	3/4	3/4	...	1	...
Len mm	70	90	110	...	140	...

[2]						
CL	150	300	600	900	1500	2500
DIA A	78	84	84	...	105	...
DIA D	150	165	165	...	215	...
THK B	17.5	20.7	25.4	...	38.1	...
	19.1	22.3	31.8	...	44.5	...
DIA G	91.9	91.9	91.9	...	91.9	...
DIA K	120.7	127	127	...	165.1	...
H	24	32	37	...	57	...
	25.6	33.6	43.4	...	63.4	...
NO. L	4	8	8	...	8	...
DIA L	19.1	19.1	19.1	...	25.4	...
Stud Bolts Diameter x Length						
DIA (in)	5/8	5/8	5/8	...	7/8	...
Len mm	85	90	110	...	145	...

[2½]						
CL	150	300	600	900	1500	2500
DIA A	90	100	100	...	125	...
DIA D	180	190	190	...	245	...
THK B	20.7	23.9	28.6	...	41.3	...
	22.3	25.5	35	...	47.7	...
DIA G	104.6	104.6	104.6	...	104.6	...
DIA K	139.7	149.2	149.2	...	190.5	...
H	27	37	41	...	64	...
	28.6	38.6	47.4	...	70.4	...
NO. L	4	8	8	...	8	...
DIA L	19.1	22.2	22.2	...	28.6	...
Stud Bolts Diameter x Length						
DIA (in)	5/8	3/4	3/4	...	1	...
Len mm	90	100	120	...	160	...



DIMENSIONAL TOLERANCES OF WELD NECK FLANGES ASME B16.5

Feature	Condition	Tolerance (Metric)	Tolerance (Inch)
Outside Diameter (Note 1)	≤ 24	1.6 mm	0.06 in
	> 24	± 3.2 mm	± 0.12 in
Diameter Hub at Base	≤ 24	1.6 mm	0.06 in
	> 24	± 3.2 mm	± 0.12 in
Inside Diameter	≤ 10	± 0.8 mm	± 0.03 in
	12 thru 18	1.6 mm	0.06 in
	≥ 20	+3.2 mm / -1.6 mm	+0.12 in / -0.06 in
Diameter Hub at Point of Welding	≤ 5	+2.4 mm / -0.8 mm	+0.09 in / -0.03 in
	≥ 6	+4.0 mm / -0.8 mm	+0.15 in / -0.03 in
Drilling – Bolt Circle	...	1.6 mm	0.06 in
Drilling – Bolt Hole Spacing		± 0.8 mm	± 0.03 in
Eccentricity – Bolt Circle	$\leq 2\frac{1}{2}$	0.8 mm max	0.03 in max
	≥ 3	1.6 mm max	0.06 in max
Thickness	≤ 18	+3.2 mm / -0	+0.12 in / -0
	≥ 20	+4.8 mm / -0	+0.18 in / -0
Length thru Hub	≤ 10	1.6 mm	0.06 in
	≥ 12	± 3.2 mm	± 0.12 in
Diameter Contact Face	1.6 mm RF	± 0.8 mm	± 0.03 in
	6.35 mm RF	± 0.4 mm	± 0.01 in
Tongue & Groove	...	± 0.4 mm	± 0.01 in
Male-Female		± 0.4 mm	± 0.01 in
Additional Values	...	1 mm	0.03 in
		2 mm	0.07 in
		6 mm	0.23 in

Note #	Description
1	Dimensions are in millimeters unless otherwise indicated.
2	The length of the Stud Bolt does not include the height of the chamfers (points)
3	ID = Depending on the wall thickness of the pipe, must be specified by the purchaser.