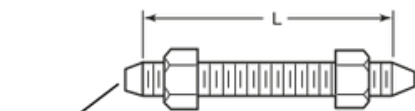


Machine Bolt With Nuts

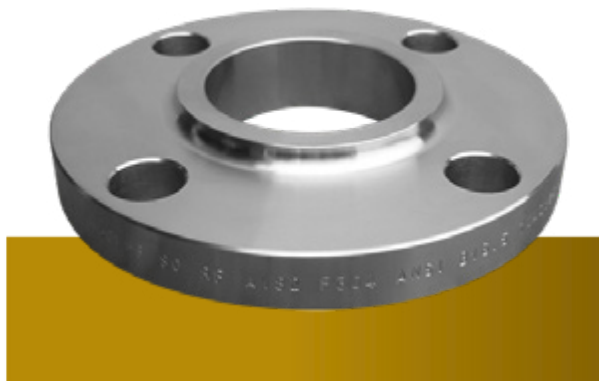


Point height
(Note 1)

Stud Bolts With Nuts

Note 1: The length of the stud bolt does not include the height of the points

* Referential photo



Dimensions are in mm

Nominal Pipe Size, NPS	Outside Diameter of Flange (O)	Minimum Thickness of Flange, (t _f)	Diameter of Hub (X)	Length Through Hub (Y)	Bore Minimum (B)	Diameter of Bolt Circle (W)	Diameter of Bolt Holes (inch)	Number of Bolts	Diameter of Bolts (inch)	Length of Bolts (L)			Weight Approx. (kg)
										Stud Bolts		Machine Bolts	
										1.5 mm Raised Face	Ring Joint	1.5 mm Raised Face	
1/2"	89	9.7	30	14	22.4	60.5	5/8	4	1/2	55	...	50	0.47
3/4"	99	11.2	38	14	27.7	69.8	5/8	4	1/2	65	...	50	0.59
1"	108	12.7	49	16	34.5	79.2	5/8	4	1/2	65	75	55	0.86
1 1/4"	117	14.2	59	19	43.2	88.9	5/8	4	1/2	70	85	55	1.08
1 1/2"	127	15.9	65	21	49.5	98.6	5/8	4	1/2	70	85	65	1.41
2"	152	17.5	78	24	61.9	120.6	3/4	4	5/8	85	95	70	2.26
2 1/2"	178	20.6	90	27	74.7	139.7	3/4	4	5/8	90	100	75	3.43
3"	190	22.4	108	28	90.7	152.4	3/4	4	5/8	90	100	75	3.87
3 1/2"	216	22.4	122	30	103.4	177.8	3/4	8	5/8	90	100	75	4.45
4"	229	22.4	135	32	116.1	190.5	3/4	8	5/8	90	100	75	5.75
5"	254	22.4	164	35	143.8	215.9	7/8	8	3/4	95	110	85	6.22
6"	279	23.9	192	38	170.7	241.3	7/8	8	3/4	100	115	85	7.38
8"	343	26.9	246	43	221.5	298.4	7/8	8	3/4	110	120	90	12.36
10"	406	28.4	305	48	276.4	362.0	1	12	7/8	115	125	100	17.10
12"	483	30.2	365	54	327.2	431.8	1	12	7/8	120	135	100	27.68
14"	553	33.3	400	56	359.2	476.2	1 1/8	12	1	135	145	115	35.20
16"	597	35.1	457	62	410.5	539.8	1 1/8	16	1	135	145	115	42.18
18"	635	38.1	505	67	461.8	577.8	1 1/4	16	1 1/8	145	160	125	49.71
20"	698	41.1	559	71	513.1	635.0	1 1/4	20	1 1/8	160	170	140	65.50
22"	749	44.4	610	78	564.4	692.2	1 3/8	20	1 1/4	170	185	150	78.48
24"	813	46.0	663	81	616.0	749.3	1 3/8	20	1 1/4	170	185	150	90.50

Note (1) 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. This dimension is defined as the diameter at the intersection between the hub taper and back face of the flange.

* Note : Dimensions, design and materials are subject to change without notice. Reference weights