

# Flange Studs Size Chart

ASME B16.5-2013. Length of studs are measured 1st full thread to last full thread.

## Class 150 LB

Nominal Pipe Size	Diameter of Studs	No. of Studs	Bolt Length of Studs		Ring Joint Gasket No.
			Raised Face	Ring Joint	
1/2	1/2	4	2-1/4	-	-
3/4	1/2	4	2-1/2	-	-
1	1/2	4	2-1/2	3	R15
1-1/4	1/2	4	2-3/4	3-1/4	R17
1-1/2	1/2	4	2-3/4	3-1/4	R19
2	5/8	4	3-1/4	3-1/4	R22
2-1/2	5/8	4	3-1/2	4	R25
3	5/8	4	3-1/2	4-1/4	R29
3-1/2	5/8	8	3-1/2	4-1/4	R33
4	3/4	8	3-1/2	4-1/4	R36
5	3/4	8	3-3/4	4-1/2	R40
6	3/4	8	4	4-1/2	R43
8	3/4	8	4-1/4	4-3/4	R48
10	7/8	12	4-3/4	5-1/4	R52
12	7/8	12	4-3/4	5-1/2	R56
14	1	12	5-1/4	6	R59
16	1	16	5-1/2	6	R64
18	1-1/8	16	6	6-1/2	R68
20	1-1/8	20	6-1/4	7	R72
22	1-1/4	20	6-1/2	7-1/4	R80
24	1-1/4	20	7	7-3/4	R76

## Class 300 LB

Nominal Pipe Size	Diameter of Studs	No. of Studs	Bolt Length of Studs		Ring Joint Gasket No.
			Raised Face	Ring Joint	
1/2	1/2	4	2-1/2	3	R11
3/4	5/8	4	3	3-1/4	R13
1	5/8	4	3-1/4	3-1/4	R16
1-1/4	5/8	4	3-1/4	3-1/4	R18
1-1/2	3/4	4	3-1/2	4	R20
2	5/8	8	3-1/2	4-1/4	R23
2-1/2	3/4	8	4	4-1/2	R26
3	3/4	8	4-1/4	5	R31
3-1/2	3/4	8	4-1/4	5	R34
4	3/4	8	4-1/2	5-1/4	R37
5	3/4	8	4-3/4	5-1/4	R41
6	3/4	12	4-3/4	5-3/4	R45
8	7/8	12	5-1/2	6-1/4	R49
10	1	16	6-1/4	7-1/4	R53
12	1-1/8	16	6-3/4	7-1/2	R57
14	1-1/8	20	7	7-3/4	R61
16	1-1/4	20	7-1/2	8-1/4	R65
18	1-1/4	24	7-3/4	8-1/2	R69
20	1-1/4	24	8-1/4	9-1/4	R73
22	1-1/2	24	8-3/4	9-3/4	R81
24	1-1/2	24	9-1/4	10-1/4	R77

## Class 400 LB

Nominal Pipe Size	Diameter of Studs	No. of Studs	Bolt Length of Studs		Ring Joint Gasket No.
			Raised Face	Ring Joint	
1/2	1/2	4	3	3	R11
3/4	5/8	4	3-1/2	3-1/2	R13
1	5/8	4	3-1/2	3-1/2	R16
1-1/4	5/8	4	3-3/4	3-3/4	R18
1-1/2	3/4	4	4-1/4	4-1/4	R20
2	5/8	8	4-1/4	4-1/4	R23
2-1/2	3/4	8	4-3/4	4-3/4	R26
3	3/4	8	5	5	R31
3-1/2	7/8	8	5-1/2	5-1/2	R34
4	7/8	8	5-1/2	5-1/2	R37
5	7/8	8	5-3/4	5-3/4	R41
6	7/8	12	6	6	R45
8	1	12	6-3/4	6-3/4	R49
10	1-1/8	16	7-1/2	7-1/2	R53
12	1-1/4	16	8	8	R57
14	1-1/4	20	8-1/4	8-1/4	R61
16	1-3/8	20	8-3/4	8-3/4	R65
18	1-3/8	24	9	9	R69
20	1-1/2	24	9-1/2	9-1/2	R73
22	1-5/8	24	10	10-1/2	R81
24	1-3/4	24	10-1/2	11	R77

## Class 600 LB

Nominal Pipe Size	Diameter of Studs	No. of Studs	Bolt Length of Studs		Ring Joint Gasket No.
			Raised Face	Ring Joint	
1/2	1/2	4	3	3	R11
3/4	5/8	4	3-1/4	3-1/4	R13
1	5/8	4	3-1/2	3-1/2	R16
1-1/4	5/8	4	3-3/4	3-3/4	R18
1-1/2	3/4	4	4-1/4	4-1/4	R20
2	5/8	8	4-1/4	4-1/2	R23
2-1/2	3/4	8	5	5-1/4	R26
3	3/4	8	5	5-1/4	R31
3-1/2	7/8	8	5-1/2	5-1/2	R34
4	7/8	8	5-3/4	6	R37
5	1	8	6-1/2	6-1/2	R41
6	1	12	6-3/4	7	R45
8	1-1/8	12	7-3/4	8	R49
10	1-1/4	16	8-1/2	8-3/4	R53
12	1-1/4	20	8-3/4	9	R57
14	1-3/8	20	9-1/4	9-1/2	R61
16	1-1/2	20	10	10-1/4	R65
18	1-5/8	20	10-3/4	11	R69
20	1-5/8	24	11-1/2	11-3/4	R73
22	1-3/4	24	12	12-1/2	R81
24	1-7/8	24	13	13-1/2	R77

# Flange Studs Size Chart

ASME B16.5-2013. Length of studs are measured 1st full thread to last full thread.

## Class 900 LB

Nominal Pipe Size	Diameter of Studs	No. of Studs	Bolt Length of Studs		Ring Joint Gasket No.
			Raised Face	Ring Joint	
1/2	3/4	4	4	4-1/4	R12
3/4	3/4	4	4-1/4	4-1/2	R14
1	7/8	4	4-3/4	5	R16
1-1/4	7/8	4	5	5	R18
1-1/2	1	4	5-1/4	5-1/2	R20
2	7/8	8	5-1/2	5-3/4	R24
2-1/2	1	8	6-1/4	6-1/4	R27
3	7/8	8	5-1/2	5-3/4	R31
4	1-1/8	8	6-1/2	6-3/4	R37
5	1-1/4	8	7-1/2	7-1/2	R41
6	1-1/8	12	7-1/2	7-3/4	R45
8	1-3/8	12	8-1/2	8-3/4	R49
10	1-3/8	16	9	9-1/4	R53
12	1-3/8	20	9-3/4	10	R57
14	1-1/2	20	10-1/2	11	R62
16	1-5/8	20	11	11-1/2	R66
18	1-7/8	20	12-3/4	13-1/4	R70
20	2	20	13-1/2	14-1/4	R74
24	2-1/2	20	17	18	R78

## Class 1500 LB

Nominal Pipe Size	Diameter of Studs	No. of Studs	Bolt Length of Studs		Ring Joint Gasket No.
			Raised Face	Ring Joint	
1/2	3/4	4	4	4-1/4	R12
3/4	3/4	4	4-1/4	4-1/2	R14
1	7/8	4	4-3/4	5	R16
1-1/4	7/8	4	5	5	R18
1-1/2	1	4	5-1/4	5-1/2	R20
2	7/8	8	5-1/2	5-3/4	R24
2-1/2	1	8	6-1/4	6-1/4	R27
3	1-1/8	8	6-3/4	7	R35
4	1-1/4	8	7-1/2	7-3/4	R39
5	1-1/2	8	9-3/4	9-3/4	R44
6	1-3/8	12	10	10-1/2	R46
8	1-5/8	12	11-1/4	11-3/4	R50
10	1-7/8	12	13-1/4	13-1/2	R54
12	2	16	14-3/4	15-1/4	R58
14	2-1/4	16	16	16-3/4	R63
16	2-1/2	16	17-1/2	18-1/2	R67
18	2-3/4	16	19-1/4	20-1/4	R71
20	3	16	21	22-1/4	R75
24	3-1/2	16	24	25-1/2	R79

## Class 2500 LB

Nominal Pipe Size	Diameter of Studs	No. of Studs	Bolt Length of Studs		Ring Joint Gasket No.
			Raised Face	Ring Joint	
1/2	3/4	4	4-3/4	4-3/4	R13
3/4	3/4	4	4-3/4	5	R16
1	7/8	4	5-1/4	5-1/2	R18
1-1/4	1	4	6	6	R21
1-1/2	1-1/8	4	6-1/2	6-3/4	R23
2	1	8	6-3/4	7	R26
2-1/2	1-1/8	8	7-3/4	8	R28
3	1-1/4	8	8-1/2	9	R32
4	1-1/2	8	9-3/4	10-1/4	R38
5	1-3/4	8	11-3/4	12-1/4	R42
6	2	8	13-1/2	14	R47
8	2	12	15	15-1/2	R51
10	2-1/2	12	19	20	R55
12	2-3/4	12	21	22	R60