Flange Bolts

- Inch sizes meet ASME B18.2.1 standards
- Grade E9 bolts meet IFI 115 standards
- Metric sizes meet DIN 6291 standards

Bolts have a circular flange under the head that acts like a washer to distribute pressure where the screw meets the surface.

Serrated flange bolts have teeth that grip surfaces to resist vibration and ensure a tight hold.

Grade E9 bolts have a 12-pt. head design to handle higher torques.



Length	Thread Style	Flange Type	Tensile Strength	Head Height	Item No.	Pkg. Qty.
Grade 5 Steel	- Zinc Plated	riange type	ouenym	Height	INU.	uty.
1/4"-20 Coarse	Fully Threaded	Serrated	120,000 psi	9⁄32 in	2FB87	100
1/2" —	Fully Threaded Fully Threaded	Standard	120,000 psi 120,000 psi 120,000 psi	%2 in	41MX89	50
5/8"	Fully Threaded	Serrated Serrated	120,000 psi	9/32 in 9/32 in	2FB89 2FB91	100
3/4" —	Fully Threaded Fully Threaded Fully Threaded Fully Threaded	Standard	120,000 psi 120,000 psi	%₂ in	41MX91	50
1" —	Fully Threaded	Serrated	120,000 psi	9∕32 in	2FB93	100
11/4"	Partially Threaded	Standard Serrated	120,000 psi 120,000 psi	9/32 in 9/32 in	41MX92 2FB95	50 50
1½" —	Partially Threaded	Standard	120,000 psi	9∕32 in	41MX94	50
16"-18 Coars	Partially Threaded	Serrated	120,000 psi	9∕32 in	2FB97	50
3/4"	Fully Threaded	Serrated	120,000 psi	²¹ / ₆₄ in	2FE14	50
1" 11/4"	Fully Threaded Fully Threaded	Serrated Serrated	120,000 psi	²¹ / ₆₄ in	2FE16 2FE18	50 50
11/2"	Partially Threaded	Serrated	120,000 psi 120,000 psi	21/64 in	2FE20	50
%"-16 Coarse		Ctondord	100 000 noi		44 MVOC	0.5
1/2" 3/4"	Fully Threaded Fully Threaded	Standard Serrated	120,000 psi 120,000 psi	²⁵ / ₆₄ in ²⁵ / ₆₄ in	41MY06 2FE22	25 25
1"	Fully Threaded	Serrated	120,000 psi	25/64 in	2FE24	25
1½" 1½"	Fully Threaded Partially Threaded	Serrated Serrated	120,000 psi 120,000 psi	²⁵ / ₆₄ in ²⁵ / ₆₄ in	2FE26 2FE28	25 25
13/4"	Partially Threaded	Serrated	120,000 psi	25/64 in	2FE30	25
/2"-13 Coarse	Fully Threaded	Serrated	120 000 pci	½ in	2FE33	10
11/4"	Fully Threaded Fully Threaded	Serrated	120,000 psi 120,000 psi	1/2 in	2FE35	10
11/2"	Fully Threaded Fully Threaded Partially Threaded	Serrated	120,000 psi 120,000 psi	½ in	2FE37	10
2" rade 8 Steel	- Black Oxide	Standard	120,000 psi	½ in	41MY18	10
4"-20 Coarse)					
1/2" 3/4"	Fully Threaded Fully Threaded	Standard Standard	150,000 psi 150,000 psi	%2 in %2 in	22A408 22A409	100 100
1"	Fully Threaded	Standard	150,000 psi	9/32 III 9/32 in	22A409 22A410	100
16"-18 Coars	9				22A415	
3/4" 1"	Fully Threaded Fully Threaded	Standard Standard	150,000 psi 150,000 psi	5∕16 in 5∕16 in	22A415 22A416	50 50
11/4"	Fully Threaded	Standard	150,000 psi	5∕16 in	22A417	50
1½" %"-16 Coarse	Partially Threaded	Standard	150,000 psi	5∕16 in	22A418	50
3/4"	Fully Threaded	Standard	150,000 psi	3/8 in	22A421	25
1½" 1½"	Fully Threaded	Standard	150,000 psi	²⁵ / ₆₄ in	2TJ78 2TJ79	25 25
2"	Partially Threaded Partially Threaded	Standard Standard	150,000 psi 150,000 psi	² 9/64 III 3/8 in	21J/9 22A438	25 25
16"-14 Coars	e		•			
11/2"	Fully Threaded Fully Threaded	Standard Standard	150,000 psi 150,000 psi	15/32 in 15/32 in	22A425 22A427	25 25
4"	Partially Threaded	Standard	150,000 psi	15/32 in	22A433	25
2"-13 Coarse 1½"	Fully Threaded	Standard	150,000 psi	½ in	2TJ81	25
2"	Partially Threaded	Standard	150,000 psi	½ in	2TJ83	25
/2"-20 Fine	-					
11/4" 11/2"	Fully Threaded Fully Threaded	Standard Standard	150,000 psi 150,000 psi	½ in ½ in	22A448 22A449	25 25
2"	Partially Threaded	Standard	150,000 psi	½ in	22A451	25
%"-11 Coarso 1½"	Fully Threaded	Standard	150,000 psi	5/8 in	22A441	25
13/4"	Fully Threaded	Standard	150,000 psi	5⁄8 in	2TJ88	25
2"	Partially Threaded Partially Threaded	Standard	150,000 psi	5/8 in 5/8 in	2TJ89 2TJ90	25 15
8"-18 Fine	i artially illitautu	Standard	150,000 psi			
2½" 3"	Partially Threaded	Standard	150,000 psi	5% in	22A462	15
31/4"	Partially Threaded Partially Threaded	Standard Standard	150,000 psi 150,000 psi	5% in 5% in	22A463 22A464	15 15
4"-10 Coarse			•			
2½" 3"	Partially Threaded Partially Threaded	Standard Standard	150,000 psi 150,000 psi	⁴⁷ / ₆₄ in	2TJ95 22A446	15 15
31/2"	Partially Threaded Partially Threaded	Standard	150,000 psi	47/64 in	22A436	10
4" 4"-16 Fine	Partially Threaded	Standard	150,000 psi	⁴⁷ / ₆₄ in	22A437	10
21/4"	Partially Threaded	Standard	150,000 psi	47/64 in	22A470	15
3½"	Partially Threaded	Standard	150,000 psi	⁴⁷ / ₆₄ in	22A473	10
raue & Steel %"-16 Coarse	- Phosphate and Oi					
1"	Fully Threaded	Standard	150,000 psi	25/64 in	41MY29	25
1½" 1½"	Fully Threaded Fully Threaded Partially Threaded Partially Threaded	Standard Standard	150,000 psi 150,000 psi	²⁵ / ₆₄ in ²⁵ / ₆₄ in	41MY30 41MY31	25 25
31/2"	Partially Threaded	Standard	150,000 psi	25/64 in	41MY38	25
/2"-13 Coarse	;			16 in		
1½" 1½"	Fully Threaded Fully Threaded	Standard Standard	150,000 psi 150,000 psi	½ in ½ in	41MY41 41MY42	25 25
13/4"	Fully Threaded	Standard	150,000 psi	½ in	41MY43	25
2"	Partially Threaded Partially Threaded	Standard Standard	150,000 psi 150,000 psi	½ in ½ in	41MY44 41MY51	25 10
%"-11 Coarso	•					
2" 2½"	Fully Threaded	Standard	150,000 psi	5/8 in	41MY56	10
3"	Partially Threaded Partially Threaded	Standard Standard	150,000 psi 150,000 psi	5% in 5% in	157D82 157D84	70 60
rade E9 Allo	y Steel - Plain		,			
/4"-20 Coarse 3/4"	Fully Threaded	Standard	170,000 psi	¹⁷ / ₆₄ in	21C341	100
	Fully Threaded	Standard	170,000 psi	17/64 in	2FA46	100
1"	runy minuduou					
1" 11/4"	Fully Threaded	Standard	170,000 psi	17/64 in	2FA48	50
1"	Fully Threaded Partially Threaded		170,000 psi 170,000 psi	17/64 in	2FA53	25
1" 1½" 2"	Fully Threaded	Standard		17/64 IN 17/64 IN 17/64 IN		

rques.						
Length	Thread Style	Flange Type	Tensile Strength	Head Height	Item No.	Pkg. Qty.
3/4" 1"	Fully Threaded Fully Threaded	Standard	170,000 psi	5/16 in	2FA63	50
11/4"	Fully Threaded	Standard Standard	170,000 psi 170,000 psi	5/16 in 5/16 in	2FA67 2FA70	50 50
16"-24 Fine	Fully Threaded	Standard	170,000 psi	5∕16 in	2FA82	25
11/2"	Partially Threaded	Standard	170,000 psi	5/16 in	2FA86	25
%"-16 Coars 3/4"	Fully Threaded	Standard	170,000 psi	3/8 in	21C343	25
1" 1½"	Fully Threaded Fully Threaded	Standard Standard	170,000 psi 170,000 psi	3/8 in 3/8 in	2FA88 2FA91	25 25
11/2"	Partially Threaded	Standard	170,000 psi	3/8 in	2FA93	25
%"-24 Fine	Fully Threaded	Standard	170,000 psi	3/8 in	2FB15	25
1½" ⁄2"-13 Coars	Partially Threaded	Standard	170,000 psi	3/8 in	2FB20	25
11/4"	Fully Threaded	Standard	170,000 psi	1/2 in	2FB36	10
1½" 2"	Partially Threaded Partially Threaded	Standard Standard	170,000 psi 170,000 psi	½ in ½ in	2FB38 2FB40	10 10
/2"-20 Fine				1/2 in	2FB51	10
2"	Partially Threaded Partially Threaded	Standard Standard	170,000 psi 170,000 psi	½ in	2FB53	5
%"-11 Coars 13/4"	Fully Threaded	Standard	170,000 psi	5/8 in	2FB57	5
2"	Partially Threaded Partially Threaded	Standard	170,000 psi 170,000 psi 170,000 psi	5⁄8 in	2FB59	5
4"-10 Coars	Partially Inreaded e	Standard	170,000 psi	5/8 in	2FB68	5
2" 2½"	Fully Threaded Partially Threaded	Standard Standard	170,000 psi 170,000 psi	3/4 in 3/4 in	2FB76 2FB78	5 5
272	r artially Tilleaueu	Jianuaru	Tensile	Head	Item	Pkg
Length	Thread Style eel - Zinc Plated	Flange Type	Strength	Height	No.	Qty.
/16-1 .00 Co	arse	0	110,000	0.0	000000	400
12-mm 16-mm	Fully Threaded Fully Threaded	Standard Serrated	116,030 psi 116,030 psi	6.6 mm 6.6 mm	38CP93 38CP94	100
20-mm 18-1 .25 Co :	Partially Threaded	Serrated	116,030 psi	6.6 mm	38CP95	100
16-mm	Fully Threaded Fully Threaded	Serrated	116,030 psi	8.1 mm	38CP98	100
20-mm 25-mm	Partially Threaded	Standard Standard	116,030 psi 116,030 psi	8.1 mm 8.1 mm	38CP99 38CR01	100
110-1 .50 C 20-mm	oarse Fully Threaded	Standard	116,030 psi	9.2 mm	38CR03	50
35-mm	Partially Threaded	Standard	116,030 psi	9.2 mm	38CR06	50
40-mm //12-1 .75 C	Partially Threaded oarse	Standard	116,030 psi	9.2 mm	38CR07	50
20-mm 35-mm	Fully Threaded Partially Threaded	Standard Standard	116,030 psi 116,030 psi	11.5 mm 11.5 mm	38CR08 38CR11	50 50
40-mm	Partially Threaded	Standard	116,030 psi	11.5 mm	38CR12	50
1185 8.8 Ste 118-1 .25 Co	eel - Zinc Yellow arse					
25-mm 30-mm	Partially Threaded Partially Threaded	Standard Standard	116,030 psi 116,030 psi	8.1 mm 8.1 mm	38CP41 38CP42	100
35-mm	Partially Threaded	Standard	116,030 psi	8.1 mm	38CP43	100
/110-1 .50 C 30-mm	oarse Partially Threaded	Standard	116,030 psi	9.2 mm	38CP52	50
30-mm 35-mm	Partially Threaded	Standard Standard	116,030 psi	9.2 mm	38CP53	50
45-mm 50-mm	Partially Threaded Partially Threaded Partially Threaded	Standard	116,030 psi 116,030 psi	9.2 mm 9.2 mm 9.2 mm	38CP55 38CP56 38CP57	50 50
60-mm 112-1 .75 C	Partially Threaded narse	Standard	116,030 psi	9.2 mm	38CP57	50
30-mm	Fully Threaded	Standard	116,030 psi 116,030 psi	11.5 mm 11.5 mm	38CP62 38CP66	50 50
50-mm 70-mm	Partially Threaded Partially Threaded	Standard Standard	116,030 psi	11.5 mm	38CP68	25
/116-2.00 Co 60-mm	Partially Threaded	Standard	116,030 psi	14.4 mm	156Y57	75
80-mm	Partially Threaded	Standard	116,030 psi	14.4 mm	38CP85	25
100-mm //20-2.50 C o	Partially Threaded	Standard	116,030 psi	14.4 mm	38CP86	25
50-mm 60-mm	Partially Threaded Partially Threaded	Standard Standard	116,030 psi 116,030 psi	17.1 mm 17.1 mm	38CP87 38CP88	10 10
90-mm	Partially Threaded	Standard	116,030 psi	17.1 mm	38CP91	10
lass 10.9 S 16-1 .00 Co						
20-mm 18-1 .25 Co a	Partially Threaded	Standard	145,038 psi	6.6 mm	38CU41	100
20-mm	Fully Threaded	Standard	145,038 psi	8.1 mm	38CU42 38CU43	100
25-mm 40-mm	Partially Threaded Partially Threaded	Standard Standard	145,038 psi 145,038 psi	8.1 mm 8.1 mm	38CU43 38CU45	100
110-1 .50 C 25-mm		Standard	145,038 psi	9.2 mm	38CU48	50
60-mm	Partially Threaded	Standard	145,038 psi	9.2 mm 9.2 mm	38CU52	50
70-mm 112-1 .75 C e	Partially Threaded oarse	Standard	145,038 psi		38CU53	50
25-mm 50-mm	Fully Threaded	Standard Standard	145,038 psi 145,038 psi 145,038 psi	11.5 mm 11.5 mm 11.5 mm	38CU54 38CU59	50 50
60-mm	Partially Threaded Partially Threaded Partially Threaded Partially Threaded Partially Threaded Partially Threaded	Standard	145,038 psi	11.5 mm	38CU59 38CU60	50
70-mm 80-mm	Partially Threaded Partially Threaded	Standard Standard	145,038 psi 145,038 psi	11.5 mm 11.5 mm	38CU61 38CU62	25 25
90-mm	Partially Threaded	Standard	145,038 psi	11.5 mm 11.5 mm	38CU63	25
/116-2.00 Co 40-mm	Partially Threaded	Standard	145,038 psi	14.4 mm	38CU68	25
60-mm	Partially Threaded	Standard	145,038 psi System of	14.4 mm Conta	38CU70	25 Item
Material	Finish	No. of Pieces	Measurement	Тур		No.
lange Bolt				.16	•	