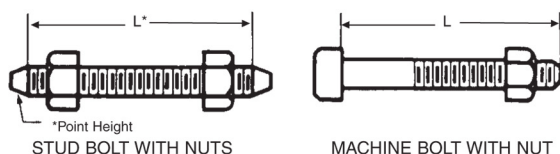


BOLTING

To suit R.F. Flange sizes DN 15 to 600 to ASME — B16.5 (BS. 1560) and DN 750 & 900 to BS. 3293



Diameter of Bolts is shown in inches. For nominal diameters 1 inch and smaller, threads are U.N.C.; nominal diameters 1-1/8 inch and larger threads are 8 U.N. (8 T.P.I.).

Length of Bolts (L) is shown in millimetres **rounded** to the nearest 5 mm. Stud Bolt lengths (L*) **do not** include the height of points. Machine Bolt lengths (L) include the height of point. The length shown includes the height of the Raised Face in all cases.

NOM FLGE SIZE DN	PN20 (CLASS 150)				PN50 (CLASS 300)				PN100 (CLASS 600)			PN150 (CLASS 900)			PN250 (CLASS 1500)			PN420 (CLASS 2500)			NOM FLGE SIZE DN	
	No.	Dia.	L		No.	Dia.	L		No.	Dia.	L	No.	Dia.	L	No.	Dia.	L	No.	Dia.	L		
			Stud	Mach.			Stud	Mach.														
Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts	Bolts		
ins.	mm	mm	ins.	mm	mm	ins.	mm	mm	ins.	mm	ins.	mm	mm	ins.	mm	mm	ins.	mm	mm	ins.	mm	mm
15	4	1/2	60	45	4	1/2	65	55	4	1/2	80	USE PN250 DIMENSIONS IN THESE SIZES			4	3/4	105	4	3/4	125	15	
20	4	1/2	65	50	4	5/8	75	60	4	5/8	90				4	3/4	115	4	3/4	125	20	
25	4	1/2	65	55	4	5/8	80	65	4	5/8	90				4	7/8	125	4	7/8	140	25	
32	4	1/2	70	55	4	5/8	80	65	4	5/8	100				4	7/8	125	4	1	150	32	
40	4	1/2	70	60	4	3/4	90	75	4	3/4	105				4	1	140	4	1 1/8	170	40	
50	4	5/8	80	65	8	5/8	90	75	8	5/8	105	8	7/8	145	8	1	175	50				
65	4	5/8	90	75	8	3/4	100	85	8	3/4	120	8	1	160	8	1 1/8	195	65				
80	4	5/8	90	75	8	3/4	110	90	8	3/4	125	8	7/8	145	8	1 1/8	180	80				
90	8	5/8	90	75	8	3/4	110	95	8	7/8	140	—	—	—	—	—	—	90				
100	8	5/8	90	75	8	3/4	110	95	8	7/8	145	8	1 1/8	170	8	1 1/4	195	100				
125	8	3/4	90	80	8	3/4	120	100	8	1	165	8	1 1/4	190	8	1 1/2	250	125				
150	8	3/4	100	85	12	3/4	125	105	12	1	170	12	1 1/8	195	12	1 3/8	260	150				
200	8	3/4	110	90	12	7/8	140	110	12	1 1/8	195	12	1 3/8	220	12	1 5/8	290	200				
250	12	7/8	115	95	16	1	155	130	16	1 1/4	215	16	1 3/8	235	12	1 7/8	335	250				
300	12	7/8	120	100	16	1 1/8	170	145	20	1 1/4	220	20	1 3/8	255	16	2	375	300				
350	12	1	130	110	20	1 1/8	175	150	20	1 3/8	235	20	1 1/2	275	16	2 1/4	405	350				
400	16	1	135	115	20	1 1/4	190	160	20	1 1/2	255	20	1 5/8	285	16	2 1/2	445	400				
450	16	1 1/8	150	125	24	1 1/4	195	170	20	1 5/8	275	20	1 7/8	325	16	2 3/4	495	450				
500	20	1 1/8	160	135	24	1 1/4	205	180	24	1 5/8	290	20	2	345	16	3	540	500				
600	20	1 1/4	175	145	24	1 1/2	230	195	24	1 7/8	330	20	2 1/2	435	16	3 1/2	615	600				
750	28	1 1/4	190	160	28	1 3/4	290	250	28	2	355	PN150, 250 & 420 — Not listed in BS 3293										750
900	32	1 1/2	215	180	32	2	325	280	28	2 1/2	400											900

Raised Face height of 2 mm for PN20 & 50 and 7 mm for PN100, 150, 250 & 420 is included in dimension L (Bolt Length).

MATERIAL SPECIFICATIONS

ASTM A193 Grade B7

Standard specification for alloy steel and stainless steel bolting materials for high temperature service.

ASTM A194 Grade 2H

Standard specification for carbon and alloy steel nuts for bolts for high pressure and high temperature service.

ASTM A320

Standard specification for alloy steel bolting materials for low temperature service.

Grade L7 covers alloy steel stud bolts.

Grade L4 covers alloy steel nuts to suit Grade L7 stud bolts.

Inch/Metric Bolting interchangeable for ASME B16.5 flanges as below	
FOR	USE
1/2"	M14
5/8"	M16
3/4"	M20
7/8"	M24
1"	M27
1 1/8"	M30
1 1/4"	M33
1 3/8"	M36
1 1/2"	M39
1 5/8"	M42
1 3/4"	M45
1 7/8"	M48
2"	M52
2 1/4"	M56
2 1/2"	M64
2 3/4"	M72



پیچ ، مهره و واشر

پیچ، مهره و واشر با متریالهای کربن استیل، استنلس استیل، چدن و... در انواع استاد بولت، پیچ های آچار خور، U بولت ، انکر بولت و ... همچنین مهره و واشر مطابق با متریال و نوع بولت مورد استفاده، منطبق بر استانداردهای ISO, DIN, ASTM, BN & etc با گرید و سایزهای مختلف مانند B7, B7M, 8.8, 5.6 & etc.

NUT & BOLT AND WASHER

Kind of Material: Stainless steel, carbon steel, Cast Iron, etc...

Type of Bolt: Stud Bolt, Machine Bolt, Anchor Bolt, U Bolt, etc...

Types of Nut & Washer: Nut and washer use for any type of bolt

Standard: ISO, DIN, ASTM, BN, BS, ASME, ASA, etc...

Grade: HV10.9, 12.3, S.S 304, S.S 316, 8.8, 5.6

B7, B7M, L7M, B16, B8, B8M, 2H, 2HM, G4, etc...

سایر ملحقات پایپینگ متریال

شامل انواع الکتروود و سیم جوش، ورق های آلومینیوم، استنلس استیل، روغنی و ورقهای فرم دار در ضخامت و آلیاژهای مختلف و ... مطابق با استانداردهای بین المللی

OTHER SUPPLEMENTS

Welding Electrode

Base of Electrode

Mild steel: E6013, E7018, E7018-1, E7016, E70T, EM12K, etc...

Low Alloyed Steel: E7018-G, E8018-G, ER80S-G, etc...

Stainless steel& High Alloyed: E308L, E309L, ER347, ER312L, etc...

Aluminum Alloys: E1100, ER1100, ER 4047, etc...

Copper Based Alloys: ECuSi-c, ERCu-ERCuSi-A, etc...

Nickel Based Alloys: ENiCrFe-2, ENiCrMo-6, etc...

Cast Iron: ENi-Cl, ENiFe, ENiC, U-BG31

ارائه خدمات مشاوره ای در زمینه انتخاب تجهیزات مورد نیاز پروژه های صنعتی



ENERGY PALAYESI I CALA
SUPPLY COMPLETE PIPING PACKAGES