



There is Difference Between Joints & Joints of FM FASTNERS

Introduction

It gives us immense pleasure to introduce ourselves as one of the leading Manufacturer in all types of Stainless steel, Alloy Steel Fastners, Nut Bolt, Screws, Washers, Socket, Threaded Rod & All type of Fastener. FM Fastener is engaged in Manufacturing and supplying of fastener accessories. FM Fastener located at Baroda, Gujarat, INDIA The founder of the company Mr. Vishal Prajapati has vast experience in this field for 10+ years.

It is our intention to supply customer's requirements with the high quality products in time with good replacement policy; therefore we stock materials of reputed brands and superior quality. Hence you can always trust on us in terms of quality, because "QUALITY IS OUR CONCERN".

About Us

FM Fastener is a large-scale company with specialization in manufacturing and exporting Stainless steel, Alloy Steel Fastners, Nut Bolt, Screws, Washers, Socket and Threaded Rod & All type of Fastener etc. Our company is committed to deliver quality products.

We endeavor to gain international importance in the present scenario. We have never stopped at any time and have reached out by diversification strategies and Technological Know-how to achieve high levels of Quality Assurance.

Due to our success and Excellency in All type of Fasteners, We have become an ideal manufacturers and exporters of India

"Better products, better quality, better standards, better service..... That's FM Fastener".

Mission

To exceed our customer's expectations in quality, delivery, and cost through continuous improvement and customer interaction.

Vission

To become the benchmark manufacturing company for the Fastener industry providing world-class products to satisfied customers through continuous improvement driven by the integrity, teamwork and creativity of our people.



Our Facilities Include

- Bar Drawing Section
- Press Shop
- Forging Shop
- Turning Section
- Packing Section
- Bolt Forming Section
- Nut Forming Section
- Nut Cutting Section



Quality Policy

FM FASTENERS IS AN ISO 9001 : 2008 Certified Company. Quality in all aspects of our business is the foundation for our success. At FM Fasteners Manufacturing, we are committed to :

- Prevention instead of reaction
- Conserve best practice, safeguard new techniques
- Quality is a leadership task

Market Demand

We are leading manufacturer of fasteners worldwide. Our fasteners uses in many industries like engineering, power plant, Aeronautics and etc. Relationship & Customer Satisfaction with client is our motto. Our manufacturing plant has capabilities to reach client's demand basis on their requirement.

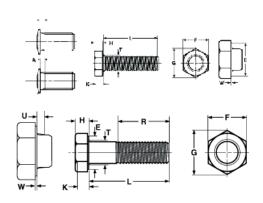
We satisfy all the needs of fasteners whether it is supplier, dealer wholesaler or trader. We reach 100% of market demand propose to supply with thousands of satisfied client



HEX SCREWS / HEX BOLTS / HSFG BOLT

HEADED BOLTS



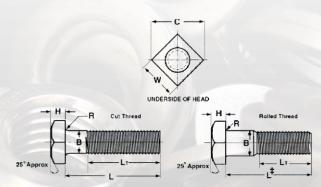


HEX BOLTS /SCREWS: A HEX Bolt threaded with metric & inch thread pitch. Generally manufactured in accordance with DIN Standard 933/ 931, ISO Standard 4017/ 4014, ASME B 18.2.1, IS 1364

S	Size		igth	Property	y Class	Equivalent Standards
Metric	Inches	Metric	Inches	High tensile	Stainless Steel	IS 1364,ISO 4014/4017,DIN931,
M16-M80	5/8"- 3"	Up To 600 MM	Up To 24"	4.6,5.6,6.4, 8.8,10.9,12.9, 14.9,B7	SS304,316, B8,B8M,201, 317,310,410, Duplex steel 2205	DIN 933,BS 1083 BSF/BSW, 1768 UNC/UNF , ANSI/ASME B18.2.1

SQUARE BOLT





An externally threaded fastener, with a trimmed, square shaped external wrenching head Used in applications where the use of power tools is impractical or undesirable offers greater bearing area for more positive gripping with a hand wrench

Si	Size		Length		/ Class	Equivalent Standards
Metric	Inches	Metric	Inches	High tensile	Stainless Steel	DIN 480 & AS PER
M16-48	5/8"- 2"	Up To 600 MM	Up To 24"	4.6,5.6,6.4, 8.8,10.9,12.9, 14.9,B7	SS304,316, B8,B8M	CUSTOMER SPECIFICATION



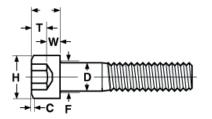
SOCKET HEAD

An externally threaded fastener with metric threads, a cylindrical head with a flat chamfered top surface, knurled cylindrical sides, and a hexagonal recess. Generally manufactured in accordance with

DIN Standard 912 or ISO Standard 4762, ASTM B 18.2.3.1M

SIZE RANGE : M 16 – M 42 LENGTH : 350 mm

GRADE : 8.8, 12.9, 14.9, SS 304, SS 316





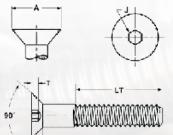


COUNTERSUNK

Has a similar design as a metric button head socket cap screw, but has an 90° countersunk flat head. Generally manufactured in accordance with DIN Standard 7991

SIZE RANGE : M 16 – M 24 LENGTH : 200 mm

GRADE : 8.8, 12.9, 14.9, SS 304, SS 316





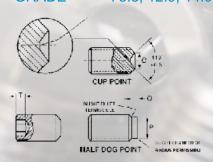
SOCKET SET SCREW

A headless screw threaded the entire length, with a hexagonal drive at one end and a point at the other end (e.g., cup, half dog, oval, flat, and cone).

Used for internal wrenching and where frequent disassembly or adjustment occurs.

SIZE RANGE : M 16 – M 24 LENGTH : 200 mm

GRADE : 8.8, 12.9, 14.9, SS 304, SS 316



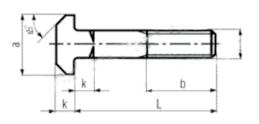




T HEAD BOLT (DIN 186 FORM A)

SIZE RANGE : M 16 – M 42 LENGTH : 300 mm

GRADE : 4.6, 8.8, 12.9, 14.9, SS 304, SS 316







CARRIAGE BOLT

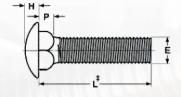
A round head bolt with a square neck under the head and a unified thread pitch.

Designed to keep the bolt from turning when a nut is being tightened

The short neck variety is used in sheet metal where a standard sized neck would create an obstruction

SIZE RANGE : M 16 – M 24 LENGTH : 300 mm

GRADE : 8.8, 12.9, 14.9, SS 304, SS 316







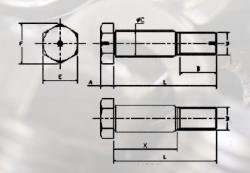
HEXAGONAL FIT BOLTS

A headless screw threaded the entire length, with a hexagonal drive at one end and a point at the other end (e.g., cup, half dog, oval, flat, and cone).

Used for internal wrenching and where frequent disassembly or adjustment occurs.

SIZE RANGE :M 12 – M 48 LENGTH : 600 mm

GRADE : 8.8, 12.9, 14.9, SS 304, SS 316







COUPLING NUTS

NUTS

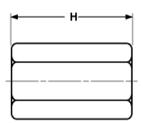
A six-sided, double chamfered nut that is available in various widths and lengths.

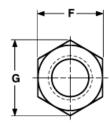
Hex couplers are used to connect two pieces of threaded material. Hex and heavy hex couplers are threaded right hand. If a right hand-left hand coupler is needed, consider using a sleeve nut.

SIZE RANGE :M 16 - M 30

GRADE : CLASS 4, 8, 10, 12, SS 304, SS 316

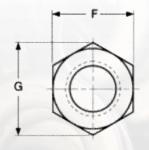






HEAVY HEX NUTS







A six-sided internally threaded fastener with metric thread / inch Thread pitch. 16 millimeter nuts and smaller are chamfered on the top and the bearing surface. Larger nuts may be double chamfered, or have a washer face on one side and a chamfered surface on the opposite side.

A heavy hex nut made of alloy steel, manufactured in accordance with ASTM Standard A194 Grade 2H. Used for high-temperature and high-pressure conditions.

Si	ze	Propert	y Class	Equivalent Standards		
Metric	Inches	High tensile	Stainless Steel	IS 1364, ISO 4032 DIN934, UNC/UNF ,		
M16-M64	5/8"- 2.1/2"	Class 4, 8, 10,12, 2H	SS304,316, B8,B8M, 410,Duplex steel 2205	ANSI/ASME B18.2.2, B 18.2.4.6M		



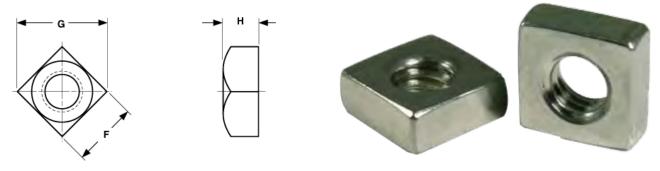
SQUARE NUTS (DIN 557)

A four-sided, internally threaded fastener with a flat bottom side and a chamfered, washer-crowned top. Square nuts are usually provided with a square bolt and used heavily in the utility and pole line industry.

Designed for use with square bolts.

SIZE RANGE :M 16 - M 48

GRADE : CLASS 4, 8, 10, 12, SS 304, SS 316



HEX JAM NUT



A six-sided internally threaded fastener which is thinner than the thickness of a finished hex nut. Used in combination with a finished hex nut to keep the nut from loosening Hex jam nuts are thinner than a standard hex nut but have the same dimension across the flats and corners. Hex jam nuts have two common applications. A jam nut can be threaded onto a bolt and run tight against the standard nut which will lock the nut in place and prevent it from backing off. Jam nuts are sometimes used for leveling purposes as well.

Si	ze	Propert	y Class	Equivalent Standards		
Metric	Inches	High tensile	Stainless Steel	IS 1364,ISO 4032 DIN439, UNC/UNF ,		
M16-M64	5/8"- 2.1/2"	Class 4, 8 , 10,12, 2H	SS304,316, B8,B8M, 410,Duplex steel 2205	ANSI/ASME B18.2.2, B 18.2.4.6M		



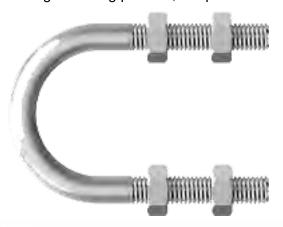
U BOLT (SQUARE / ROUND)

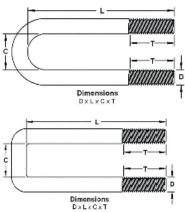
BENT BOLTS

Square bent U-Bolts are typically used for attaching product to a square shaped post. They can also be embedded in concrete and used as anchor bolts.

Round bend U-Bolts are typically used for attaching pipe or steel round bar to a round wood or steel post. Another common application is to hang wrought iron pipe in mechanical installations. They can also be embedded in concrete as anchor bolts

FM FASTENERS manufactures custom round bend U-bolts from 1/2" through 3" in diameter to virtually any ASTM specification & DIN 3570. They are provided either plain finish or hot-dip galvanized. Other metals like 304 and 316 stainless steel U-Bolts are also manufactured. All operations, including the galvanizing process, are performed in-house





THREADED BAR / TIE ROD THREADE

THREADED BAR / TIE ROD

Alloy Steel/Stainless Steel/Carbon Steel:

A pre-threaded bar with metric/ inch thread pitch which may be cut to length with a metal cutting hacksaw or power band saw. A nut will move easily over clean cut ends. Only minimal burr removal may be required from rough cut ends.



Siz	Size Len		gth	Property Class		Equivalent Standards
Metric	Inches	Metric	Inches	High tensile	Stainless Steel	DIN 975 DIN 976
M10-M80	3/8"- 3"	Up To 600 MM	Up To 236"	4.6,5.6,6.4, 8.8,10.9,12.9, 14.9,B7	SS304,316, B8,B8M, 410 201	DIN 939 IS 1862 TYPE 1,2,3



ANCHOR BOLTS (RIGHT ANGLE BEND) / FOUNDATION BOLT

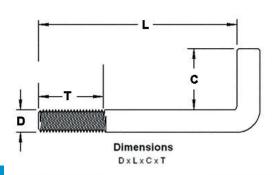
Bent anchor bolts are embedded in concrete and used to support structural steel columns, light poles, highway sign structures, bridge rail, equipment, and many other applications. The bent portion, or "leg", of the anchor bolt serves to create resistance so that the bolt does not pull out of the concrete foundation when force is applied.

FM FASTENERS also manufactures other concrete anchor bolt configurations including anchor rods, headed anchor bolts, and swedged rods.

manufactures custom bent anchor bolts from 1/2" - 4" diameter as per customer requirement & drawing

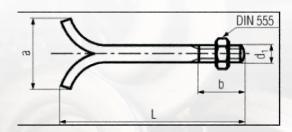
They are provided either plain finish or hot-dip galvanized. Stainless steel anchor bolts are also manufactured. All operations, including the galvanizing process, are performed in-house.





DIN 529 - ANCHOR BOLTS (STONE BOLT)





EYE BOLTS (CLOSED/OPEN)

FM FASTENERS manufactures custom closed & open eye bolts from 1/2" - 11/2" diameter as per standard Also referred to as "turned" eye bolts, they are often welded closed. Eye bolts are provided either plain finish or hot-dip galvanized. Stainless steel eye bolts are also manufactured. All operations, including the galvanizing process and welding, are performed in-house.





AIR RELEASE PLUG / HEX PLUG

MATERIAL : SS 304/ SS 316 / MILD STEEL



WASHERS (PUNCHED & MACHINED)

WASHERS

Washers provide a smooth bearing surface and are used under the head of a bolt and / or a nut. The chemical, mechanical, and dimensional requirements for hardened washers are covered under the ASTM specification, washers are through hardened or carburized to add strength

SUB GROUP: standard flat / Hardened washers / Square

washers / Spring Washers /

Material : STAINLESS STEEL / MILD STEEL

DIMENSION : AS PER DIN 125 A/B

SIZE RANGE: M8-M42



THEROMETER POCKET

SPECIAL PRODUCTS

MATERIAL: BRASS, SS 304, SS 316





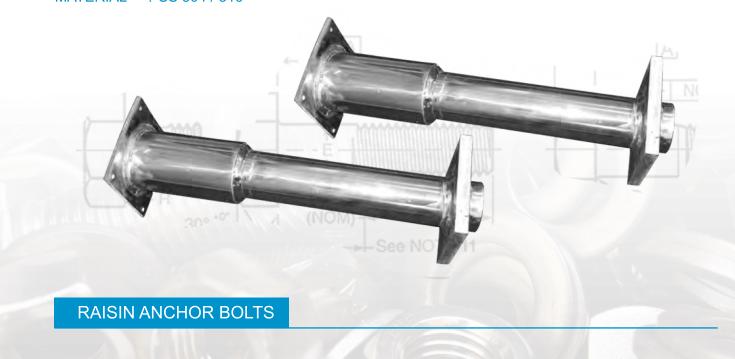
COUPLING BOLT

MATERIAL : SS 304/ SS 316 / MILD STEEL



ANCHOR BOLT ASSEMBLY

MATERIAL : SS 304 / 316







Technical Specifications

FASTENERS PRODUCT RANGE AND QUICK SELECTION GUIDE

		Size R	ange								
Product	Dian	neter	Leng	gth	Property	Class	Equivalent Standards				
	Metric	Inch	Metric	Inch	Metric	Inch	IS	ISO	DIN	BS	ANSI/ASME
High Tensile Hex Head Screws/Bolts	M16 to M64	5/8" to 2.1/2"	25 mm to 750 mm	1" to 30"	8.8, 10.9 . Also in 9.8 & 12.9, 14.9, B7, B16 etc	Grade R,S,V,X and Gr 5 , Gr 8	1364	4014 4017	931 933	BS 1768	B18.2.1/B18.2.1M ASTM 193 / 307
HighTensile Hex Nuts	M16 to M64	5/8" to 2.1/2"			Gr 8, Gr 10, Gr 12, Gr 2H, Gr4 etc	Gr 8, Gr R, Gr 5	1364	4032	934	BS 1768	B18.2.4.1M/ B18.2 ASTM 194
Stainless Steel SS-304 Hex Heal Screws/Bolts	M16 to M64	5/8" to 2.1/2"	25 mm to 750 mm	1" to 30"	A2 - 50, 70, 80, B8	Equivalent to A2 - 50, 70, 80	1364	4014 4017	931 933	BS 1768	B18.2.1 / B18.2.1M ASTM 193 / 307
Stainless Steel SS-316 Hex Heal Screws/Bolts	M16 to M64	5/8" to 2.1/2"	25 mm to 750 mm	1" to 30"	A4 - 50, 70, 80, B8M C 1 / C 2	Equivalent to A4 - 50, 70, 80	1364	4014 4017	931 933	BS 1768	B18.2.1 / B18.2.1N ASTM 193 / 307
Stainless Steel Hex Nuts in SS-304 and SS-316	M16 to M64	5/8" to 2.1/2"			A4-50 ,70, 80, B8 A4-50, 70, 80, B8M	Equivalent Property Class	1364	4032	934	BS 1768	B18.2.4.1M/ B18.2.2 ASTM 19
HighTensile and Stainless Steel Socket Head Cap Screws	M16 to M36	5/8" to 1-1/2"	25 mm to 600 mm	1" to 24"	8.8, 10.9, 12.9, A2-50, 70, 80, A4-50, 70, 80	Equivalent Property Class	2269	4762	912	BS 4168 (Metric) , BS 2470 (Inch)	B18.3.1M / B18.3
High Tensile and Stainless Steel Fully Threaded Studs	M16 to M64	5/8" to 3"	1 Meter, 2 Meter, 3 Meter	3 Feet, 6 Feet, 9 Feet	8.8, 10.9, A2 - 70, A4 - 70	Equivalent Property Class			975 / 976		B16.5.1
High Tensile and Stainless Steel Double Ended Studs	M16 to M64	5/8" to 2.1/2"	25 mm to 750 mm	1" to 30"	8.8, 10.9, A2 - 70, A4 - 70	Equivalent Property Class	1862		939 / 835 940		
High Strength Structural Bolts, Nuts and Washers	M16 to M36	1/2" to 1.1/2"	40 mm to 300 mm	1.1/2" to 12"	8.8 S, 10.9 S Or Equivalent	Equivalent Property Class	3757, 6623, 6649	7412, 4775, 7415	6913, 6914, 6915	BS 4395	ASTM 325, A563, F436 / AST A 450, ASTM 30
Stud Bolts with 2 Heavy Hex Nuts	M16 to M64	5/8" to 3"	25 mm to 3000 mm	1" to 120"	As per Std eg. B7 /B16						A193 / A 320 / A 194 / A 307
Special Products			As	per Custo	mer Drawings/Sa	mples and Spe	cificat	ions			

Group	Grade	Chemical Composition(%)									
		С	Si	Mn	Р	S	Cr	Мо	Ni	Cu	
	A1	0.12	1	6.5	0.2	0.15 to 0.35	16 to 19	0.7	5 to 10	1.75 to 2.25	
	A2	0.1	1	2	0.05	0.03	15 to 20	0.7	8 to19	4	
Austenitic	АЗ	0.08	1	2	0.045	0.03	17 to 19	0.7	9 to 12	1	
	A4	0.08	1	2	0.045	0.03	16 to 18.5	0.7	10 to 15	1	
	A5	0.08	1	2	0.045	0.03	16 to 18.5	0.7	10.5 to14	1	

A4-70

A = Austenitic steel (300 series)

1 = Free cutting stainless steel

2 = Cold formed stainless steel containing mainly chromium and nickel (known as 304)

- 4 = Cold formed stainless steel containing mainly chromium and nickel and molybdenum (known as 316)

Indicates the strength (property) class

50 - 1/10 of the tensile strength min 500 Mpa (approx 72000 psi)

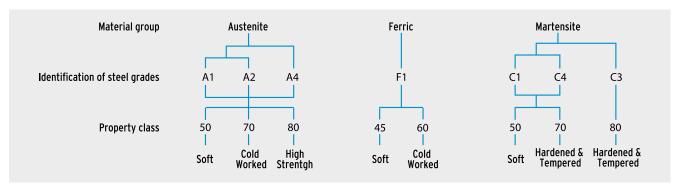
70 - 1/10 of the tensile strength min 700 Mpa (approx 101000 psi)

80 - 1/10 of the tensile strength min 800 Mpa (approx 11600 psi)

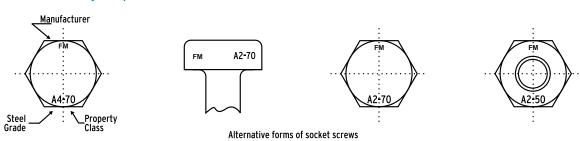
Applies for sizes up to M20 only.



Technical Specifications

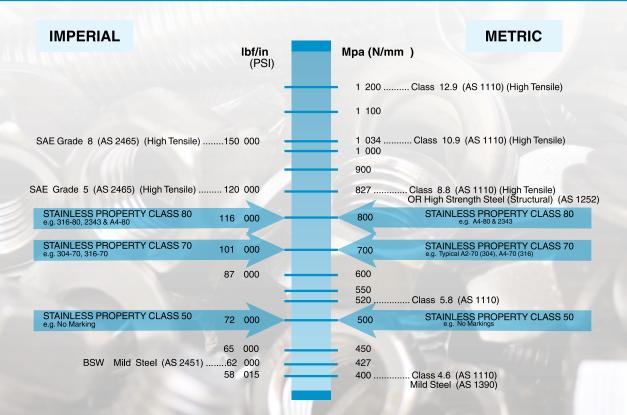


Stainless steel Markings only



Bolts, Screws and Studs

Grade	Property Class	Tensile Strength Rm. M.Pa (N/mm2) min	Yield Stress Pp 0.2 M.Pa (N/mm2) min	Elongation A1 min
A2 and A4	50	500	210	0.6d
A2 and A4	70	700	450	0.4d
A2 and A4	80	800	600	0.3d





Application

- Heavy Engineering Industries.
- Earth Moving Equipment Manufacturers.
- · Indian Railways.
- Locomotive Manufacturers.
- · Petro-Chemical Industries.
- Fertilizers Plants.
- Power Generation units, Nuclear, Hydro, or thermal.

- Ship Building Industries.
- · Steel Plants.
- · Civil Construction Industries.
- · Mining Industries.
- · Elevators Manufacturers.
- · Oil Exploration Project.
- · Defence Organizations.
- Pre Engineered Buildings and other application.



