

## METRIC CONVERSIONS

Diameter/Decimal/Metric Chart for Small Diameters

Gauge or Diameter	Decimal (in)	mm
No. 0000	0.021	.53
No. 000	0.034	.86
No. 00	0.047	1.19
No. 0	0.060	1.524
No. 1	0.073	1.854
No. 2	0.086	2.184
No. 3	0.099	2.515
No. 4	0.112	2.845
No. 5	0.125	3.175
No. 6	0.138	3.505
No. 8	0.164	4.166
No. 10	0.190	4.826
No. 12	0.216	5.484

Fastener Conversion Chart

Inch Equivalent		Metric Size-Pitch ISO and IFI Rec.
UNC	UNF	
1 - 64	1 - 72	M2 x 0.4
3 - 48	3 - 56	M2.5 x 0.45
4 - 40	4 - 48	M3 x .05
6 - 32	6 - 40	M3.5 x .06
8 - 32	8 - 36	M4 x .07
10 - 24	10 - 32	M5 x .08
1/4 - 20	1/4 - 28	M6 x 1
5/16 - 18	5/16 - 24	M8 x 1.25
3/8 - 16	3/8 - 24	M10 x 1.5
7/16 - 14	7/16 - 20	M12 x 1.75
1/2 - 13	1/2 - 20	M14 x 2
5/8 - 11	5/8 - 18	M18 x 2
3/4 - 10	3/4 - 16	M20 x 2.5
1 - 8	1-12	M24 x 3
1-1/4 - 7	1-1/8 - 12	M30 x 3.5
1-1/2 - 6	1-1/4 - 12	M36 x 4

### MINIMUM STRENGTHS

**METRIC**  
(ISO 898)

**INCH**  
(SAE J429)

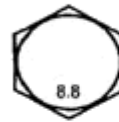


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Grade: 4, 8 (4.6, 5.8)  
Tensile: 429 MPa  
(60,900 psi)

Grade: 2  
Tensile: 60,000 psi

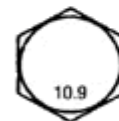


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Grade: 8.8  
Tensile: 830 MPa  
(120,350 psi)

Grade: 5  
Tensile: 120,000 psi

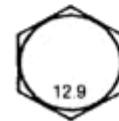


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Grade: 10.9  
Tensile: 1040 MPa  
(150,800 psi)

Grade: 8  
Tensile: 150,000 psi



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Grade: 12.9  
Tensile: 1220 MPa  
(176,900 psi)

Grade: ASTM-A574  
Tensile: 170,000 psi  
Note: Generally not marked

Approximate Equivalency Chart Metric/US  
Roughly Equivalent US Bolt Materials

Metric Nut Class	SAE J429 Normally Used	Grades	ASTM Grades
4.6	4 or 5	1	A306, Grade A
4.8	4 or 5	2	.
5.8	5	2	.
8.8	8	5	A325, A449
9.8	9	5+	A193, B7 and B16
10.9	10 or 12	8	A490, A354, Grade 8D
12.9	10 or 12	.	A540; B21 through B24

Common DIN Numbers for Metric Fasteners

DIN	Hex Capscrews
931	Coarse thread pitch partially threaded (specify grade)
933	Coarse thread pitch fully threaded (specify grade)
930	Fine thread pitch partially threaded (specify grade)
961	Fine thread pitch fully threaded (specify grade)
DIN	Nuts
934	Hex nuts (specify pitch and class)
985	Nylon insert locknuts (specify pitch and class)
980V	All metal locknuts (specify pitch and class)
DIN	Washers
125	Flatwashers
127	Lockwashers
DIN	Socket Products
912	Socket head capscrews (normally GR 12.9 and coarse thread)
7991	Flat head socket capscrews (normally GR 12.9 and coarse thread)
916	Socket setscrews (normally GR 12.9 and coarse thread)
DIN	Machine Screws
7985	Pan head Phillips drive zinc plated
965	Flat head Phillips drive zinc plated
DIN	Threaded Rod
975	All threaded rod (normally 1 meter lengths, specify grade and pitch)