

Sample Part Number					
N	P	-81	-2	-7	11
Type	Category	Thread	Material	Plating	Standard
A	B	C	D	E	F

A	Type	Code
	Nut	N

B	Category	Code
	Small Pattern Hex Nuts	P
	Machine Nut	M
	Nylon Insert Locknut	Y

C	Thread	Code
	#2-56	81
	#4-40	80
	#6-32	82
	#8-32	83
	#10-32	84
	#1/4	85
	#3/8	87
	#5/16	86

G	Standard	Code
	Coarse	11

For more information See page 138

Material Description	Code For Spacer	Code for Screws, Nuts, Washers
Low Carbon Steel	S	1
Stainless Steel (A2)	T	2
Brass	B	3
Aluminum	A	6

#### Steel

Steel is the most common fastener material. Steel fasteners are available plain as well as with various surface treatments such as zinc plating, galvanization, and chrome plating.

Ultimate tensile strength (UTS), often shortened to tensile strength is the maximum stress that a material can withstand while being stretched or pulled before necking

#### Stainless steel

Stainless steel is an alloy of low carbon steel and chromium for enhanced corrosion characteristics. Stainless steel is highly corrosion resistant for the price, and because the anti-corrosive properties are inherent to the metal, it will not lose this resistance if scratched during installation or use.

#### A-2 Stainless

Steel alloy with 17- 19% Chromium and 8-13% Nickel up to 4% copper also  
Known in the USA as 304 grad.

#### Brass

Brass is an alloy of copper and zinc; the proportions of zinc and copper can be varied to create a range of brasses with varying properties.

For ROHS compliance the allowed limit for lead in copper alloys is 4%; CW614N brass has a lead range from 2.5 to 3.5% so it is ROHS compliant.

#### Aluminum

Aluminium is remarkable for the metal's low density and for its ability to resist corrosion due to the phenomenon of passivation.

UNS A92011; QQ-A-225/3; DIN AlCuBiPb;

Density 2.83 g/cc

Electrical Resistivity @Temperature 20.0 °Cohm-mm<sup>2</sup>/m 0.0449

Hardness, Brinell 95

For more information see pageXXX

Plating Description	Code for Spacer	Code for Screws, Nuts, Washers
Blue Zinc	1	2
Yellow Zinc	6	4
Black Zinc	7	7
No Plating	3	5
Passivate	2	6
Black Oxide	9	9
Nickel	8	8

**Blue Zinc Plating:**

Though clear zinc, you would imagine, has no color, often it is referred to as blue as it can result in a blue-ish hue. This type of coating is often achieved by tri-valent based processes which are more environmentally friendly than the hex-valent passivation is the spontaneous formation of a hard non-reactive surface film that inhibits further corrosion.

**Yellow Zinc Plating:**

yellow dichromate passivity, greatly improving corrosion resistance. Salt Spray protection (ASTM-B117) is approximately 96 hours.

**Black Zinc Plating:**

As above with black silver nitrate passivate, giving a matte black appearance and similar corrosion resistance to yellow zinc plating.

**Passivation:**

is the process of making a material "passive", usually by the deposition of a layer of oxide on its surface. In air, passivation affects the properties of almost all metals.

In the context of corrosion, passivation is the spontaneous formation of a hard non-reactive surface film that inhibits further corrosion. This layer is usually an oxide or nitride that is a few nanometers thick.

**Black Oxide Plating:**

This is a black conversion finish used over steel parts for aesthetic purposes. The coatings have a deep glossy appearance. Salt Spray protection approaches 24 hours (ASTM-B117) depending on the sealant used.

**Nickel Plating:**

This coating is used primarily when a decorative bright silver finish is desired. If high hardness and good chemical resistance are required, Other properties include excellent chemical resistance in a hard, durable finish. More decorative than zinc plating.

\*Upon customer request other plating material can be provided

**UNC Machine Nut**

Size	W		T		Code
	Max	Min	Max	Min	
#2 - 56	0.188	0.180	0.066	0.057	81
#4 - 40	0.250	0.241	0.089	0.087	80
#6 - 32	0.312	0.302	0.114	0.102	82
#8 - 32	0.344	0.332	0.130	0.117	83
#10 - 24	0.375	0.362	0.130	0.117	84
#12 - 24	0.438	0.423	0.161	0.148	99
#1/4 - 20	0.438	0.423	0.193	0.178	77
#5/16 - 18	0.562	0.545	0.225	0.208	76
#3/8 - 16	0.625	0.607	0.257	0.239	75



**Small Pattern Hex Machine Screw Nut**

Size	W		T		Code
	Max	Min	Max	Min	
#2-56	0.188	0.180	0.066	0.057	80
#4-40	0.250	0.241	0.098	0.087	82
#6-32	0.250	0.241	0.098	0.087	83
#8-32	0.312	0.302	0.114	0.102	84

