

**Engineered Domestic Lock Nuts**







**Principal Products:**

**Collarlok® Nuts**

**ESlok® Nuts**

**Strux® Nuts**

**Whiz Lock® Nuts**

-  Wheel nuts
-  Nut & bracket assemblies
-  Nut & washer assemblies
-  Nylon nuts
-  Fasteners used for assemblies
-  All metal lock nuts

**Markets**

**Aerospace**

**Automotive**

Brake, Exhaust, Fuel, Interior Trunk, Fuel,  
Power Steering, Power Train, Suspension

**Agriculture**

Sickle Bar Guards, Wheel Fastening

**Truck and Trailer**

Bearing Retention, Wheel Fastening

**Industrial**

**Lawn and Garden**

Lawn Tractor Components, Shift Linkages

**Collarlok®**



The Collarlok prevailing torque hex or flange nut design offers the reuse characteristics of the proven ESNA insert type. A red nylon collar bonded into the head of the nut provides a prevailing torque type nut with the advantage of high speed assembly using automatic assembly tools. The non-galling collar offers superior vibration performance in standard or metric threads.

**ESlok®**



The ESlok red nylon locking patch type fastener has a controlled amount of red nylon permanently bonded to the threads of the standard hex nut and to the center threads of the nut permitting either end entry of the bolt for automatic machine assembly. Parts are easily removed with a wrench and may be reused up to five times. No metal is removed or distorted insuring the tensile strength and non-galling characteristics of an ESlok self-locking fastener.

# **PURCHASE PARTNERS™**

## **LOCK NUTS**

### **Strux® Nuts**

The Strux nuts system provides a completely automated, accurate and reliable method for installing fasteners, as well as eliminating expensive manual secondary operations and increasing productivity. The result is a precisely located threaded hole that becomes an integral part of the steel plate.

STRUX® is a registered trademark of Camcar Division of Textron Inc.



### **Whiz Lock®**



Whiz Lock is a time-tested system for fastening products faster and better. These one-piece all-metal, free-spinning nuts and screws spin on and lock when seated.

The underside or bearing surface side of a Whiz-Lock Fastener has a series of spiraling serrations or teeth. The number, shape, height, and curve of the teeth are important in producing higher break loose (off) torque in comparison to application (on) torque.

The convex angle of the base improves the locking effectiveness of the teeth permitting first contact of the base of the Whiz-Lock Nut or Screw nearest the hole in the bearing surface. This produces a better contact particularly when the bearing surface is not flat or where the Whiz-Lock is being applied to the depressed side of punched holes.

Whiz-Locks are designed to grip and oppose rotation as the Whiz-Lock is wrenched down on a bearing surface. When vibration, shock, load or other loosening forces are applied, the teeth grip the bearing surface with unequalled locking power. It takes over 30% more torque to remove a Whiz-Lock fastener than to apply it.

The unique Whiz-Lock design -the teeth and the convex base- is verified by patents in major countries throughout the world. No other combination of teeth and base design approach the performance of Whiz-Lock fasteners.



## LOCK NUTS

### *Offshore Product Line*

<u>Part Series</u>	<u>Description</u>	<u>Sizes From</u>
<b>NM Series</b> Nylon Insert	Machine Screw Pattern, Standard Height Machine screw threaded application	#2 --- #12
<b>NTM Series</b> Nylon Insert Locknut	Machine Screw Pattern, Thin(Jam) Hgt Machine screw threaded application where thin nut is required	#2 --- #12
<b>NE Series</b> Nylon Insert	Light Hex, Standard Height For Fractional Bolt thread application	1/4" --- 1 1/2"
<b>NTE Series</b> Nylon Insert Locknut	Light Hex, Thin Height For Fractional Bolt thread application where thin Height is required	1/4" --- 1 1/2"
<b>NU Series</b> Nylon Insert Locknut	Heavy Hex, Full Height Type NU Nuts are alternative Self Locking Nuts designed for the American Standard Heavy Hex series	1/4" --- 3"
<b>NTU Series</b> Nylon Insert Locknut	Heavy Hex, Thin Height Type NTU Nuts are designed for the American Standard Thin Heavy Hex series	1/4" --- 3"
<b>NE8 (N1610) Series</b> Nylon Insert Locknut	Light Hex, Grade 8 NE8 Series for High Tensile Grade 8 application Double notched corners per IFI specifications	1/4" --- 1 1/2"
<b>NTE8 (NTE1610)</b> Nylon Insert Locknut	Light Hex, Thin Height, Grade 8 NE8 Series for High Tensile Grade 8 application where Thin Height is required Double notched corners per IFI specifications	1/4" --- 1 1/2"
<b>NU8 (NU1610) Series</b> Nylon Insert Locknut	Heavy Hex, Grade 8 Type NU8 Nuts are designed for the American Standard Heavy Hex series where High Tensile Grade 8 application is critical Double notched corners per IFI specifications	1/4" --- 3"
<b>NTU8 (NTU1610)</b> Nylon Insert Locknut	Heavy Hex, Thin Height Grade 8 Type NTU 8 Nuts are designed for the American Standard Heavy Thin Hex series where High Tensile Grade 8 application is critical Double notched corners per IFI specifications	1/4" --- 3"
<b>N1268 (N1260) Series</b> Nylon Insert Locknut	High Hex, Grade 8 Designed for applications that require pre-stressing high strength Bolts to their elastic limits. Provides extra threaded length and Hex Height attaining uniform thread loading and adequate wrenching	1/4" --- 1 1/2"



## LOCK NUTS

	area Double notched corners per IFI specifications	
<b>CLC Series</b> All Metal Locknut	All Metal, Grade C Top lock CLC series Automation Style Locknut. Heat Treated	1/4" --- 2"
<b>NKE/NKTE</b> Nylon Insert Cap Locknut	Hex Nylon Cap Locknuts Type NKE/NKTE Cap Nuts are designed for use in applications where, for reasons of safety or appearance, it is desirable to cover exposed bolt ends. Suitable for sealing internal or external pressures up to 80 PSI past the bolt threads. Purple/ Black/ White/ Gray Caps available	#4 --- 12"
<b>NKM/NKTM</b> Nylon Insert Cap Locknut	Hex Nylon Cap Locknuts Type NKE/NKTE Cap Nuts are designed for use in applications where, for reasons of safety or appearance, it is desirable to cover exposed bolt ends. Suitable for sealing internal or external pressures up to 80 PSI past the bolt threads. Purple/ Black/ White/ Gray Caps available	#4 --- 12"
<b>WC Series</b> Nylon Insert Wing nut	Locking Wing Nuts, Nylon Insert Only locking device with Nylon Insert that may be installed and backed off by hand	#5 --- 12"
<b>1660 Series</b> Nylon Insert Locknut	Miniature Hex Nylon Inserts Radar, radio equipment, electronics, computers, switch instruments, and related products where design requires miniaturization and reduced installation clearance	#0 --- #4
<b>LH1660 Series</b> All Metal Locknut	All Metal, Miniature Hex Lock Nuts Where design requires miniaturization and reduced installation clearance where heat is greater than 250 F or subject to an acidic application	#2 --- #6
<b>NMRH</b> Nylon Insert Locknut	Reduced Hex Nylon Insert Locknuts Across flats hexagons are undersized Nut standards. They are offered for use for applications where wrench clearances are limited	#6 --- 1/4"
<b>NCFMA Series</b> Nylon Insert Locknut	Miniature Clinch Flush Mounting Nylon Type NCFMA Parts used in applications involving installation in thin aluminum, soft steel sheets or plates having small mounting areas making the use of a Miniature Fixed Nut desirable	#2 --- #10
<b>LHCFM Series</b> All Metal Locknut	All Metal Miniature Flush Mounting Type LHCFM Parts used in applications involving installations in thin aluminum, soft steel sheets or plates having small mounting areas making the use of a Miniature Fixed Nut desirable Used in applications where heat is greater than 250 F or subject to an acidic application	#2 --- 1/4"
<b>NC Series</b>	Clinch Hex Nut Nylon Insert Locknut	#4 --- 5/16"

# **PURCHASE PARTNERS™**

## **LOCK NUTS**

Nylon Insert Locknut	Captive Self Locking Fastener Installed In Aluminum or soft sheet steel. Provides load bearing threads in sheet metal and offers a reliable method of blind fastening. Available in six different shank lengths per diameter size.	
<b>ND Series</b> Nylon Insert Locknut	<b>Spline Nylon Insert Locknuts</b> A self Wrenching Nut designed for either blind hole application or where maintenance can be facilitated by the use of a captive fastener.	#8 --- 1/2"
<b>NKCFM Series</b> Nylon Insert Cap Locknut	<b>Miniature Clinch Flush Mounting Nylon</b> The Nylon Cap covers protruding threads in an NCFMA application.	#2 --- #10
<b>BRN Series</b> Nylon Insert Locknut	<b>Bearing Retainer Nylon Insert Locknut</b> Excellent for bearing applications where space is limited: Cylinders, Bearing Race Retainers, Pinion Shafts.	SAE#N03 -- SAE#AN15 -- AN18
<b>M2DN (DIN982)</b>	<b>Metric Nylon Insert Locknuts To DIN 982</b> Steel Class 6, 8, & 10.	M5 --- M24
<b>M5DN (DIN985)</b>	<b>Metric Nylon Insert Locknuts To DIN 985</b> Steel Class 6, 8, & 10 Brass Stainless Steel A2 (18/8) & A4 (316)	M3 --- M30 M4 --- M10 M2.5 --- M10
<b>Misc. Metric Series</b>	<b>Metric Hex Nylon Insert Locknuts</b> DIN 6924 (ISO 7040) Class 8 & 10 <b>Metric Hex Nylon Insert Flange Nuts</b> DIN 6926 (ISO 7043) Class 8 & 10	M5 --- M30 M5 --- M20
<b>KL Series</b> All Metal Assembly	<b>Hex Nut/Tooth Washer Locknut Assembly</b>	#4 --- 1/2 Including Small
<b>SL Series</b> All Metal Locknut	<b>All metal serrated flange Hex Locknut</b> Serrations on bottom of Flange cause large bearing surface diameter to lock into mating surface	#10 --- 1/2"
<b>TL Series</b> All Metal Locknut	<b>Reversible Hex All Metal Locknuts</b> Finished Hex Nut pattern with reversible locking feature on center of Hex flats.	#10 --- 1"



## LOCK NUTS

Other Definitions

HEX LOCK NUTS

Prevailing-Torque Types

All Metal, One Piece

TRADE NAMES: **"Two-Way", "Reversible", "Center lock"**

1, 2 or 3 round, rectangular or other shaped indentations compressed onto the flat sides of the nut distorts the internal threads causing a controlled locking action when engaged with external mating threads.

For use with Grade 2 bolts usually supplied plated

For simple, inexpensive locknut applications

TRADE NAMES: **"Stover", "Cone lock", "Uni-Torque", "Crown Lock"**

During the manufacturing process, applying pressure on the outside of the nut deforms the internal threads. The deformed threads produce a friction fit with the external threads of the bolt. This friction fit is well controlled and induces a locking action that allows for temperature and vibration variations.

Elliptical threads (the locking feature) are formed in the manufacturing process by applying pressure to the sides of the nut near the top.

This nut is indented directly on the top surface to deform the threads. This locking feature works on the same principle as the one above, giving the same results.

Compression to the sides and the collar area form the elliptical threads that assure the locking fit.

The most popular material for the above nuts is grade "8" or "C" and serves grade 2, 5 and 8 bolts.

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