

Nylon Insert Hex Flange Lock Nuts are designed to compress around the threads of a mating fastener — providing a full 360° of locking action and a dampening effect when subjected to vibration. Offering a built-in washer that distributes the clamping load over a wider area, Nylon Insert Hex Flange Lock Nuts provide maximum locking force in your assembly.

#### **PRODUCT ATTRIBUTES**

Nylon is resistant to temperatures up to 250° F Built-in washer distributes clamping load over wider area Replaces traditional nylon insert nut & washer applications Sizes range from #10 to 3/4" and M6 to M12

# MARKETS FOR NYLON INSERT HEX FLANGE LOCK NUTS

Agriculture Equipment
Commercial Lawn Equipment
Robotics & Automation
Automotive

# THIS PRODUCT IS OFTEN CALLED...

Nylock Flange Lock Nut
Non-Metallic Insert Flange Lock Nut
Flanged Stop Nut
Prevailing Torque Nylon Insert Lock Nut

#### **AVAILABLE VALUE ADDED SERVICES**

Bulk, full & broken case quantities Secondary & rework services available Custom packaging services Custom plating



#### ADDITIONAL HEX FLANGE PRODUCT WE SUPPLY

Hex Flange Lag Screws Hex Flange Screws Metric & JIS Hex Flange Screws Metric Stainless Steel Hex Flange Screws Hex Serrated Flange Screws Large Flange Hex Serrated Flange Screws Stainless Steel Hex Serrated Flange Screws Metric Hex Serrated Flange Screws Hex Flange Nuts Metric & JIS Hex Flange Nuts Metric Stainless Steel Hex Flange Nuts Hex Serrated Flange Lock Nuts Large Flange Hex Serrated Flange Lock Nuts Stainless Steel Hex Serrated Flange Lock Nuts Metric & JIS Hex Serrated Flange Lock Nuts All Metal Hex Flange Lock Nuts Metric All Metal Hex Flange Lock Nuts

Service GUARANTEE

The right part.
The right quantity.
On-time.
Everytime.



# GRADE 8 (GRADE G) & GRADE F (GRADE 5) NYLON INSERT HEX FLANGE LOCK NUTS

Nylon Insert Hex Flange Lock Nuts are manufactured in accordance with the latest revision of the following industry standards:

**ASME B18.16.6** Dimensional Requirements

**SAE J995** Material and Physical Properties

**ASME B1.1** Thread Requirements **ASTM F812** Surface Discontinuities

**ASME B18.18** Inspection and Quality Assurance

#### **THREADS**

Threads are made to the requirements of ASME B1.1 Unified Threads (UNC) Class 2B

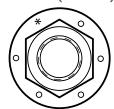
Thread acceptance per ASME B1.3, System 21

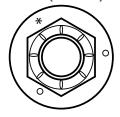
#### **PLATING**

GRADE 8	GRADE F
Zinc Yellow	n/a
n/a	Zinc Clear (Cr+3)

## **MATERIAL AND PHYSICAL PROPERTIES**

Grade 8 (Grade G) Grade F (Grade 5)





## **Chemical Composition:**

GRADE	CARBON (C)	MANGANESE (Mn)	PHOSPHORUS (P)	SULFUR (S)
	Max	Min	Max	Max
8	0.55	0.30	0.04	.005
F	0.55	0.30	0.05	0.15

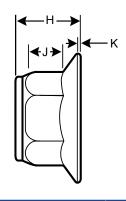
#### **Hardness**

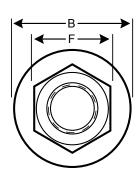
SAE J995 GRADE 8	SAE J995 GRADE F
HRC 24/36	HRC 32 max

#### **Proof Load Strength**

SAE J995 GRADE 8	SAE J995 GRADE F
150,000 psi min	120,000 psi min

## DIMENSIONS FOR GRADE 8 (GRADE G) & GRADE F (GRADE 5) NYLON INSERT HEX FLANGE LOCK NUTS





SIZE	GRADE	WIDTH ACROSS FLATS (F)		FLANGE DIAMETER (B)	NUT THICKNESS (H)		WRENCH HEIGHT (J)	FLANGE THICKNESS (K)
		MAX	MIN	MAX	MAX	MIN	MAX	MIN
1/4	8 & F	0.438	0.428	0.560	0.300	0.265	0.140	0.040
5/16	8 & F	0.502	0.489	0.680	0.365	0.320	0.170	0.050
3/8	8 & F	0.565	0.551	0.810	0.425	0.404	0.200	0.060
1/2	8 & F	0.752	0.736	1.070	0.555	0.528	0.260	0.080
5/8	8 & F	0.940	0.922	1.330	0.690	0.646	00.320	0.100
3/4	8	1.127	1.088	1.585	0.825	0.742	.380	0.110

<sup>\*</sup>The specifications shown on this sheet are not intended to be used in the production of parts. Earnest Machine is not responsible or liable in any manner for any production errors and we certify the information present on this specification sheet is correct to the best of our knowledge. ©2021 Earnest Machine Products



# CARBON STEEL (GRADE A & GRADE 2) NYLON INSERT HEX FLANGE LOCK NUTS

Nylon Insert Hex Flange Lock Nuts are manufactured in accordance with the latest revision of the following industry standards:

**ASME B18.16.6** Dimensional Requirements

**SAE J995** Material

**ASME B1.1** Thread Requirements **ASTM F812** Surface Discontinuities

**ASME B18.18** Inspection and Quality Assurance

#### **THREADS**

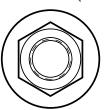
Threads are made to the requirements of ASME B1.1 Unified Threads (UNC and UNF) Class 2B Thread acceptance per ASME B1.3, System 21

#### **PLATING**

Zinc Clear Cr+3

## **MATERIAL AND PHYSICAL PROPERTIES**

Carbon Steel (Grade A & Grade 2)



## **Chemical Composition:**

CARBON (C)	PHOSPHORUS (P)	SULFUR (S)
Max	Max	Max
0.55	0.12	0.19

#### **Hardness**

# SAE J995 GRADE 2

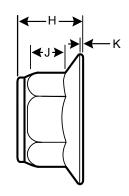
HRC 32 max

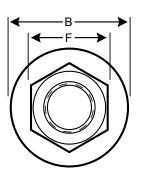
## **Proof Load Strength**

#### SAE J995 GRADE 2

90,000 psi min

# DIMENSIONS FOR CARBON STEEL (GRADE A & GRADE 2) NYLON INSERT HEX FLANGE LOCK NUTS





SIZE	WIDTH ACROSS FLATS (F)		FLANGE DIAMETER (B)	) NUT THICKNESS (H)		WRENCH HEIGHT (J)	FLANGE THICKNESS (K)
	MAX	MIN	MAX	MAX	MIN	MAX	MIN
#10	0.375	0.365	0.500	0.264	0.230	0.130	0.030
1/4	0.438	0.428	0.560	0.300	0.265	0.140	0.040
5/16	0.502	0.489	0.680	0.365	0.320	0.170	0.050
3/8	0.565	0.551	0.810	0.425	0.404	0.200	0.060
1/2	0.752	0.736	1.070	0.555	0.528	0.260	0.080
5/8	0.940	0.922	1.330	0.690	0.646	0.320	0.100
3/4	1.127	1.088	1.585	0.825	0.742	0.380	0.110

<sup>\*</sup>The specifications shown on this sheet are not intended to be used in the production of parts. Earnest Machine is not responsible or liable in any manner for any production errors and we certify the information present on this specification sheet is correct to the best of our knowledge. ©2021 Earnest Machine Products



## METRIC CLASS 10 NYLON INSERT HEX FLANGE LOCK NUTS

Nylon Insert Hex Flange Lock Nuts are manufactured in accordance with the latest revision of the following industry standards:

**DIN 6926** Dimensional Requirements

**ISO 898-2** Material and Physical Properties

ISO 261 Thread Requirements
ISO 6157-2 Surface Discontinuities

**ISO 3269** Inspection and Quality Assurance

#### **THREADS**

Threads are made to the requirements of ISO 261 ISO 965-2 Class 6H

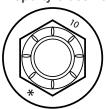
Thread acceptance per ISO 1502

#### **PLATING**

Zinc Clear (Cr3+) Zinc Yellow

## **MATERIAL AND PHYSICAL PROPERTIES**

**Property Class 10** 



## **Chemical Composition:**

CARBON (C)	MANGANESE (Mn)	PHOSPHORUS (P)	SULFUR (S)
Max	Min	Max	Max
0.58	0.30	0.048	0.058

#### **Hardness**

# ISO 898-2 CLASS 10

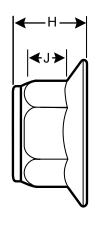
HRC 26/36

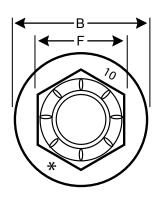
## **Proof Load Strength**

#### ISO 898-2 CLASS 10

1040 MPa min

#### DIMENSIONS FOR METRIC CLASS 10 NYLON INSERT HEX FLANGE LOCK NUTS





SIZE	WIDTH ACROSS FLATS (F)		WIDTH ACROSS FLATS (F) FLANGE DIAMETER (B) NUT THICKNESS (H)		WRENCH HEIGHT (J)	FLANGE THICKNESS (K)	
	MAX	MIN	MAX	MAX	MIN	MAX	MIN
M6	10.0	9.78	14.2	9.1	8.74	3.1	1.1
M8	13.0	12.73	17.9	11.1	10.67	4.5	1.2
M10	15.0	14.73	21.8	13.5	13.07	5.5	1.5
M12	18.0	17.73	26.0	16.1	15.57	6.8	1.8
M16	24.0	23.67	34.5	20.3	19.46	9.0	2.4

<sup>\*</sup>The specifications shown on this sheet are not intended to be used in the production of parts. Earnest Machine is not responsible or liable in any manner for any production errors and we certify the information present on this specification sheet is correct to the best of our knowledge. ©2021 Earnest Machine Products



# Nylon Insert Hex Flange Lock Nuts - Inch

# **Grade 8**

SIZE	GRADE	PITCH	FINISH	PART #
1/4-20	GR 8	Coarse	Zinc Yellow	367345
1/4-20	GR 8	Coarse	Zinc Yellow	367345T
5/16-18	GR 8	Coarse	Zinc Yellow	367348
3/8-16	GR 8	Coarse	Zinc Yellow	367351
1/2-13	GR 8	Coarse	Zinc Yellow	367356
5/8-11	GR 8	Coarse	Zinc Yellow	367361
3/4-10	GR 8	Coarse	Zinc Yellow	367364

# **Grade F**

SIZE	GRADE	PITCH	FINISH	PART #
1/4-20	GR F	Coarse	Zinc Clear	367343T
5/16-18	GR F	Coarse	Zinc Clear	367349
3/8-16	GR F	Coarse	Zinc Clear	367354T
3/8-16	GR F	Coarse	Zinc Clear	367352
1/2-13	GR F	Coarse	Zinc Clear	367104T
5/8-11	GR F	Coarse	Zinc Clear	367106T

# **Grade A**

SIZE	GRADE	PITCH	FINISH	PART #
#10-24	GR A	Coarse	Zinc Clear	367340

#10-32	GR A	Fine	Zinc Clear	367342T
1/4-20	GR A	Coarse	Zinc Clear	367344T
5/16-18	GR A	Coarse	Zinc Clear	367347T
3/8-16	GR A	Coarse	Zinc Clear	367350T
1/2-13	GR A	Coarse	Zinc Clear	367355T
5/8-11	GR A	Coarse	Zinc Clear	367360
3/4-10	GR A	Coarse	Zinc Clear	367363

# Nylon Insert Hex Flange Lock Nuts - Metric

# **Metric Class 10**

SIZE	GRADE	PITCH	FINISH	PART #
M6-1.0	Carbon Steel	Coarse	Zinc Yellow	467845
M8-1.25	Carbon Steel	Coarse	Zinc Clear	467849T
M8-1.25	Carbon Steel	Coarse	Zinc Yellow	467850
M10-1.5	Carbon Steel	Coarse	Phos & Oil	467857
M10-1.5	Carbon Steel	Coarse	Zinc Clear	467856T
M10-1.5	Carbon Steel	Coarse	Zinc Yellow	467855