

Made in Japan

信  
頼  
の  
締  
結

Ensure Dependable Fastening

Prevailing Torque Type  
Locknut

**FUJILOK U-NUT**®  
*Series*

安全と  
安心は



Fuji Seimitsu Co., Ltd.



The industry standard for lock nuts  
that ensure dependable fastening solutions



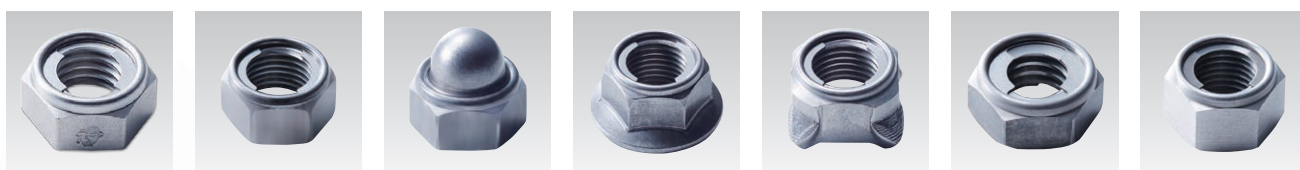
Structure and Function	3
The FUJILOK U-NUT Technology	7

## FUJILOK U-NUT®

With over 50 years of history. The FUJILOK U-NUT is now highly regarded as the first name in locknuts across all industries from steel structures such as railways and connecting bridges to automobiles, motorcycles, and on up to industrial machines.

No matter how harsh the use environment is, the FUJILOK U-NUT which is required for safety and peace of mind is the definitive version of the locknut which continues to evolve in terms of durability, vibration resistance, etc. as well as locking performance.

9



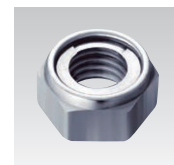
●FUJILOK U-NUT    ●Small Type    ●Cap Type    ●Flange Type    ●Weld Type    ●Whit Thread Type    ●Unified Thread Type

FUJILOK U-NUT

## GU-NUT®

The GU-NUT was developed to further improve upon the safety and peace of mind provided with the FUJILOK U-NUT and to create the locknut standard for the next generation.

The shape of the 270° high torque type friction ring (specialized spring) provides an even better locking function.



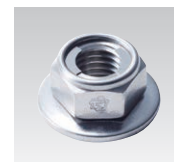
19

GU-NUT

## FSW U-NUT®

The FSW U-NUT is created for to meet requests from various customers, we combined the FUJILOK U-NUT with a free spinning washer.

The FSW U-NUT enables reduced assembling operation time and improves efficiency. This one-part combination means a reduced inventory and prevents failure of installation.



21

FSW U-NUT

## SU-NUT®

The SU-NUT special design works as a visual crime deterrent and also the special tool requirement greatly minimizes any attempts to tamper with valuable equipment.

And also special sockets are needed as ordinary sockets can't remove or install it.



23

SU-NUT

Precautions for Use	24
Line-up	25
For the FUJILOK U-NUT applications	27
Customer Support System	29
Company Outline	31

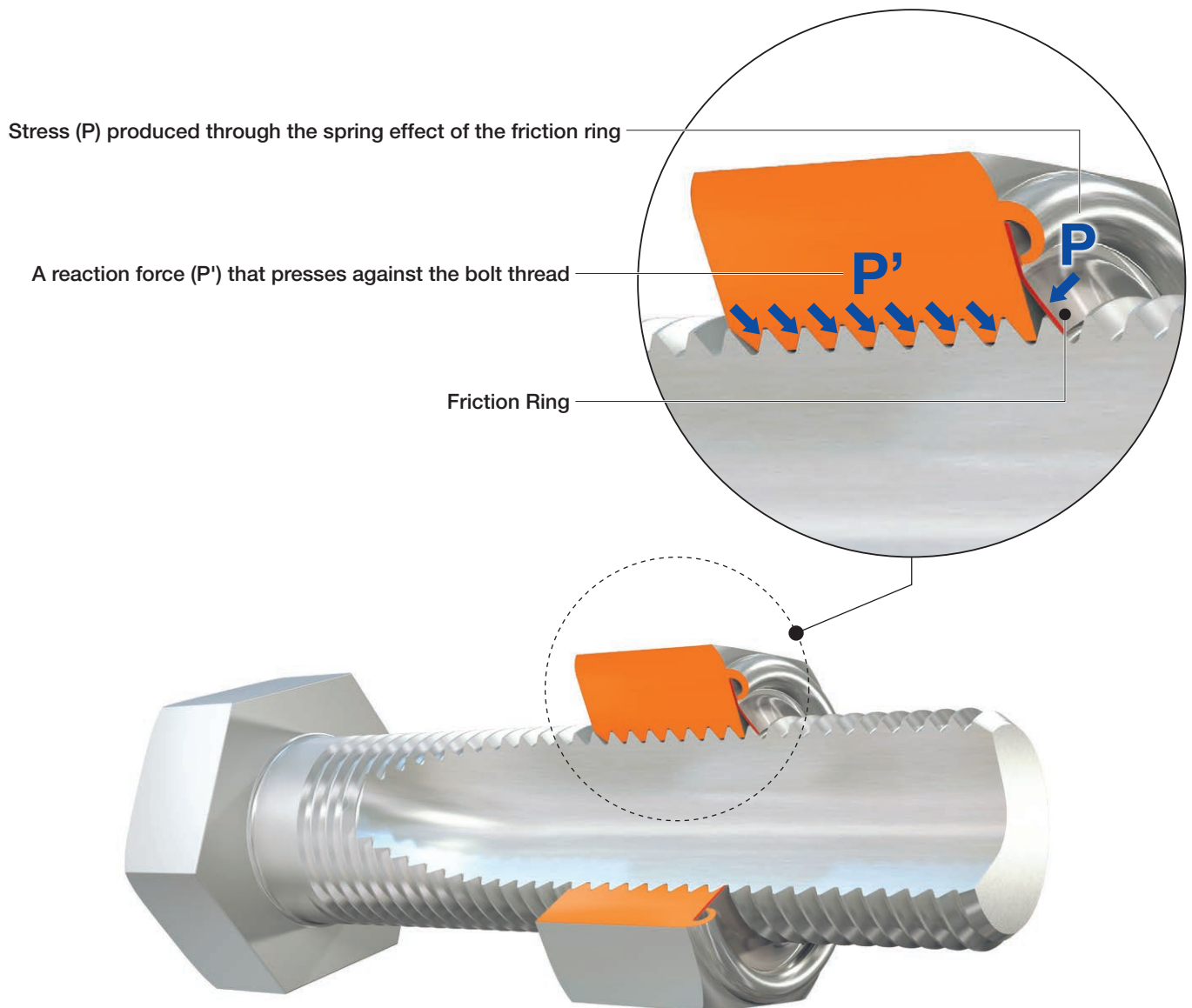
# As a leader in the locknut industry

The FUJILOK U-NUT was a groundbreaking locknut introduced by Fuji Seimitsu as the first in the industry to feature a metal ring locking function.

The FUJILOK U-NUT sparked a revolution in the area of bolts and nuts where up until that point loosening had been considered unavoidable.

With over 50 years of history

The FUJILOK U-NUT is now highly regarded as the first name in locknuts across all industries from steel structures such as railways and connecting bridges to automobiles, motorcycles, and on up to industrial machines.



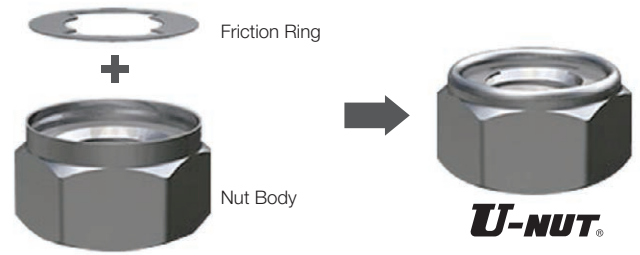
The friction ring touches the bolt screw threads, and stress ( $P$ ) is produced through a spring effect when the nut is tightened as shown on the left. Along with a reaction force ( $P'$ ), a frictional torque (prevailing torque= $P$ ) that presses against the bolt screw threads is produced.

▼  
**Prevents free rotation**



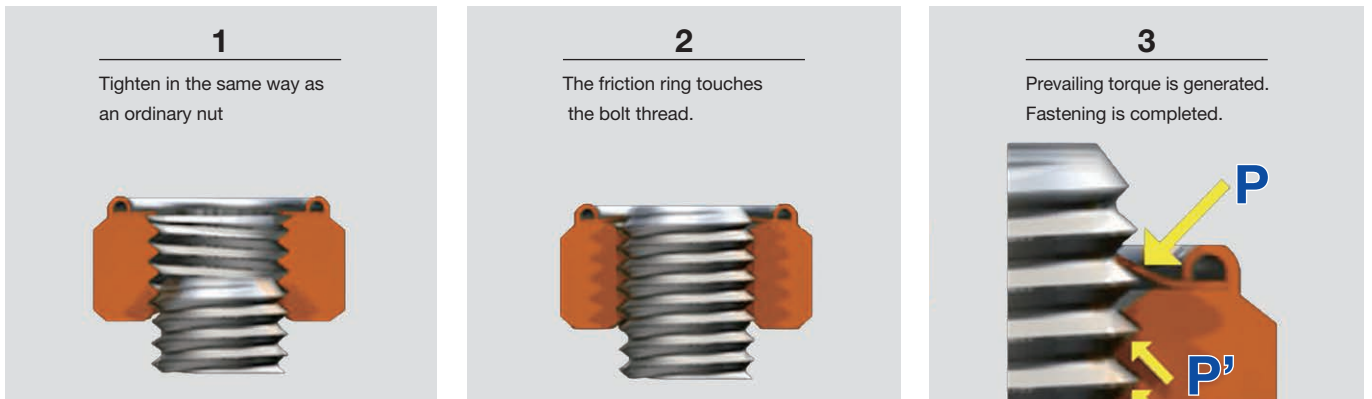
## The industry's first [metal ring locking function]

The FUJILOK U-NUT consists of a nut and friction ring (specialized spring). The friction ring is secured to and integrated with the top face of the nut by crimping.



## [Locking effect] created by the friction ring

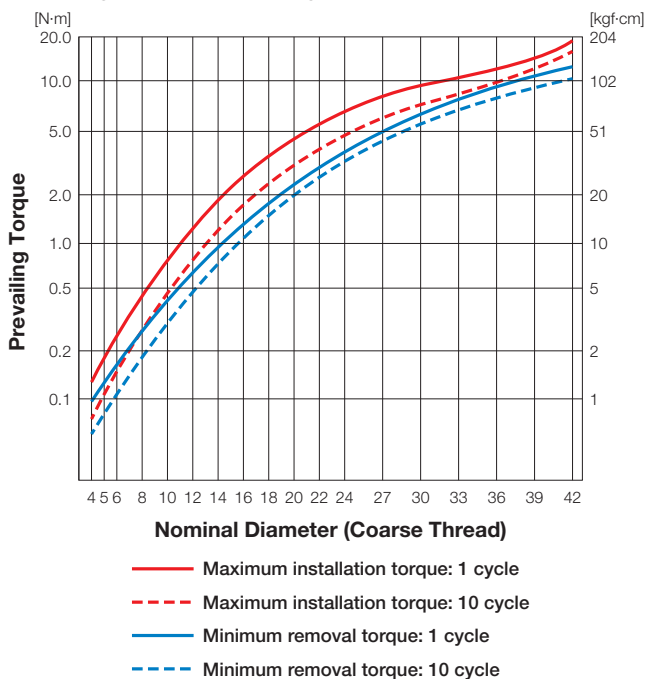
When the bolt is screwed in, the friction ring begins to bend, and presses against the bolt thread. Stress produced through a spring effect and the prevailing torque (friction torque) caused by a reaction force that presses against the bolt thread are produced.



## Performance of the prevailing torque and reusability

Prevailing torque is produced by the spring effect when the friction ring touches the bolt threads.

### Measuring results of Prevailing Torque



### Sample

[N-m]

M12 × 1.75 SS400 equivalent non-plating			
Maximum Installation torque		Minimum removal torque	
1 cycle	10 cycle	1 cycle	10 cycle
1.20	0.75	0.70	0.50

Even re-used 10 times, the prevailing torque shows only a slight decrease.

### [Test conditions]

Bolt material: Alloy steel (SCM435)  
Thread accuracy: ISO6g (JIS6g)  
Surface treatment: plain (nut and bolt)  
Lubricant: penetrating lubricant

\* The table on the right shows the result of prevailing torque at 10 cycles.

In every facet of life  
and industry

Public works

**Seismic Reinforcement**  
To ensure safety

**Back side Acoustical Board**  
For construction  
in high/narrow areas

**Catwalk**  
For the prevention of the falling of parts

**Sound Insulation Wall**  
For construction  
in high/narrow areas

Motorcycles

Railways

Transmission  
Towers

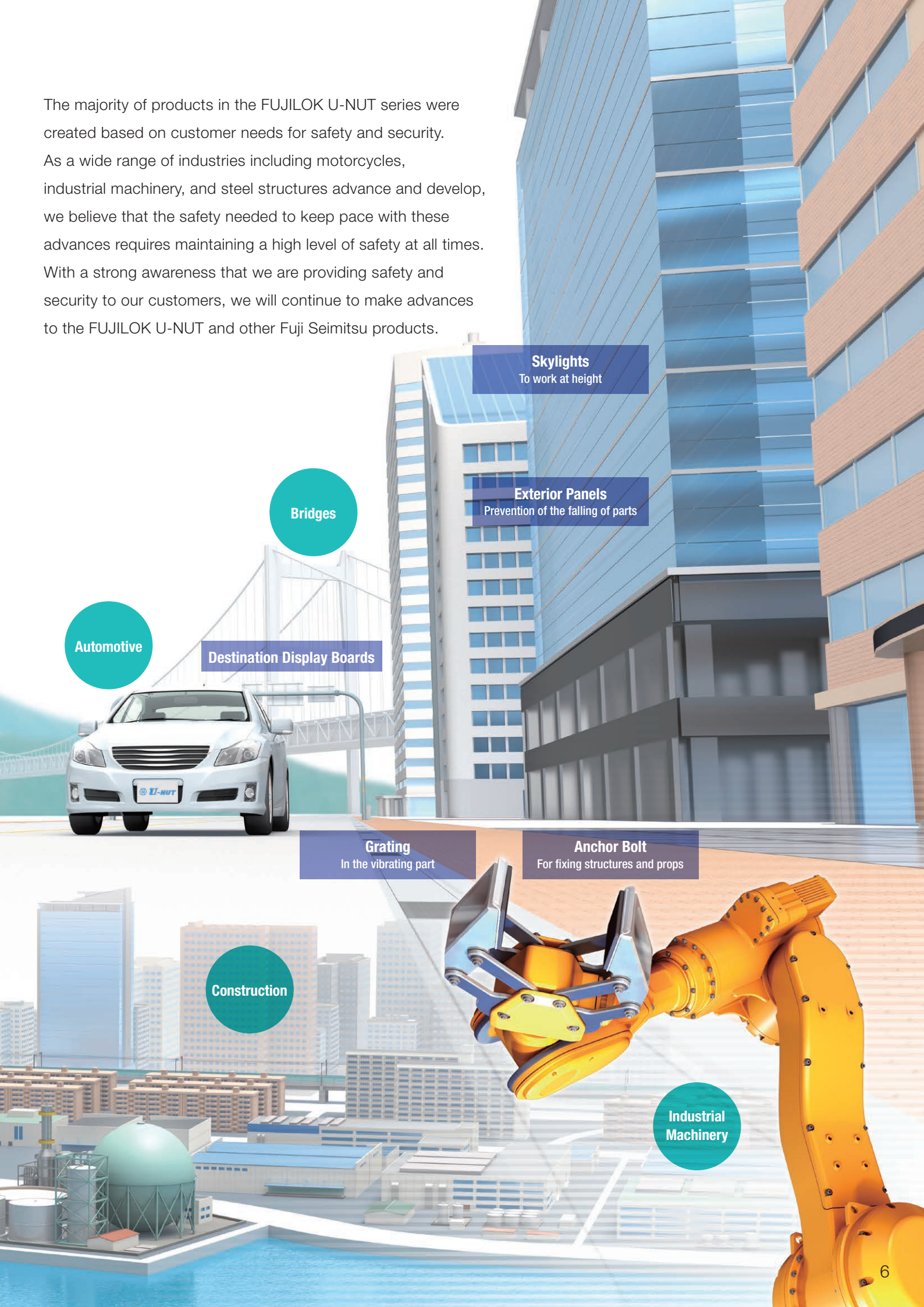
Solar Panels

Shipbuilding

Plants



The majority of products in the FUJILOK U-NUT series were created based on customer needs for safety and security. As a wide range of industries including motorcycles, industrial machinery, and steel structures advance and develop, we believe that the safety needed to keep pace with these advances requires maintaining a high level of safety at all times. With a strong awareness that we are providing safety and security to our customers, we will continue to make advances to the FUJILOK U-NUT and other Fuji Seimitsu products.



Automotive

Destination Display Boards

Bridges

Skylights

To work at height

Exterior Panels

Prevention of the falling of parts

Grating

In the vibrating part

Anchor Bolt

For fixing structures and props

Construction

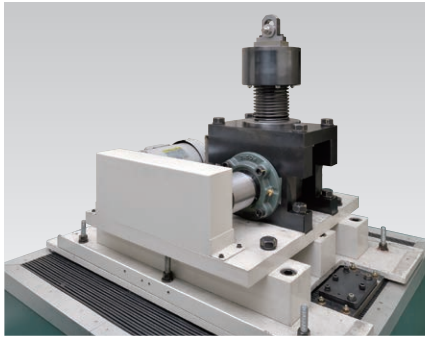
Industrial Machinery

# The true strengths of the FUJILOK U-NUT verified by a variety of testing

Testing and measurement equipment that verifies safety from a variety of aspects.

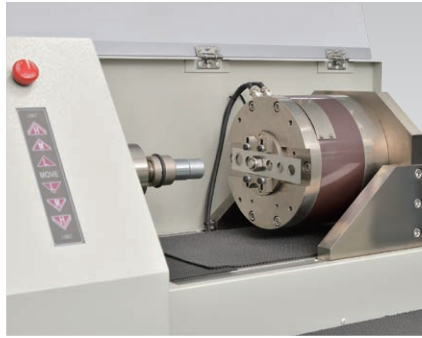
## NAS Conforming High-Speed Thread Looseness Tester

This machine is produced to conform to NAS3350 (U.S. National Aerospace Standard) tester specifications, and is used for judgement and comparison of locking performance.



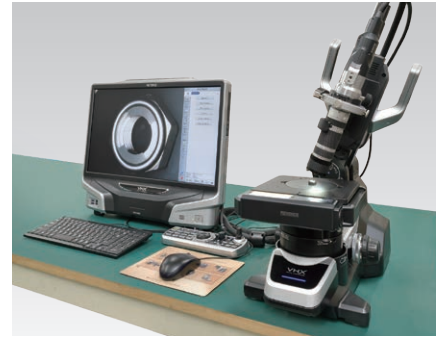
## Threaded Fastener Tightening Characteristic Testing Unit

This machine conforms to JIS B 1084 (Fasteners-Torque/clamp force testing), and is used for measuring characteristic values resulting from tightening.



## Microscope

Capable of observations with magnifications up to 1000x. Compared with conventional projection instruments, this allows more detailed checks of shapes.



## Amsler Universal Tensile Testing Machine

Used for proof load tests that are satisfied by JIS B 1052 (Mechanical properties of fasteners made of carbon steel and alloy steel).



## Junker Testing Machine for Thread Loosening

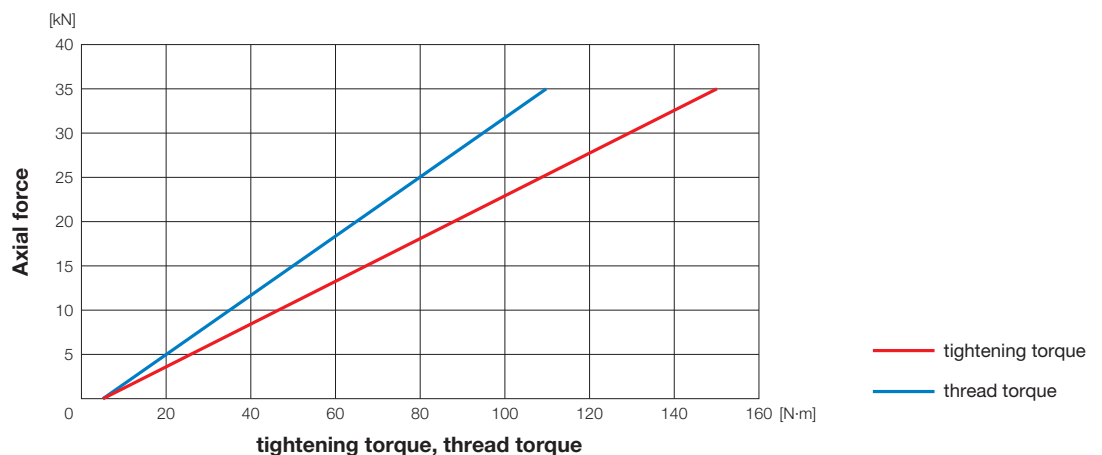
Used to verify the tightening force and vibration resistance of bolts and nuts.



## Threaded Fastener Tightening Characteristic Testing Unit

### Results from Threaded Fastener Tightening Characteristic Testing Unit

This test measures the axial force, tightening torque, and thread torque.





## Vertical Axis Vibration Test

### Junker Type Thread Loosening Testing Machine (according to DIN 65151)

This test repeatedly applies amplitude and impact in a direction vertical to the axis of the bolts and nuts that are assembled in a vibration plate in order to examine the reduced axial tension of the fastener and judge the locking performance.

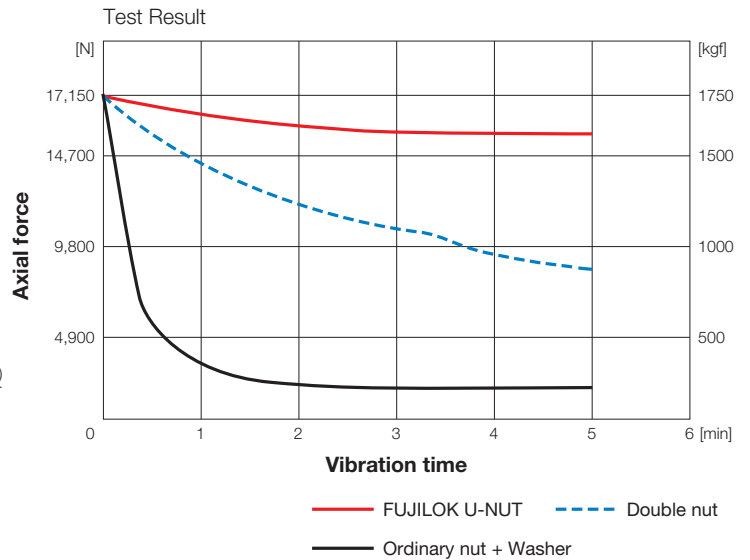
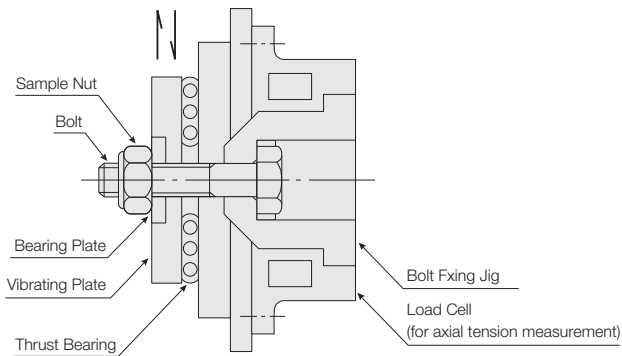
#### Specification of the Junker Type Thread Loosening Testing Machine

Frequency of the vibration plate	200 c.p.m.
Displacement of vibration	±0.5 mm
Vibration time	5 min.

#### Test Condition

Sample size	M12×1.75
Material of the sample nut, bolt	SS400 or equivalent
Axial tension for fastening	17150 N {1750 kgf}

Yield point of Bolt  $\delta_y$ : 314 N/mm<sup>2</sup> {32 kgf/mm<sup>2</sup>}



## Vertical Axis Vibration Test

### NAS Conforming High Speed Thread Looseness Tester (according to National Aerospace Standard NAS3350)

This test repeatedly applies shocks in a direction vertical to the axis of the bolts and nuts that are assembled a vibration barrel in order to examine whether or not loosening occurs and judge the locking performance.

#### Specification of NAS Conforming High Speed Thread Looseness Test Machine

Frequency	1780 c.p.m.
Excitation stroke	11.4 mm
Impact stroke	19 mm

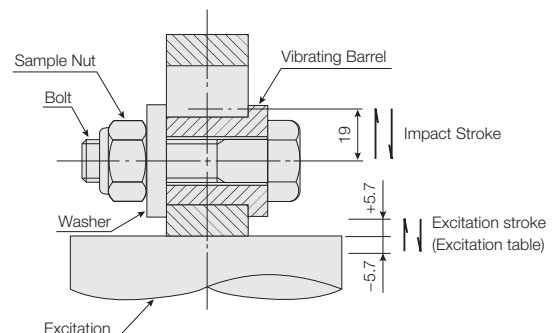
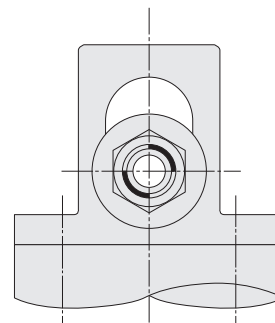
#### Test Condition

Sample size	M12×1.75
Material of the sample nut, bolt	SS400 or equivalent
Axial tension for fastening	17150 N {1750 kgf}

Yield point of Bolt  $\delta_y$ : 314 N/mm<sup>2</sup> {32 kgf/mm<sup>2</sup>}

#### Test Result

Sample size	Frequency	Vibration time
U-NUT	30,000 cycles	16' 51"
	No problem	
Double nut	4,450 cycles	2' 30"
	Came off	
Ordinary nut + Washer	1,335 cycles	45 sec.
	Came off	



# FUJILOK U-NUT®

A groundbreaking locknut introduced by Fuji Seimitsu as the first in the industry.

With over 50 years since the birth. The FUJILOK U-NUT is now highly regarded as the first name in locknuts across all industries from steel structures such as railways and connecting bridges to automobiles, motorcycles, and on up to industrial machines.

No matter how harsh the use environment is, the FUJILOK U-NUT which is required for safety and peace of mind is the definitive version of the locking nut which continues to evolve in terms of durability, vibration resistance, etc. as well as locking performance.



## FUJILOK U-NUT

### Features

- Fastening function** Provides a stable locking function.
- Non-loosening** Prevents nuts from quickly coming off even if the tightening force is lowered.
- Reusability** Can be reused.
- Simple tightening** No skill or technique is required for assembly.
- Simplex parts** Easy tightening prevents installation mistakes.
- Temperature-resistant** It is all metal products and is excellent in heat resistance and cold resistance.

### Introduction of Applications



Bridge Collapse Prevention device



Marine Engine



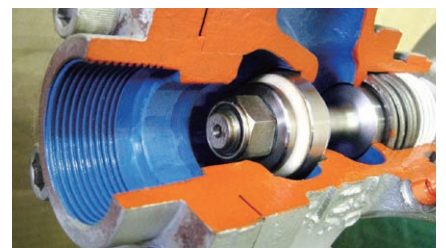
Swing Arm Pivot



Air Blower

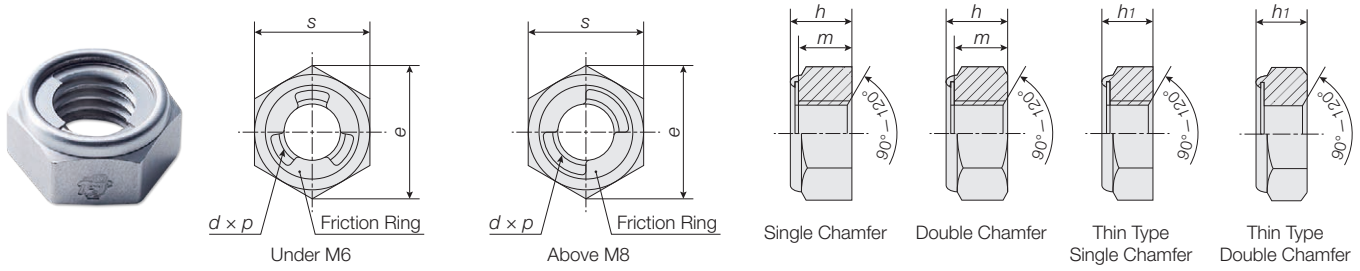


Rail Fastening



Stainless Steel Valve

# FUJILOK U-NUT Single Chamfer, Double Chamfer, Thin Type



● : Available

Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body						SS400		S45C-H		SUS304		Unit Weight (g) Approx. (Except for the Thin Type)				
Material of the Friction Ring						SUS301										
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Overall Height (h)		Thread Height (m) Approx.	Across Corners (e) Approx.	Single Chamfer	Double Chamfer	Thin Type (h1)	Double Chamfer		Thin Type (h1)	Single Chamfer	Thin Type (h1)	
		Base	Tolerance	Base	Tolerance											
M 3	0.5	5.5		3.2	±0.3	2.7	6.4		●				●		0.4	
M 4	0.7	7		3.8		3.0	8.1		●					●	3.1	0.8
M 5	0.8	8		4.6		3.9	9.2		●		●			●	3.4	1.2
M 6	1	10		5.1		4.2	11.5		●		●			●	4.0	2.1
M 8	1.25	13		7.3	±0.4	6.1	15.0		●				●	5.0	5.1	
	1						5.0			●				●		
M10	1.5	17		8.3		7.1	19.6		●		6.5			●	6.5	10.0
	1.25						6.5		●		6.5			●	6.5	
M12	1.75	19		10.5	±0.5	9.0	21.9		●		8.5		●	8.5	15.2	
	1.5						8.5			●		8.5		●		
M14	2	22		12.5		11.0	25.4		●		9.5			●	9.5	24.0
	1.5						9.5			●				●		
M16	2	24		14.5	±0.6	13.0	27.7		●		12.0		●	11.0	31.5	
	1.5						12.0			●		12.0		●		11.0
M18	2.5	27		16.0		14.0	31.2		●		12.0			●	12.0	45.2
	1.5						12.0			●		12.0		●	12.0	
M20	2.5	30		17.5	±0.8	15.4	34.6		●		14.0		●	13.5	61.4	
	1.5						14.0			●		12.0		●		
M22	2.5	32		19.5		17.2	37.0		●		12.5			●		74.3
	1.5						12.5			●				●		
M24	3	36		21.5	±1	18.8	41.6		●		16.0		●	16.5	108	
	2						16.0			●				●		
M27	3	41		24.0		21.2	47.3		●					●		159
	3									●				●		
M30	3.5	46		27.0	±1.5	24.0	53.1		●		21.0		●	21.0	226	
	3									●				●		
M33	3.5	50		29.5		26.5	57.7		●					●		287
	3									●				●		
M36	4	55		32.5	±2	29.5	63.5		●				●		393	
	3									●				●		
M39	4	60		35		31.8	69.3		●					●		509
	3									●				●		
M42	4.5	65		38	34.5	75.0		●					●		651	
	3								●				●			
M45	4.5	70		40	±2	36.0	80.8		●				●		794	
	3						36.5			●				●		
M48	5	75		42		38.0	86.5		●					●		972
	3									●				●		
M52	5	80		46	±2	42.0	92.4		●				●		1190	
	3									●				●		
M55	3	85		49		44.5	98.1		●					●		1360
	5.5									●				●		
M56	4	90		52	45.0	104.0			●				●		1410	
	5.5									●				●		
M60	5.5	90		52	47.5		104.0			●				●		1660
	4										●				●	
M64	6	95		54	50.0	110.0		●					●		1910	
	4								●				●			

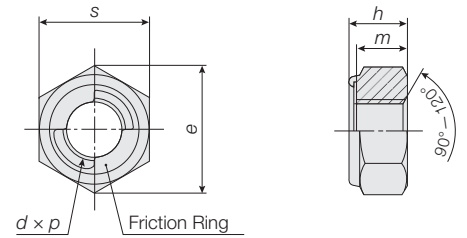
\* Thin type (h1) mentioned is available. \*Please confirm the shape on single or double chamfer.

\* Please check the stock condition of each size. \* The material also includes items with equivalent materials. \* Dimensions may change for improvement.

# Small Type U-NUT

## Features

- The width across flat is smaller than in the regular FUJILOK U-NUT.
- Nuts can be reduced in weight.
- Work space can be downsized.
- Tools can be used in common with other parts, improving work efficiency.



●: Available

Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body						SS400	S45C-H	SUS304	Unit Weight (g) Approx.		
Material of the Friction Ring						SUS301					
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Overall Height (h)		Thread Height (m) Approx.	Across Corners (e) Approx.	Double Chamfer		Double Chamfer	Double Chamfer
		Base	Tolerance	Base	Tolerance						
M 8	1.25	12	0 -0.25	7.3	±0.4	6.2	13.9	●	●	●	4.0
M10	1.25	14		8.5		7.3	16.2	●	●	●	5.9
	1.5			10.5		9.4	19.6	●	●	●	10.6
M12	1.25	17	0 -0.35	12.5	±0.5	11.0	21.9	●	●		15.4
	1.75							●	●		
M14	1.5	19						14.5	13.0	25.4	
	2		●	●							
M16	1.5	22	16.0	14.5	27.7	●			30.1		
	2		●								
M18	1.5	24	17.5	16.0	31.2	●			41.5		

\* Please check the stock condition of each size. \* The material also includes items with equivalent materials. \* Dimensions may change for improvement.

## Introduction of Applications



Motorcycle Side Kickstands



Tractors



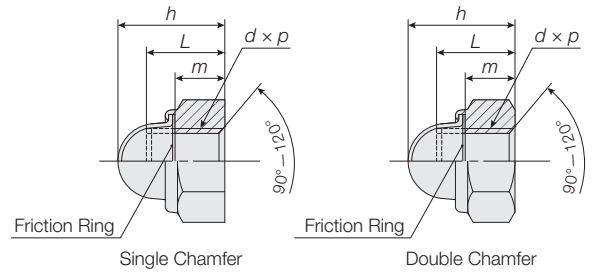
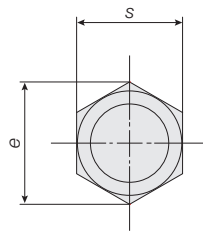
Brake Levers



# Cap Type U-NUT

## Features

- The appearance can be improved by covering the bolt with a cap.
- By covering the bolt, we can obtain excellent corrosion resistance and safety.



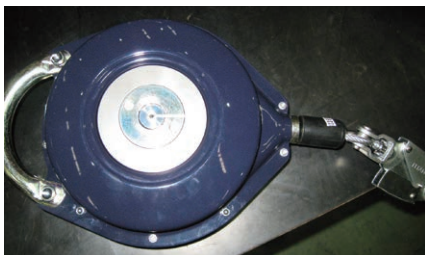
● : Available

Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body										SS400	SUS304	Unit Weight (g) Approx.	
Material of the Cap										SPCC	SUS304		
Material of the Friction Ring										SUS301	SUS301		
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Overall Height (h)		Thread Height (m) Approx.	Across Corners (e) Approx.	(L)		Single Chamfer	Double Chamfer		Single Chamfer
		Base	Tolerance	Base	Tolerance			MAX	MIN				
M 4	0.7	7	0 -0.2	7.2	±0.5	3.0	8.1	5.4	4.4		●	●	0.9
M 5	0.8	8		9.0	±0.6	3.9	9.2	7.4	5.5		●	●	1.4
M 6	1	10		10.5		4.2	11.5	7.9	6.2		●	●	2.5
M 8	1.25	12	0 -0.25	13.6	±0.8	6.2	13.9	10.8	8.6		●		4.6
		13		15.0						●	●	5.7	
		14		16.2						●		6.8	
M10	1.5	17		15.5		7.1	19.6	12.8	10.1		●	●	11.6
M12	1.25	19	0 -0.35	19.0	±1	9.0	21.9	15.8	12.5		●		16.6
	1.5									●	●		
	1.25									●			
M14	2									22	0 -0.35	24.5	±2
	1.5	●											
M16	2	24	0 -0.35	26.5	±2	13.0	27.7	20.8	17.0	●		●	36.2
	1.5									●			
M18	2.5	27	0 -0.35	28.5	±2	14.0	31.2	22.8	19.0	●			47.1
M20	2.5	30								15.4	34.6	24.8	
	1.5		●										

\* Please check the stock condition of each size. \* The material also includes items with equivalent materials. \* Dimensions may change for improvement.

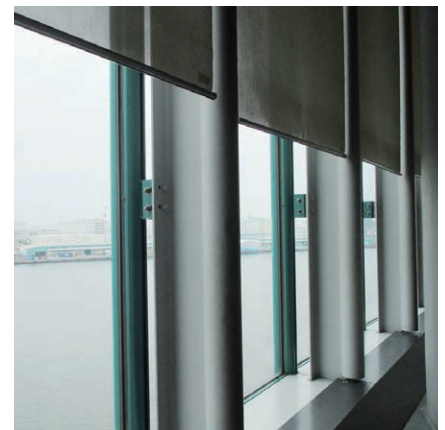
## Introduction of Applications



Fall Prevention Devices



Washing Machines

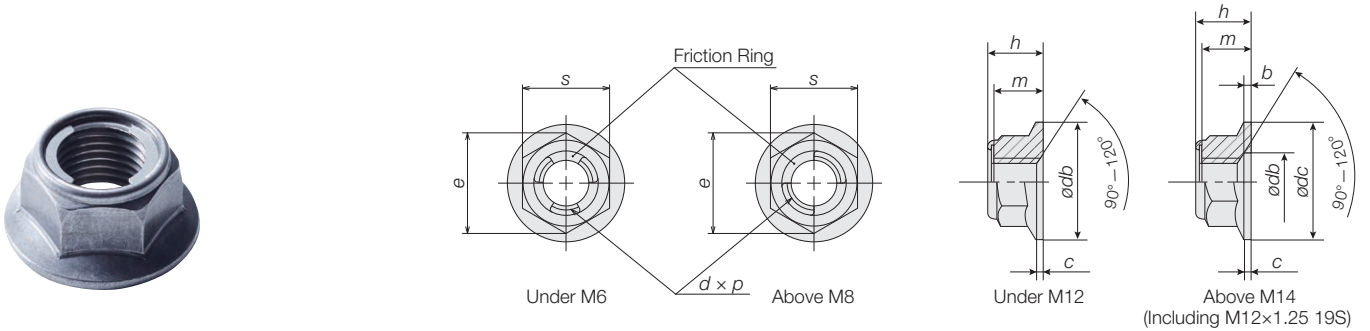


Exterior Panels

# Flange Type U-NUT

## Features

- No washer is needed so it can improve work efficiency.
- Can reduce the number of parts.
- Can achieve stable locking performance.
- The appearance can be improved by the FUJILOK U-NUT with integrated washer.



● : Available

Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body														SS400	S45C-H	Unit Weight (g) Approx.
Material of the Friction Ring														SUS301		
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Flange Diameter (ødc)		Overall Height (h)		Thread Height (m) Approx.	Across Corners (e) Approx.	Depth of Counter Bores (b)	Diameter of Counter Bores (øcb)		Flange Thickness (c) MIN	Property Class		
		Base	Tolerance	Base	Tolerance	Base	Tolerance				Base	Tolerance		6T	8T	
M 4	0.7	7	0 -0.2	10	0 -0.4	5.0	±0.3	4.2	8.1	-	-	-	0.6	●		1.3
M 5	0.8	8		11		6.0		5.3	9.2				1.0	●		2.0
M 6	1	10		13		6.9		6.0	11.5				1.2	●		3.5
M 8	1.25	12	0 -0.25	17	0 -0.4	8.5	±0.4	7.5	13.9	-	-	-	1.5	●	●	6.8
		14												●		8.3
M10	1.25	14	0 -0.25	19	0 -0.4	10.0	±0.4	8.8	16.2	-	-	-	1.7	●	●	9.2
		17												●		13.7
M12	1.25	17	0 -0.5	24	0 -0.5	12.5	±0.5	11.2	19.6	2	13	±0.3	1.4	●	●	17.4
		19												●		20.5
M14	1.5	19	0 -0.35	26	±0.5	15.0	±0.5	13.5	25.4	3	15	±0.3	1.6	●		22.6
		22												●		29.8
M16	1.5	22	0 -0.35	30	±0.5	16.5	±0.5	15.0	27.7	3	17	±0.3	3.0	●		35.7
		24												●	●	41.5
M18	1.5	24		32		18.0		16.5			20		3.0	●		41.7

\* Please check the stock condition of each size. \* The material also includes items with equivalent materials. \* Dimensions may change for improvement.

## Introduction of Applications



Engine Mounts



Rear Axles



Trimmers



Sprockets



Electric Wheelchairs

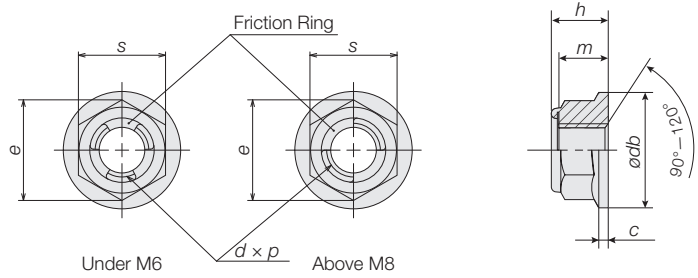


Muffler Brackets

# Flange Type U-NUT (stainless)

## Features

- No need washer, can be improved work efficiency.
- Can be reducing the number of parts.
- Can be achieved stable locking performance.
- Excellent corrosion resistance.
- The appearance can be improved by the FUJILOK U-NUT with integrated washer.
- Only coarse thread (pitch) is available.



Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body												SUS304		
Material of the Friction Ring												SUS301		
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Flange Diameter (ødc)		Overall Height (h)		Thread Height (m) Approx.	Across Corners (e) Approx.	Flange Thickness (c) MIN	Unit Weight (g) Approx.	Reference Tightening Torque (N·m)		
		Base	Tolerance	Base	Tolerance	Base	Tolerance					Proof Stress 300 N/mm <sup>2</sup>	Strength grade 50 210 N/mm <sup>2</sup>	Strength grade 70 450 N/mm <sup>2</sup>
M 6	1	10	0 -0.2	14.2	0 -0.4	6.9	±0.3	6.0	11.5	1.1	3.7	7.0	4.9	10.0
M 8	1.25	13	0 -0.25	17.5	±0.4	9.0	±0.4	7.8	15.0	1.2	7.7	17.0	12.0	25.0
M10	1.5	17	0 -0.35	23.0		11.0		9.6	19.6	1.5	16.7	33.0	23.0	50.0
M12	1.75	19	0 -0.35	26.5	0 -0.5	13.0	±0.4	11.5	21.9	1.8	24.8	58.0	41.0	88.0

\* Please check the stock condition of each size. \* The material also includes items with equivalent materials. \* Dimensions may change for improvement.

## Introduction of Applications



Tunnel Illumination Lamps



Safety Nets



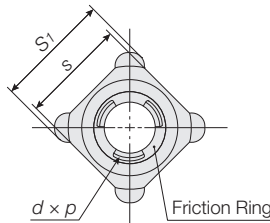
Snowmobiles



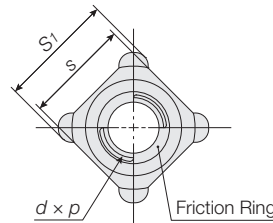
# Weld Type U-NUT

## Features

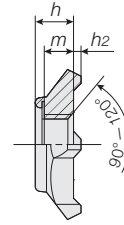
- Lock nuts for projection weld, screw a bolt into the FUJILOK U-NUT.



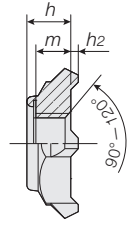
Under M6



Above M8



Under M8



Above M10

●: Available

Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body								SS400		Unit Weight (g) Approx.	
Material of the Friction Ring								SUS301			
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Outline (S1) Approx.	Overall Height (h)		Thread Height (m) Approx.	(h <sub>2</sub> )			Square Weld
		Base	Tolerance		Base	Tolerance		Base	Tolerance		
M 5	0.8	9	0	9.7	3.0	±0.3	2.3	1.0	0 -0.2	●	1.2
M 6	1	10	-0.36	11.0	4.0		3.1			●	1.9
M 8	1.25	14	0	15.4	5.2		4.0			●	4.8
M10	1.25	17	-0.43	18.9	8.0	±0.4	6.8	1.2	0 -0.2	●	11.5
M12	1.25			19.2	10.5		9.2			●	13.6

\* Please check the stock condition of each size. \* The material also includes items with equivalent of materials. \* Dimensions may change for improvement.

## Precautions for use

- Electrodes must not come in contact with the top and sides of the friction ring clamp.
  - The tolerance accuracy must be increased for the work piece to be welded, the non-conductor and the minor diameter of the internal thread.
  - The centers of the upper and lower electrodes and nonconductor must be aligned.
  - Water-cooled electrodes must be used for both the upper and lower electrodes.
- \* An instruction manual for the weld-type FUJILOK U-NUT projection jig is available.

## Introduction of Applications



Vehicle Arm Rests



Power Seat Units



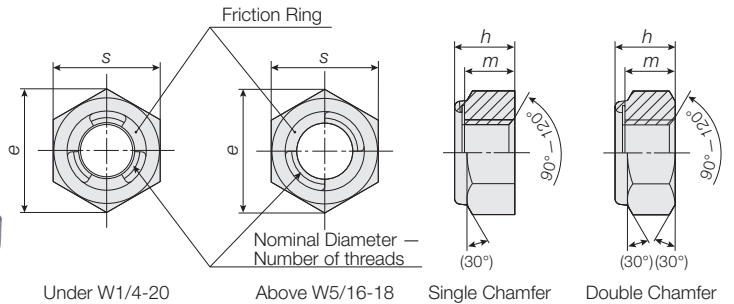
Motorcycle center stands



# Whitworth Thread Type U-NUT

## Features

- Whitworth's standard specifies a 55° thread angle. It is widely used for waterworks and construction.
- The British Standard Whitworth thread was the world's first national screw thread standard.



●: Available

Thread Accuracy: formerly JIS Class2 Unit: mm

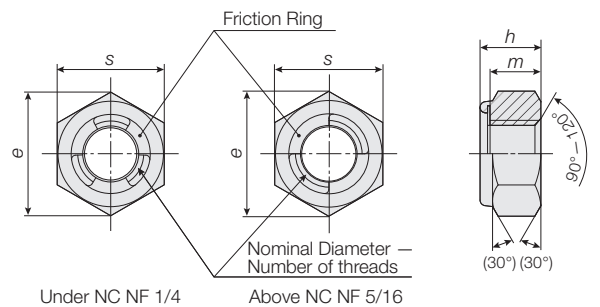
Material of the Nut Body					SS400	S45C-H	SUS304	Unit Weight (g) Approx.			
Material of the Friction Ring					SUS301						
Nominal Diameter — Number of threads	Width Across Flat (s)		Across Corners (e) Approx.	Overall Height (h)		Thread Height (m) Approx.	Single Chamfer		Double Chamfer	Double Chamfer	Single Chamfer
	Base	Tolerance		Base	Tolerance						
W3/16—24	9	0	10.4	4.1	±0.3	3.3	●				1.4
W1/4—20	10	-0.2	11.5	5.1		4.2		●			●
W5/16—18	14	0	16.2	7.3	±0.4	5.9	●				6.3
W3/8—16	17	-0.25	19.6	8.3		6.9	●	●	●	●	10.6
W7/16—14	19	0	21.9	10.0	±0.4	8.3	●				15.3
W1/2—12	21	-0.35	24.2	10.5		9.0	●	●	●	●	19.1
W5/8—11	26	0	30.0	14.8	±0.5	13.0	●		●	●	40.8
W3/4—10	32	-0.4	37.0	16.0		14.0			●	●	69.6
				18.1	±0.6	16.0	●				72.6
W7/8—9	35		40.4	18.5		15.8	●		●	●	91.0
W1"—8	41		47.3	22.5	20.0	●		●	●	154.1	

\* Please check the stock condition of each size. \* The material also includes items with equivalent materials. \* Dimensions may change for improvement.

# Unified Thread Type U-NUT

## Features

- Unified Threads specify a 60° thread angle. It is widely used for US aircraft and automotive.
- The Unified Thread Standard (UTS) is commonly used in the United States and Canada.



●: Available

Thread Accuracy: ISO2B (JIS2B) Unit: mm

Material of the Nut Body					SS400	S45C-H	SUS304	SS400	S45C-H	SUS304	Unit Weight (g) Approx.					
Material of the Friction Ring					SUS301											
Nominal Diameter — Number of threads	Width Across Flat (s)			Across Corners (e)		Overall Height (h)		Thread Height (m) Approx.	UNC			UNF				
	Coarse (UNC)	Fine (UNF)	Base	Max.	Min.	Max.	Min.		Base	Tolerance	Double Chamfer	Double Chamfer	Double Chamfer	Double Chamfer	Double Chamfer	Double Chamfer
#10—24	#10—32	9.52	9.52	9.20	10.99	10.50	3.9	±0.3	3.2	●		●	●		●	1.5
1/4—20	1/4—28	11.11	11.11	10.88	12.82	12.40	6.6		5.6	●		●	●		●	3.4
5/16—18	5/16—24	12.70	12.70	12.43	14.65	14.15	7.8	±0.4	6.8	●		●	●	●	●	5.2
3/8—16	3/8—24	14.28	14.28	14.00	16.51	15.96	9.5		8.3	●	●	●	●	●	●	7.5
7/16—14	7/16—20	17.46	17.46	17.15	20.16	19.51	10.9	±0.4	9.5	●		●	●	●	●	12.7
1/2—13	1/2—20	19.05	19.05	18.70	21.99	21.34	12.6		11.1	●	●	●	●	●	●	18.1
5/8—11	5/8—18	23.81	23.81	23.42	27.50	26.70	15.6	±0.6	13.9	●	●	●	●	●	●	35.9
3/4—10	3/4—16	28.57	28.57	27.64	32.99	31.50	18.1		16.3	●	●	●	●	●	●	56.1
7/8—9	7/8—14	33.33	33.33	32.24	38.50	36.76	21.6	±0.8	19.1	●	●	●	●			87.8
1"—8	1"—12	38.10	38.10	36.83	43.99	41.99	24.2		21.7	●	●	●	●			125.3

\* Please check the stock condition of each size. \* The material also includes items with equivalent materials. \* Dimensions may change for improvement.

# FUJILOK U-NUT Single Chamfer, Double Chamfer

## Tightening torque table for reference

■ The tightening torques in the table below are reference values based on the bolt surface treatment and strength grade.

The most suitable tightening torque varies depending on the customer.

■ The FUJILOK U-NUT materials which can be combined also include equivalent parts made of each material.

■ "O" and "x" in the table below indicate the combinations where the reference tightening torque can be applied.

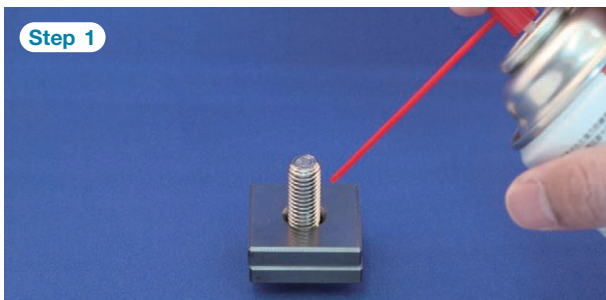
■ If you have any questions or concerns about unlisted sizes or materials or the conditions of use, please contact us.

Unit: N·m {kgf·cm}

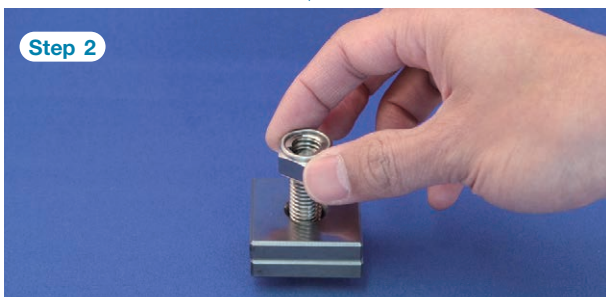
Surface Treatment		Plain			Zinc plated			Hot dip galv.	Plain		
Strength Grade		4.8	8.8	10.9	4.8	8.8	10.9	4.8	Stainless Steel	50	70
Combination of FUJILOK U-NUT	SS400	○	x	x	○	x	x	○	Stainless Steel (Proof Stress 300 N/mm <sup>2</sup> {30.6 kgf/mm <sup>2</sup> })	50 (Proof Stress 210 N/mm <sup>2</sup> {21.4 kgf/mm <sup>2</sup> })	70 (Proof Stress 450 N/mm <sup>2</sup> {45.9 kgf/mm <sup>2</sup> })
	S45C-H	○	○	x	○	○	x	x			
	SCM435-H	○	○	○	○	○	○	x			
	SUS304	x	x	x	x	x	x	x			
M 3 × 0.5	0.8 {8}	—	—	—	0.9 {9.5}	—	—	—	0.8 {8}	0.6 {6}	1.2 {12}
M 4 × 0.7	1.8 {18}	—	—	—	2.2 {22}	—	—	—	1.9 {19}	1.3 {14}	2.8 {29}
M 5 × 0.8	3.7 {38}	7.4 {75}	10 {100}	—	4.4 {45}	8.7 {89}	12 {120}	—	3.8 {39}	2.7 {27}	5.8 {59}
M 6 × 1	6.3 {64}	13 {130}	18 {180}	—	7.4 {75}	15 {150}	21 {210}	—	6.5 {66}	4.6 {46}	9.8 {100}
M 8 × 1.25	15 {150}	30 {310}	43 {440}	—	18 {180}	36 {370}	51 {520}	23 {230}	16 {160}	11 {113}	24 {240}
M 10 × 1.5	30 {310}	60 {610}	85 {870}	—	36 {370}	71 {720}	100 {1000}	45 {460}	31 {320}	22 {223}	47 {480}
M 12 × 1.75	53 {540}	105 {1050}	145 {1500}	—	62 {630}	125 {1250}	175 {1800}	79 {810}	55 {560}	38 {390}	82 {840}
M 14 × 2	84 {860}	165 {1700}	235 {2400}	—	99 {1000}	200 {2050}	280 {2850}	125 {1250}	87 {890}	61 {620}	130 {1350}
M 16 × 2	130 {1350}	260 {2650}	365 {3700}	—	155 {1600}	310 {3150}	435 {4450}	195 {2000}	135 {1400}	95 {970}	205 {2090}
M 18 × 2.5	180 {1850}	360 {3650}	510 {5200}	—	210 {2150}	425 {4350}	600 {6100}	270 {2750}	185 {1900}	130 {1350}	—
M 20 × 2.5	255 {2600}	510 {5200}	720 {7350}	—	300 {3050}	600 {6100}	850 {8650}	385 {3950}	265 {2700}	185 {1900}	—
M 22 × 2.5	345 {3500}	690 {7050}	970 {9900}	—	410 {4200}	820 {8350}	1150 {11700}	520 {5300}	360 {3650}	250 {2600}	—
M 24 × 3	440 {4500}	880 {8950}	1240 {12600}	—	520 {5300}	1040 {10600}	1470 {15000}	660 {6750}	455 {4650}	320 {3300}	—
M 27 × 3	640 {6550}	1290 {13200}	1810 {18500}	—	760 {7750}	1530 {15600}	2150 {21900}	970 {9900}	670 {6850}	470 {4800}	—
M 30 × 3.5	880 {8950}	1750 {17800}	2460 {25100}	—	1040 {10600}	2070 {21100}	2920 {29800}	1320 {13500}	910 {9300}	635 {6500}	—
M 33 × 3.5	1190 {12100}	2380 {24300}	3350 {34200}	—	1410 {14400}	2820 {28800}	3970 {40500}	1800 {18400}	1240 {12600}	865 {8800}	—
M 36 × 4	1530 {15600}	3060 {31200}	4300 {43800}	—	1810 {18500}	3620 {36900}	5100 {52000}	2310 {23600}	1590 {16200}	1110 {11300}	—
M 39 × 4	1980 {20200}	3960 {40400}	5570 {56800}	—	2340 {23900}	4690 {47800}	6590 {67200}	2980 {30400}	2060 {21000}	1440 {14700}	—
M 42 × 4.5	2450 {25000}	4890 {49900}	6880 {70200}	—	2900 {29600}	5800 {59100}	8150 {83100}	3690 {37600}	2540 {25900}	1780 {18100}	—
M 45 × 4.5	3070 {31300}	6130 {62500}	8620 {87900}	—	3630 {37000}	7260 {74000}	10200 {104000}	4620 {47100}	3180 {32400}	2230 {22700}	—
M 48 × 5	3670 {37400}	7340 {74800}	10300 {105000}	—	4350 {44400}	8690 {88600}	12200 {124000}	5530 {56400}	3810 {38900}	2670 {27200}	—
M 52 × 5	4760 {48500}	9520 {97100}	13400 {137000}	—	5640 {57500}	11300 {115000}	15850 {162000}	7180 {73200}	4940 {50400}	3460 {35300}	—
M 56 × 5.5	5910 {60300}	11800 {120000}	16650 {170000}	—	7000 {71400}	14000 {143000}	19700 {201000}	8910 {90900}	6140 {62600}	4300 {43800}	—
M 60 × 5.5	7360 {75100}	14750 {150000}	20700 {211000}	—	8720 {88900}	17450 {178000}	24550 {250000}	11100 {113000}	7650 {78000}	5350 {54600}	—
M 64 × 6	8920 {91000}	17850 {182000}	25100 {256000}	—	10550 {108000}	21150 {216000}	29700 {303000}	13450 {137000}	9260 {94400}	6480 {66100}	—

# U-NUT Installation procedure

## Installation using a spanner



Insert the bolt to a tightening element. Use bolts with a chamfered tip with thread accuracy of ISO6g. Use a lubricant if there is the risk of seizure or galling.

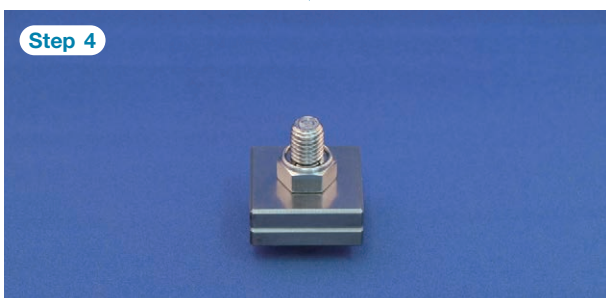


Manually screw the nut on until the friction ring touches the tip of the thread portion of the bolt.

\* The nut cannot be installed from the friction ring side.



Tighten the nut with a tightening tool such as a spanner or impact wrench. Please refer to the reference tightening torque table for tightening torque. If it is to be used under severe conditions or with low axial tension, consult us.



Check that at least two full bolt threads protrude beyond the friction ring. When removing, unscrew the nut with a tightening tool such as a spanner until the friction ring is detached from the tip of the threaded portion of the bolt. After that, unscrew the nut manually.

## Installation using an impact wrench



Insert the bolt through the materials to be fastened. Check that the bolt thread accuracy is ISO6g and that the thread tip has been chamfered. Use a lubricant if there is the risk of seizure or galling.



Tighten by hand until the friction ring comes in contact with the tip of the thread portion of the bolt, and then use the impact wrench.



Tighten slowly from directly above the bolt. Seizure may occur if the bolt is angled or if it is tightened at high speed.

### **Precaution**

Do not insert the nut into the impact wrench socket.





## That meets the JIS B 1056 Prevailing torque type steel nuts standard

The GU-NUT adopted much wider 270° friction ring to clear the locking performance standard defined in JIS B 1056.

We improved the locking performance and sought increased safety and peace of mind.

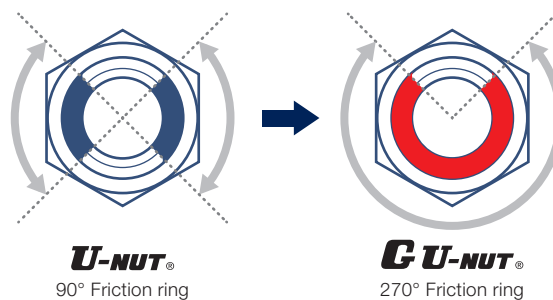


### Features

- In accordance with JIS B 1056 "Prevailing torque type steel nuts".
- Improved performance by expanding the friction ring's shape to 270°.
- Improved locking performance due to being a high torque type.
- Quick coming off is prevented even with a decreasing axial force.

### Use of the GU-NUT

- Fixing vehicle height adjustment levers and stays.
- Fixing conveyers and chain.
- Use under conditions of decreasing axial force.

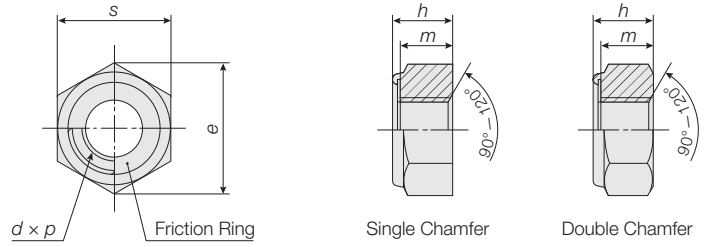


### Introduction of Applications



Mounting Brackets for LCD TVs





●: Available

Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body						SS400					
Material of the Friction Ring						SUS301					
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Overall Height (h)		Thread Height (m) Approx.	Across Corners (e) Approx.	Single Chamfer	Single Chamfer	Unit Weight (g) Approx.	Reference Tightening Torque (N·m)
		Base	Tolerance	Base	Tolerance						
M 8	1.25	13	0	7.3	±0.4	6.1	15.0		●	5.1	18
M10	1.5	17	-0.25	8.3		7.1	19.6		●	10.0	36
M12	1.75	19	0	10.5		9.0	21.9		●	15.2	62
M14	2	22	-0.35	12.2	±0.5	10.4	25.4	●		24.0	99
M16	2	24		14.5		12.7	27.7	●		31.5	155

\* Please check the stock condition of each size. \* Reference tightening torque values are applied with when the bolt meets the following conditions: Low carbon steel, trivalent yellow zinc plated.  
\* The material also includes items with equivalent materials.

## Compare values with the JIS B 1056 (Prevailing torque type steel nuts)

All prevailing torque values are confirmed to exceed to the standard value of prevailing torque type steel nuts in JIS B 1056.

### Test result

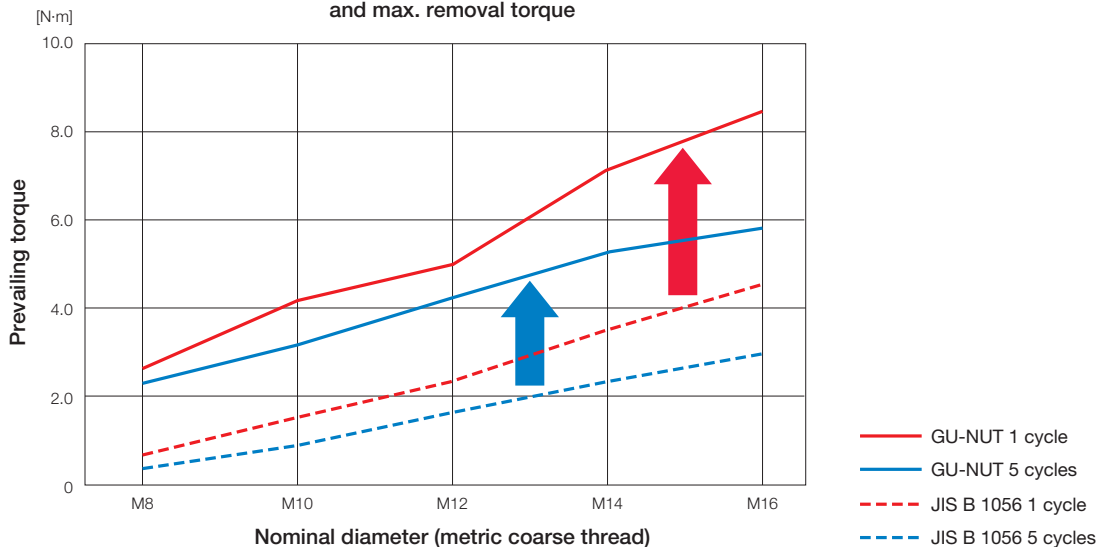
Nominal Diameter	1st removal		5th removal	
	GU-NUT	JIS B 1056 (Min.)	GU-NUT	JIS B 1056 (Min.)
M 8	2.78	0.85	2.40	0.60
M10	4.12	1.50	3.08	1.00
M12	5.00	2.30	4.12	1.60
M14	7.10	3.30	5.30	2.30
M16	8.60	4.50	5.86	3.00

\* GU-NUT & BOLT -Material: SS400 or equivalent -surface treatment: trivalent yellow zinc plated

**Reference:** Hot Dip Galvanized U-NUT has cleared the prevailing torque value specified in JIS B 1056.

**High prevailing torque type of stainless steel products with 270° friction ring are available.**

Standard value of prevailing torque type steel nuts and max. removal torque



# FSW U-NUT®

Locking function + spinning washer = improved work efficiency

The FSW U-NUT is created for to meet requests from various customers, we combined the FUJILOK U-NUT with a free spinning washer.

Being a free spinning washer, the mating surface is not damaged.

The FSW U-NUT enables reduced assembling operation time and improves efficiency.

This one-part combination means reduced inventory and cost control.



## Features

- It's capable of reducing the total cost of the application.
- It simplifies the operations for the application.
- It can reduce the number of parts.
- It can used with anchor bolts.
- It can protect the surface treatment of the object to be fastened.
- Available for loose holes and non-threaded holes.
- Product conforms to the NAS3350 vibration test.

## Use of the FSW U-NUT

- Locking measure for anchor bolts.
- Fastening supporting metal parts of various cables.
- Installation work for tunnel lighting and pipe supports.

## Introduction of Applications

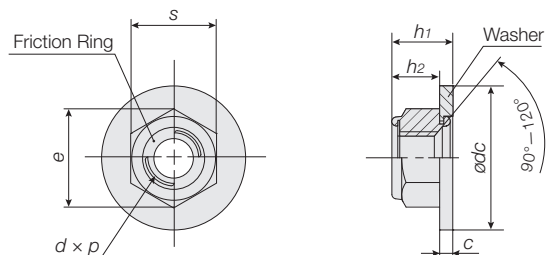


Guard Net for Construction Work



Pipe Bracket for Construction Work

### Specification: SS400 · Hot dip galvanizing

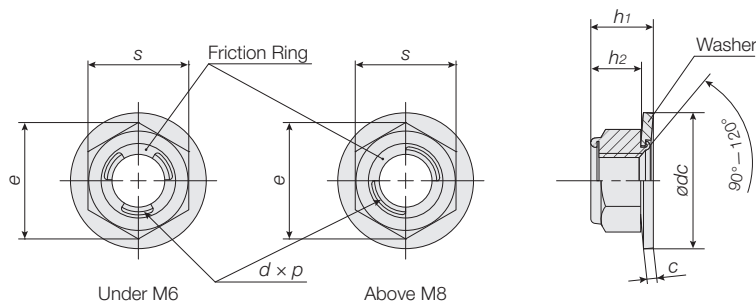


Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body												SS400		
Material of the Friction Ring												SUS301		
Material of the Washer												SPCC		
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Flange Diameter (phi dc)		Overall Height (h1)		U-NUT Height (h2) Approx.	Across Corners (e) Approx.	Washer Thickness (c)	Unit Weight (g) Approx.	Reference Tightening Torque (N·m)		
		Base	Tolerance	Base	Tolerance	Base	Tolerance					Bolt Strength Grade 4.8		
												Surface treatment: hot dip galvanizing		
M 8	1.25	13	0	22	0	9.3		7.3	15.0	2.0	9.2	23		
M10	1.5	17	-0.25	26	-0.52	10.8	+1.0	8.3	19.6	2.5	17.6	45		
M12	1.75	19	0	32	0	13.5	-0.5	10.5	21.9	3.0	29.3	79		
M16	2	24	-0.35	38	-0.62	17.5		14.5	27.7	3.0	50.6	195		

\* Please check the stock condition of each size. \* Dimensions may change for improvement. \* Other materials and sizes can be quoted upon request.

### Specification: SUS304 · FUN COAT®



Thread Accuracy: ISO6H (JIS6H) Unit: mm

Material of the Nut Body												SUS304		
Material of the Friction Ring												SUS301		
Material of the Washer												SUS304		
Nominal Diameter (d)	Pitch (p)	Width Across Flat (s)		Flange Diameter (phi dc)		Overall Height (h1)		U-NUT Height (h2) Approx.	Across Corners (e) Approx.	Washer Thickness (c)	Unit Weight (g) Approx.	Reference Tightening Torque (N·m)		
		Base	Tolerance	Base	Tolerance	Base	Tolerance					Proof Stress 300 N/mm²	Strength Grade 50 210 N/mm²	Strength Grade 70 450 N/mm²
M 6	1	10	0 -0.2	17	0 -0.4	6.5	±0.4	5.1	11.5	1.0	3.5	6.5	4.6	9.8
M 8	1.25	13	0	20		9.2		7.3	15.0	1.4	7.9	16	11	24
M10	1.5	17	-0.25	24	0 -0.4	10.6	±0.5	8.3	19.6	1.8	14.6	31	22	47
M12	1.75	19	0	28		13.5		10.5	21.9	2.3	21.5	55	38	82
M16	2	24	-0.35	34	0 -0.5	18	±0.6	14.5	27.7	2.5	45.6	135	95	205

\* FUN COAT is Anti-Seize Lubricant. \* Please check the stock condition of each size. \* Dimensions may change for improvement. \* Other materials and sizes can be quoted upon request.

## Lock nut + anti-theft, anti-tamper functions

We have many inquiries about the SU-NUT for protecting equipment of key facilities all around the world including Mega Solar equipment that is being manufactured in various areas in Japan.

The SU-NUT has a special design. It not only heightens the visual crime prevention deterrent effect, but also a special socket is needed as ordinary sockets or spanners can't remove or install it. We control of the exclusive tool, and lend it to customers for free after entering into a memorandum of understanding.

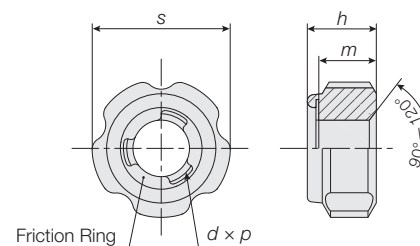


### Features

- Protect your valuable company property.
- It can be used by replacing your current nuts.
- Function and quality is the same as the FUJILOK U-NUT.
- It's easy to use and the only special tool required is the socket.

### Use of the SU-NUT

- Used for anti-theft in areas such as solar panels, steel towers, road signs, guardrails, marine equipment, outdoor signboards, vending machines, surveillance cameras.
- Used for anti-tamper in areas such as nameplates (sign boards), amusement equipment, public facilities (toilets/handrails), Hotel equipment (lighting equipment).





Thread Accuracy: ISO6H (JIS6H) Unit: mm


Material of the Nut Body						SUS304				
Material of the Friction Ring						SUS301				
Nominal Diameter (d)	Pitch (p)	Overall Height (h)		Across flat (s)		Thread Height (m) Approx.	Unit Weight (g) Approx.	Reference Tightening Torque (N·m)		
		Base	Tolerance	Base	Tolerance			Bolt		
								Proof Stress 300 N/mm <sup>2</sup>	Strength Grade 50 210 N/mm <sup>2</sup>	Strength Grade 70 450 N/mm <sup>2</sup>
M6	1	6	±0.3	12	0 -0.2	5	3	6.5	4.6	9.8

\* Please check the stock condition of each size. \* Dimensions may change for improvement. \* Other materials and size can be quoted upon request  
\* The material also includes items with equivalent material

### SU-NUT Installation procedure

- 

As it's special shaped for anti-theft, special socket is needed for tightening. Ordinary sockets or spanners can't remove or install it. Manually screw it on until the friction ring touched the tip of the threaded portion of the bolt.
- 

Prepare the special socket
- 

Ratchet wrench or impact wrench also can be used with special tool. For controlling the tightening torque, use preset torque wrench or digital ratchet.

### Introduction of Applications



Solar power generation (Kanuma Solar farm, Tochigi)



Solar power generation (Otagawa solar farm, Tochigi)



# Precautions for Use

The FUJILOK U-NUT series is especially used in critical and extremely important applications.



Use bolts with a chamfered tip with ISO6g thread accuracy.



Please refer to the tightening torque table when tightening.



Use lubricant where problems such as scorching or seizing may occur during installation and removal of a nut.



For full locking, ensure that two full bolt threads protrude beyond the friction ring at the top of the FUJILOK U-NUT.



When welding a nut, pay attention to the effect of heat and splattering on the friction ring and thread areas.



Consult us before using the nut if the bolt thread is machined with key ways or pin holes.



The nut cannot be installed from the friction ring side.



Stop using the nut if excessive deformation or another fault is found on the friction ring and the clamp.



If you are using the product under severe conditions or with a low axial tension, consult us.



"FUJILOK U-NUT" is a registered trademark of Fuji Seimitsu.

There are products in the market which have shapes and friction rings that are similar to the FUJILOK U-NUT, and it can be difficult to tell them apart.











However the quality and performance of these products are different, and some customers have been inconvenienced after mistakenly selecting the wrong brand.

# Variations

The experience that we have accumulated in many different areas, through all kinds of troubles, and for all kinds of requests, have enabled us to grow into a company of unrivaled lock nut professionals.

Sizes, thread types, shapes, materials, surface treatment, and manufacturing methods

We will study the nearly limitless combinations of these elements and filter them based on our experience as professionals in order to offer the optimal FUJILOK U-NUT series.

Type of Thread	Metric Thread *	Whitworth Thread	Unified Thread		
Shape	Single Chamfer 	Double Chamfer 	Thin Type 	Small Type 	Flange Type 
Material	SS400 Equivalent	S45C-H Equivalent	SCM435-H	SUS304 Equivalent *	SUS316L *
Surface Treatment	Trivalent Yellow Zinc 	Trivalent Black Zinc 	Trivalent White Zinc 	Hexavalent Yellow Zinc 	Zinc-Nickel Alloy Plating +Anti-rust Coating 

We provide the most appropriate FUJILOK U-NUT series



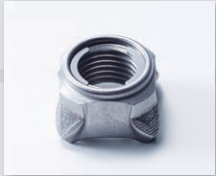
\* For left-handed thread, consult us.

Cap Type

Weld Type

FSW U-NUT

SU-NUT



For other specialty shapes, consult us.

Brass

Titanium

\* Lubricant Coating for Stainless  
FUN COAT® (common)  
Defric Coating

For other materials, consult us.

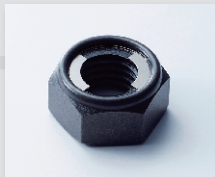
Hot Dip Galvanizing \*

Hot-dip  
Zinc-Aluminum Alloy  
Galvanized Coatings \*

Black Oxide Coating

Lubrite Treatment

Others  
• Geomet  
• Ag plating



\* Available above M8  
For other specialty coatings, consult us.

from a combination of infinite elements

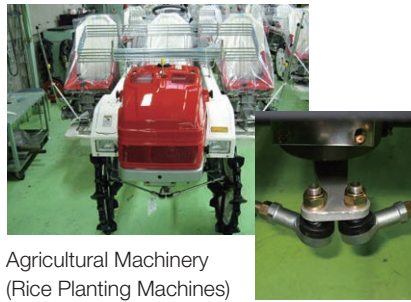


Experience

# Introduction of Other Applications



Welfare Equipment  
(Wheelchairs)



Agricultural Machinery  
(Rice Planting Machines)



Playground Equipment  
(Slides)



Construction  
(Exterior Panels)



Electricity  
(Power Transmission Tower/Laos)



Railways (Rails)



Construction Machinery  
(Attachment)



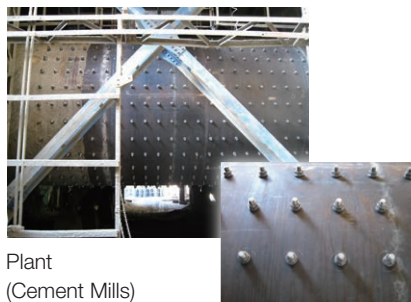
Special-Purpose  
Vehicles (Wing Car)



Communication Devices  
(Cable Racks)



Machine Tools  
(Couplings)



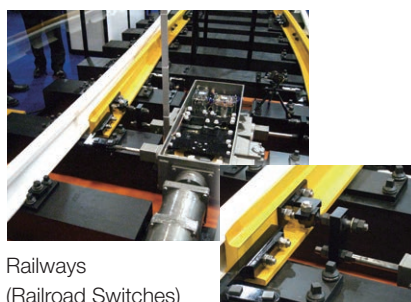
Plant  
(Cement Mills)



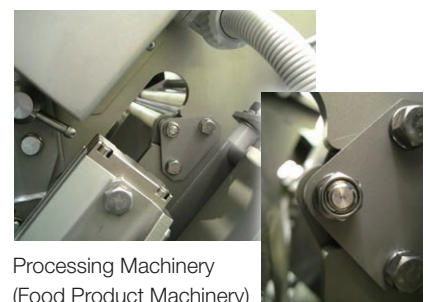
Materials  
(Manhole Covers)



Playground Equipment  
(Ropeway)



Railways  
(Railroad Switches)

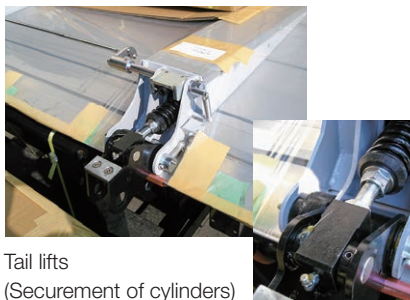


Processing Machinery  
(Food Product Machinery)

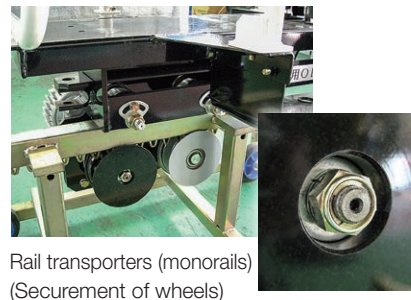




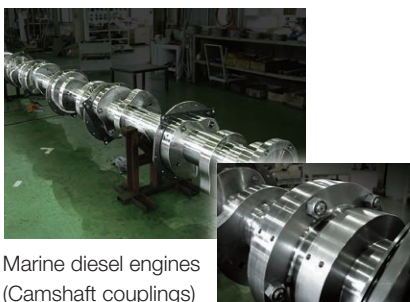
Motorcycles  
(Engine hangers)



Tail lifts  
(Securement of cylinders)



Rail transporters (monorails)  
(Securement of wheels)



Marine diesel engines  
(Camshaft couplings)



Noise barrier walls  
(Anchor bolts for mounting noise barrier wall supports)



Child seats  
(Securement of seat rotation parts)

## Products Sold only in Japan

### **BLU-NUT®**

Locking function + one-side fastening method



The BLU-NUT that added the FUJILOK U-NUT's functions to blind nuts. In the past we used the FUJILOK U-NUT as a back nut by welding it to a square washer, however this new method allows a much quicker application. The BLU-NUT will not only improve the application quality but be much more cost effective.

### **CLIP U-NUT®**

Combine with the FUJILOK U-NUT and metal clip for one-side fastening method



The CLIP U-NUT can simplify the operation, especially in areas with limited access and a confined space. By simply making a hole in the mating component (no welding of nut necessary) and applying the CLIP U-NUT, considerable time is saved and overall reduced cost of the application.

### **FUJILOK BOLT N**

Reliable locking function is adopted into the bolt



FUJILOK BOLT N has a high quality locking function. By using "FUJILOK BOLT N", you will be sure the application is tight and secure.

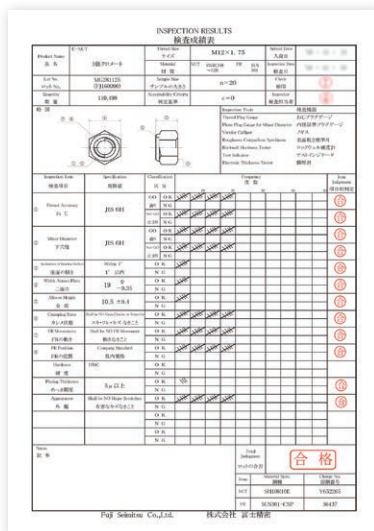
Contact us: [u-town-overseas@fun.co.jp](mailto:u-town-overseas@fun.co.jp)

# Customer Support System

- Various certificates such as material certificates and test reports are available.
- Various environment-related certificates are available.
- Our testing machines allow us answer your technical questions.
- CAD data is downloadable from our web-site.
- We arrange product briefings upon request.
- Specify the Part No. when placing orders.
- Consult us when you need a special item or help for other technical questions.

[u-town-overseas@fun.co.jp](mailto:u-town-overseas@fun.co.jp)

## Certification examples



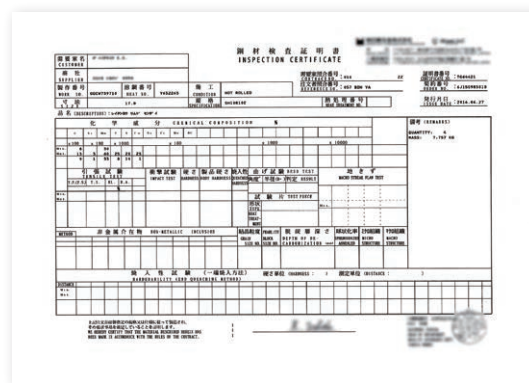
INSPECTION RESULTS  
検査成績書

Material Name: MIS-1.75  
Lot No.: 27000000  
Drawing No.: 1.00.000

検査項目	規格	検査結果	判定
寸法	JIS S45C	合格	○
機械的性質	JIS S45C	合格	○
化学成分	JIS S45C	合格	○
表面状態	JIS S45C	合格	○
組織	JIS S45C	合格	○
引張強さ	JIS S45C	合格	○
降伏強さ	JIS S45C	合格	○
伸び	JIS S45C	合格	○
断面収縮率	JIS S45C	合格	○
硬度	JIS S45C	合格	○
引張強さ	JIS S45C	合格	○
降伏強さ	JIS S45C	合格	○
伸び	JIS S45C	合格	○
断面収縮率	JIS S45C	合格	○
硬度	JIS S45C	合格	○

検査結果: 合格

検査員: 佐藤 健一



材料検査証明書  
INSPECTION CERTIFICATE

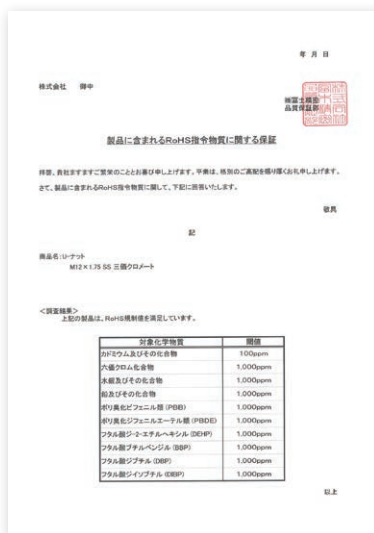
検査番号: 27000000  
検査品名: MIS-1.75  
検査数量: 1000個

項目	規格	検査結果	判定
寸法	JIS S45C	合格	○
機械的性質	JIS S45C	合格	○
化学成分	JIS S45C	合格	○
表面状態	JIS S45C	合格	○
組織	JIS S45C	合格	○
引張強さ	JIS S45C	合格	○
降伏強さ	JIS S45C	合格	○
伸び	JIS S45C	合格	○
断面収縮率	JIS S45C	合格	○
硬度	JIS S45C	合格	○

検査員: 佐藤 健一

Material certificate

## Inspection results



株式会社 関中

製品に含まれるRoHS指令対象物質に関する保証

保証書

対象化学物質	検出濃度
鉛(Pb)	1,000ppm
六価クロム化合物	1,000ppm
水銀及びその化合物	1,000ppm
ポリ臭化フェニルエーテル (PBDE)	1,000ppm
ポリ臭化ジフェニルエーテル (DPPE)	1,000ppm
ポリ臭化ジフェニルエーテル (DPPE)	1,000ppm
ポリ臭化ジフェニルエーテル (DPPE)	1,000ppm
ポリ臭化ジフェニルエーテル (DPPE)	1,000ppm
ポリ臭化ジフェニルエーテル (DPPE)	1,000ppm

以上

RoHS certificate



溶融亜鉛めっき試験成績書

株式会社 富士精密 関中

試験依頼者: 株式会社 関中  
工場名: 関中工場  
製品名: LPP2  
めっき日: 平成30年 8月7日  
試験月日: 平成30年 8月7日

試験項目	規格	試験結果
膜厚	JIS H 4001 2.0	合格
膜厚	JIS H 4001 2.0	合格
膜厚	JIS H 4001 2.0	合格
膜厚	JIS H 4001 2.0	合格
膜厚	JIS H 4001 2.0	合格

試験員: 佐藤 健一

Inspection test results for hot dip galvanizing

# Promising Safety and Security through our Technological Capabilities

Numerous industries enrich human lives.

In order for an industry to contribute to society, it is essential that it not only provide convenience, but also that it be trusted for safety.

Bolts and nuts - Functional parts that are at the heart of the industrial world

Our mission is to achieve increases constantly in the safety of these parts and create an unshaken link between society and security. Fuji Seimitsu provides the dependable safety and security that are the foundation of industry.

## Technical Development

We utilize a range of test equipment in order to develop new products, improve our main products, and answer the technical questions of our customers.

We accurately identify wide-ranging needs and work to improve our technical level on a daily basis in order to achieve our corporate principle of proposing and sharing results that satisfy customer requirements.

## Quality Control

The quality of all products is controlled according to JIS standards, ISO standards, and other public standards, as well as by strict quality control based on our own standards.

In addition to complete control of dimensions and shapes based on design drawings, we perform careful checks into details such as plating conditions and surface scratches. Quality control is the key to protecting the Fuji Seimitsu brand.

## Production Control

All Fuji Seimitsu products are manufactured by our original specially-designed machines. Everything from this manufacturing equipment to the layout of facilities and equipment, line design, and tools is designed and produced by our company.

This allows us to achieve a high level of manufacturing quality that other companies cannot match.

### ISO 9001 Certification



Certificate number 00064-1999-AQ-KOB-RvA/JAB  
 Scope of Certification Design, Development and Manufacture of Prevailing Torque Type Lock Nut FUJILOK U-NUT  
 Location Head Office, Tokyo Branch, Fukuoka Office, Hiroshima Product Center, TAIWAN FUJI SEIMITSU MFG CO.LTD., PT. FUJI SEIMITSU INDONESIA  
 Certification Authority DNV GL BUSINESS ASSURANCE JAPAN K.K.  
 Certification Authority RvA (Raad voor Accreditatie in Netherlands) JAB (Japan Accreditation Board)  
 Initial Certification Date 12/3/1999

### ISO 14001 Certification



Certificate number 02628-2012-AE-KOB-RvA/JAB  
 Scope of Certification Design, Development and Manufacture of Prevailing Torque Type Lock Nut FUJILOK U-NUT  
 Location Head Office, Tokyo Branch, Fukuoka Office  
 Certification Authority DNV GL BUSINESS ASSURANCE JAPAN K.K.  
 Certification Authority RvA (Raad voor Accreditatie in Netherlands) JAB (Japan Accreditation Board)  
 Initial Certification Date 11/20/2012

### NETIS



NETIS is an acronym for "New Technology Information System" and is a database for utilization of new technologies, which is operated by the Ministry of Land, Infrastructure, Transport and Tourism of Japan. This database makes it possible for anyone to view technical information over the internet.

## Message from the President

---



---

Fuji Seimitsu developed and began marketing the FUJILOK U-NUT® patented lock nut in 1962. The FUJILOK U-NUT® prevailing torque type lock nut brought about a major revolution in preventing the loosening of bolts and nuts, and shocked many industries at that time. This marked the beginning of our company's history. More than 50 years have passed since our founding, and we have remained continually dedicated to creating products together with our customers, carrying out ceaseless technical innovations, and working to improve the quality. As a result, we have earned the trust of our customers and users for providing safety and security.

The FUJILOK U-NUT®, FINE U-NUT® brand will continue striving to meet customer expectations by providing trusted products, quality, technologies, and services that will contribute to the growth of industries not only in Japan but also in Southeast Asia and the world. As the top manufacturer of lock nuts, we will remain dedicated to our "customer first" philosophy, and believe that our flexible systems which were developed from the customers' perspective will lead us to new possibilities.

In the future, we will continue to fulfill our corporate social responsibilities (CSR) and contribute to the advancement of society, and at the same time we will proceed with manufacturing to satisfy a greater number of customers under our corporate slogan, "Unshaken Quality for the Future". I hope we will enjoy everyone's continued support and guidance in the future.

President Masataka Wada

---



# Company Profile

Company Name	FUJI SEIMITSU Co., Ltd
Foundation	February 1962
Incorporation of the Company	September 1970
Capital	59 million yen
Number of employees	91
Business Items	FUJILOK U-NUT, GU-NUT, FINE U-NUT, TWIN FU-NUT, CLIP U-NUT, SU-NUT, BLU-NUT, FSW U-NUT, FUJI LOCK BOLT N etc.
URL	<a href="https://www.fun.co.jp">https://www.fun.co.jp</a>
History	<p>1962 Feb. Founding of Fuji Seimitsu Manufacturing. Development of the patented FUJILOK U-NUT lock nut and start of sales.</p> <p>1970 Sep. Established Fuji Seimitsu Manufacturing Co., Ltd.</p> <p>1974 Apr. Licensed in accordance with Japanese National Railways standards.</p> <p>1976 Feb. The first President, Takeji Wada assumed the position of Chairman Hiroyuki Wada assumed the position of President. May Obtained patent for "FUJILOK U-NUT" in Englad and Germany</p> <p>1981 May Development of the lock nut for use with bearings, FINE U-NUT and started sales. Oct. Obtained patent for "FINE U-NUT" in Germany and Sweden</p> <p>1984 Oct. Trademark registration of FINE U-NUT®</p> <p>1989 Apr. Establishment of Taiwan Fuji Seimitsu Mfg. Co., Ltd.</p> <p>1999 Apr. Company name changed to Fuji Seimitsu Co., Ltd. Dec. Acquisition of ISO9000 certification</p> <p>2000 Dec. Establishment of PT. Fuji Seimitsu Indonesia.</p> <p>2004 May Acquisition of ISO9000 certification by Taiwan Fuji Seimitsu Mfg. Co., Ltd. Acquisition of ISO9000 certification by PT. Fuji Seimitsu Indonesia.</p> <p>2012 Nov. Acquisition of ISO14001:2004 certification.</p> <p>2014 Mar Trademark registration of FUJILOK U-NUT®</p> <p>2016 Apr. Hiroyuki Wada assumed the position of Chairman. Masataka Wada assumed the position of President.</p> <p>2019 May Trademark registration of GU-NUT® Trademark registration of TWIN FU-NUT®</p>



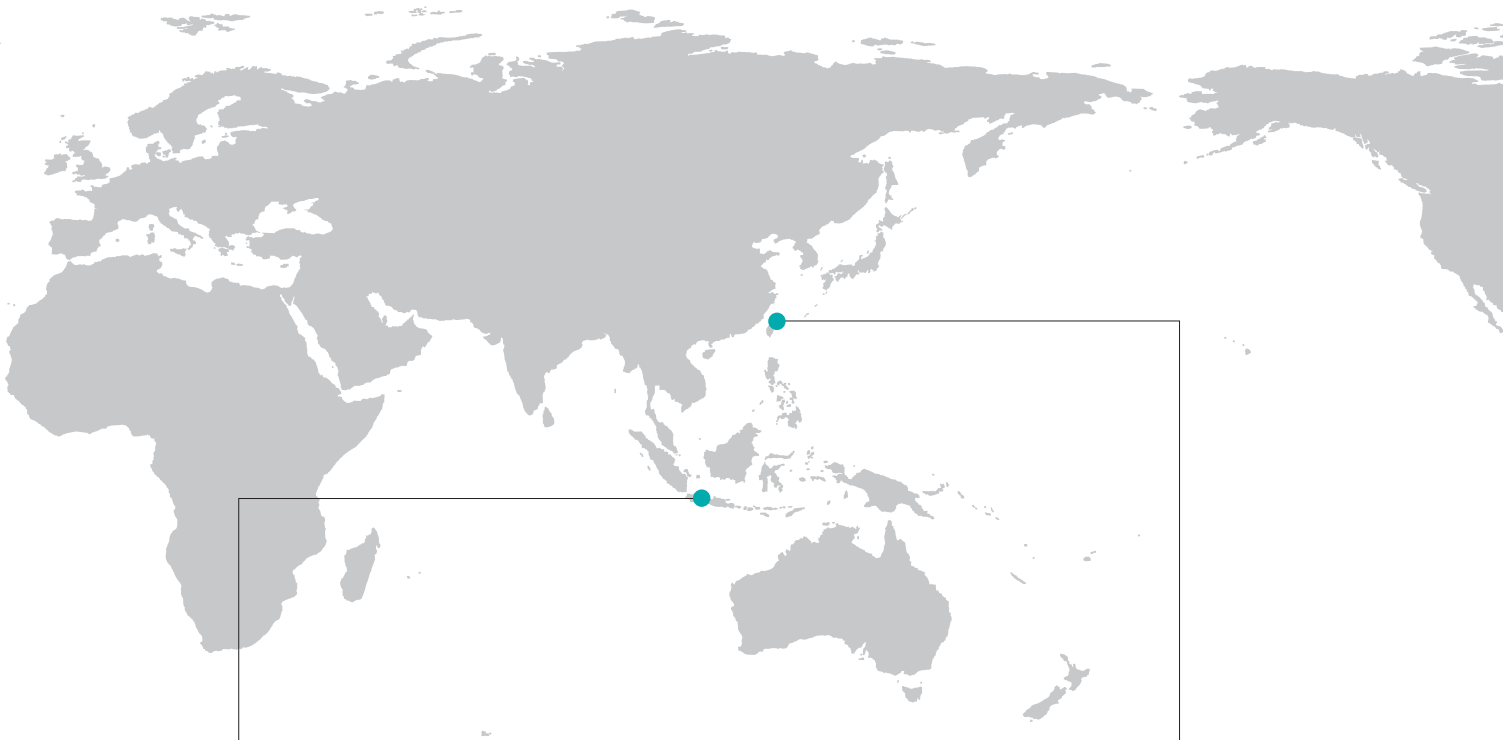
ILLUSTRATED BY H.KUROGANE

## Mascot Character "GUGU"®

"GUGU" is unique and synonymous with the life of the FUJILOK U-NUT product and expresses the concept of strolling freely around the universe.

As a comprehensive manufacturer of lock nuts, we are advancing the tradition of lock nut superiority and we have established a corporate image make further technological leaps with "GUGU".

## Overseas Locations



### **P.T. FUJI SEIMITSU INDONESIA**

Jalan Industri Utama Blok RR-10, Kawasan Industri Javabeka Tahap II, Pasirsari,  
Cikarang Selatan, Kab. Bekasi, Jawa Barat, 17550 Indonesia  
TEL. 62-21-893-7340 FAX. 62-21-893-7305

### **TAIWAN FUJI SEIMITSU MFG. CO., LTD.**

No.2 Zhongxing ST., Minxiong Township,  
Chiayi Country, 621 Taiwan (R. O. C.)  
TEL. 886-5-221-3021 FAX. 886-5-221-3020

# “The FUJILOK U-NUT” Brand is respected worldwide.

The FUJILOK U-NUT has earned great trust from a wide range of manufacturers in Japan and overseas, government ministries, and private enterprises.

Fuji Seimitsu is developing overseas sites and expanding resources in order to further meet customer requirements.

Since the patent was first acquired in the United States in 1968, the FUJILOK U-NUT has been highly thought of by industries around the world. Our Global Group companies in Asia achieve the Japan level of quality and deliver our products to customers worldwide.

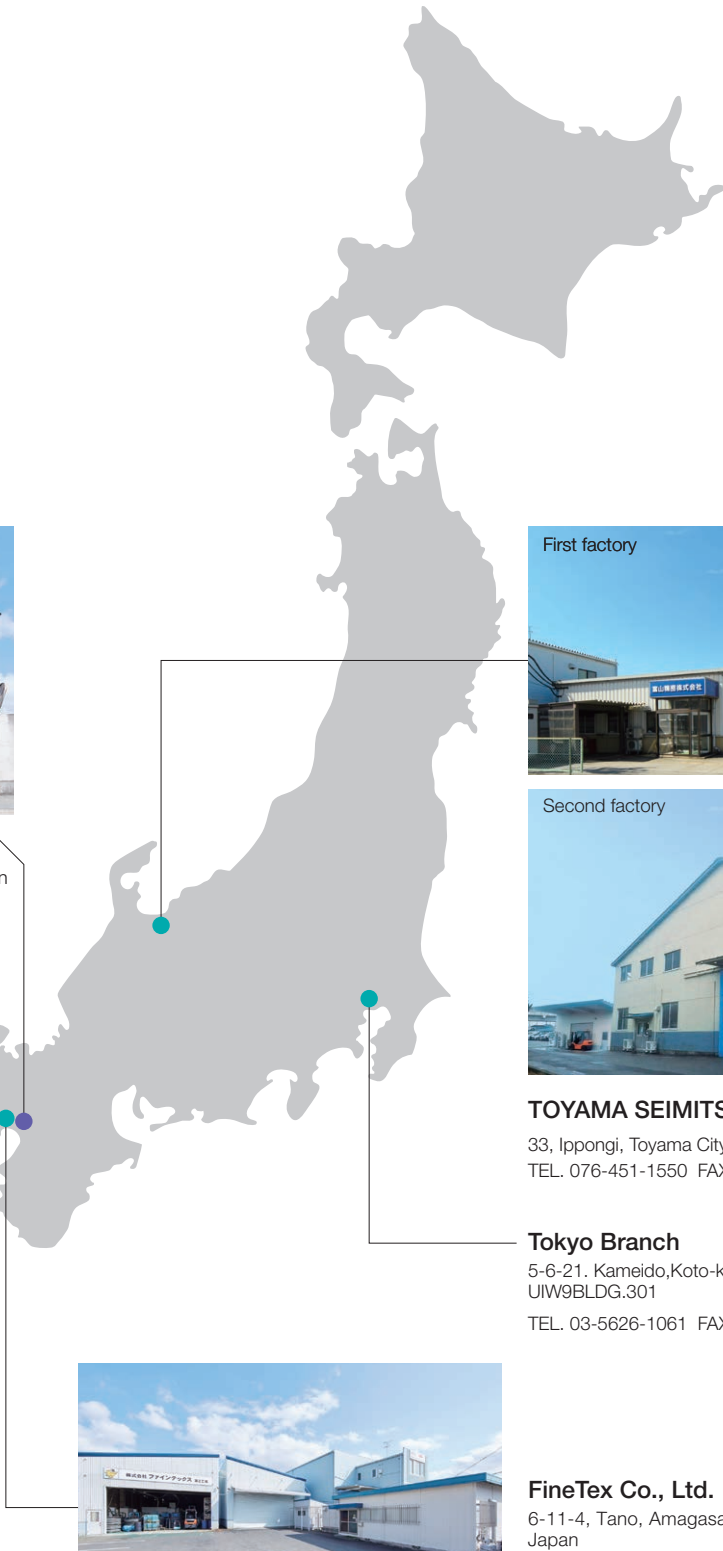


### **Hiroshima Products Center**

88-50 Oji, Shinjo-cho, Shobara, Hiroshima 727-0004  
Japan  
TEL. 0824-72-8340 FAX. 0824-72-8341

### **Fukuoka Sales Office**

3rd Hakata Kaisei Building 1002, 1-3-6 Hakata Eki  
Minami, Hakata-ku, Fukuoka 812-0016 Japan  
TEL. 092-411-1551 FAX. 092-411-1554



**Head Office**

3-14-15, Tokura, Toyonaka, Osaka 561-0845 Japan  
TEL. 06-6862-3112 FAX. 06-6862-9880



First factory



Second factory

**TOYAMA SEIMITSU Co., Ltd.**

33, Ippongi, Toyama City, Toyama 930-0904 Japan  
TEL. 076-451-1550 FAX. 076-451-5354

**Tokyo Branch**

5-6-21, Kameido, Koto-ku, Tokyo 136-0071 Japan  
UIW9BLDG.301  
TEL. 03-5626-1061 FAX. 03-5626-1063



Second factory

**FineTex Co., Ltd.**

6-11-4, Tano, Amagasaki City, Hyogo 661-0951 Japan  
TEL. 06-4960-1720 FAX. 06-4960-1730

**Second factory**

8-33, Morimoto, Itami-city, Hyogo, 664-0842, Japan



Unshaken quality to the future  
Manufacturer of Lock Nuts



株式会社 富士精密

Fuji Seimitsu Co., Ltd.

Head Office 3-14-15, Tokura, Toyonaka, Osaka 561-0845 Japan  
TEL. 06-6862-3112 FAX. 06-6862-9880

Tokyo Branch 5-6-21, Kameido, Koto-ku, Tokyo 136-0071 Japan  
TEL. 03-5626-1061 FAX. 03-5626-1063

Fukuoka Sales Office 3rd Hakata Kaisei Building 1002, 1-3-6 Hakata Eki Minami,  
Hakata-ku, Fukuoka 812-0016 Japan  
TEL. 092-411-1551 FAX. 092-411-1554

HP: <https://www.fun.co.jp>



FUJILOK U-NUT are registered trademarks of Fuji Seimitsu Co., Ltd.



2022.06 3,000 ㊤ 556.3