

Nuts

These nuts are designed with smaller hex envelope and thickness than JIS standard to be used in limited spaces.

Compact Nuts

SNTRC
SNTRCS (Thin)
PACK-SNTRC
PACK-SNTRCS (Thin)

Material: SUS304
Strength Class SNTRC: 5T Equivalent
SNTRCS: 4T Equivalent

PACK- contains 10 pcs.

RoHS 10

Part Number	Type	M	Coarse Pitch	B	(e)	T	T ₁	SNTRC		SNTRCS			
								Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate		
SNTRC SNTRCS	4	0.7	6	6.9	2.4	2		1 - 4 pc(s)	5 - 99 pc(s)	100 - 500 pcs	1 - 4 pc(s)	5 - 99 pc(s)	100 - 500 pcs
	5	0.8	7	8.1	3.2	2.5							
	6	1	8	9.2	3.6	3							
	8	1.25	10	11.5	5	4							
	10	1.5	13	15	6	4.5							
12	1.75	17	19.6	7	5.5								

For orders larger than indicated quantity, please check with WOS.

Part Number	Type	M	Coarse Pitch	B	(e)	T	T ₁	Qty.	PACK-SNTRC		PACK-SNTRCS	
									Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
PACK-SNTRC PACK-SNTRCS	4	0.7	6	6.9	2.4	2	10		1 - 2 pkg(s)	3 - 30 pkg(s)	1 - 2 pkg(s)	3 - 30 pkg(s)
	5	0.8	7	8.1	3.2	2.5	10					
	6	1	8	9.2	3.6	3	10					
	8	1.25	10	11.5	5	4	10					
	10	1.5	13	15	6	4.5	10					
12	1.75	17	19.6	7	5.5	10						

Ordering Example

Part Number	SNT3C5 SNT3C4
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Tall Nuts

Type	Material	Surface Treatment	Hardness
NT	S45C	Trivalent Bright Chromate Plating	25~30HRC
SNT	SUS304	-	-

RoHS 10

Part Number	Type	M (Coarse)	H	B	(C)	D ₁	NT		SNT	
							Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
NT SNT	6	9	10	11.5	9.8		1 - 49 pc(s)	50 - 500 pcs	1 - 49 pc(s)	50 - 500 pcs
	8	12	13	15	12.5					
	10	15	17	19.6	16.5					
	12	18	19	21.9	18					
	16	24	24	27.7	23					
	20	30	30	34.6	29					
	24	36	36	41.6	34					

For orders larger than indicated quantity, please check with WOS.

Ordering Example

Part Number	NT6
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Configurable Length Nuts

Type	Material	Surface Treatment
NTFL	SS400	Electroless Nickel Plating
NTFLS	SUS304	-

RoHS 10

L Dimension Selectable

Part Number	Type	M (Coarse)	L	B	(C)	D ₁	NTFL		NTFLS	
							Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
NTFL NTFLS	3	4	5	6	6.9	5.3	1 - 19 pc(s)	20 - 49 pc(s)	50 - 99 pc(s)	100 - 200 pcs
	4	5	6	7	8.1	6.8				
	5	6	8	8	9.2	7.8				
	6	10	12	10	11.5	9.8				
	8	15	20	15	15	12.5				
	10	20	25	20	19.6	16.5				
	12	25	30	25	21.9	18				
16	30	40	30	27.7	23					

Ordering Example: Part Number - L
NTFL6 - 10

L Dimension Configurable

Part Number	Type	M (Coarse)	L	B	(C)	D ₁	Unit Price	
							NTFL	NTFLS
3	4	5	6	6.9	5.3			
4	5	6	7	8.1	6.8			
5	6	8	8	9.2	7.8			
6	10	12	10	11.5	9.8			
8	15	20	15	15	12.5			
10	20	25	20	19.6	16.5			
12	25	30	25	21.9	18			
16	30	40	30	27.7	23			

U-Nuts® / Double Locking Nuts

Hard Lock Nuts®



Type	Item	Pkg.	Body Material	Friction Ring Material	Surface Treatment	Screw Precision
UNUTZ	UNUTZ	PACK-UNUT	SS400 or Equivalent	SUS301	Trivalent Bright Chromate Plating	JIS6H (Class 2)
UNUTKZ	UNUTKZ	PACK-UNUTK	SS400 or Equivalent	SUS301	Trivalent Chromate	JIS6H (Class 2)
UNUTSZ	UNUTSZ	PACK-UNUTS	SUS304 or Equivalent	SUS301	-	JIS6H (Class 2)

(M6 or Less) (M8 or More)

As shown in the figure below, stress P is caused by the spring effect when Friction Ring contacts the thread. The reaction force P' together with P presses hard upon the threads, which creates friction torque (prevailing torque) to prevent any free motion.

U-Nuts® is a trademark of Fuji Seimitsu Co. Ltd.

Part Number	Type	M	UNUTZ		UNUTKZ		UNUTSZ	
			Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
4	5	6	8	10				
12	16							

Part Number	Type	M	Qty. / 1 pkg.	PACK-UNUT		PACK-UNUTK		PACK-UNUTS	
				Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
4	5	6	8	10	10	10	10	10	
12	16								

M	Pitch	Reference Dim.	Tolerance	Reference Dim.	Tolerance	m	(e)	Tightening Torque N·m (kg·cm)		
								UNUT, UNUTK, UNUTS		
								UNUT	UNUTK	UNUTS
4	0.7	7		3.8		3	8.1	2.2(22)	1.9(19)	
5	0.8	8	0	4.6	±0.3	3.9	9.2	4.4(45)	3.8(39)	
6	1.0	10	-0.2	5.1		4.2	11.5	7.4(75)	6.5(66)	
8	1.25	13	0	7.3		6.1	15	18(180)	16(160)	
10	1.5	17	-0.25	8.3	±0.4	7.1	19.6	36(370)	31(320)	
12	1.75	19	0	10.5		9	21.9	62(630)	55(560)	
16	2.0	24	-0.35	14.5	±0.5	13	27.7	155(1600)	135(1400)	

For orders larger than indicated quantity, please check with WOS.

Ordering Example

Part Number	UNUTZ4 PACK-UNUT12
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- ### Features of U-Nuts®
- Capable of stable anti-loosening effect. Prevents screws from falling off even when declines in axial tension.
 - Being a solid metal product, the nuts are highly resistant to heat and cold.
 - Simplified fastening task makes work management easier.
 - Easy parts management prevents inappropriate installation.
 - Reusable.

- ### Cautions
- Make 2 or more pitches of the thread protrude from the friction ring.
 - When tightening the nut, refer to the Tightening Torque Chart.
 - Use chamfered tipped screws of JIS6g (Class 2) in thread precision.
 - Use appropriate lubricant if seizure or scuffing occurs when screwing or unscrewing the nut onto threads.
 - Cannot be screwed in from the friction ring side.
 - Discontinue the use if abnormal deformation occurs in the friction ring or the clamp.

Double Locking Nuts

Type	Material	Surface Treatment
HLN	SS400 Equivalent	Trivalent Chromate
HLNS	SUS304 Equivalent	-

RoHS 10

Ⓜ14 is not flanged.

Part Number	Type	M	MxPitch	B	(e)	Lower Nut		Upper Nut		Pair Height Tolerance (h)	Weight per Set (g)	Unit Price	
						H Tolerance	H ₁ Tolerance	H Tolerance	H ₁ Tolerance			HLN	HLNS
HLN HLNS (Stainless Steel)	6	6x1.0	10	11.5	5	±0.3	5	±0.3	8	3	4		
	8	8x1.25	13	15	6.5		6.5		10.6	4.1	8.9		
	10	10x1.5	17	19.6	8	0	8	0	13.2	5.2	18		
	12	12x1.75	19	21.9	10	-0.58	9	-0.58	16	7.0	26		
	14	14x2.0	22	25.4	11	0	11	0	18.5	7.5	39		
16	16x2.0	24	27.7	13	-0.7	11	-0.7	20	9	46			

Tightening Torque Chart (Reference Value)

M	Lower Nut				Upper Nut			
	By Material: Tightening Torque Reference Value Chart (N·m)				All Materials			
	SS400 or Equivalent 4.8(320N/mm ²)	S45C or Equivalent 8.8(640N/mm ²)	SCM435 or Equivalent 10.9(900N/mm ²)	SUS304, 316 or Equivalent 50(210N/mm ²)	70(450N/mm ²)	Tightening Torque (N·m)		
6	2.3~6	-	1.5~4	3.3~9				4~5
8	5.6~15	11.2~30	15.8~42	3.7~10	7.9~21	9~13		
10	11~30	22~59	31~84	7~20	16~42	18~24		
12	19~52	39~104	55~146	13~34	27~73	27~39		
14	31~82	62~165	87~232	20~54	44~116	40~58		
16	48~129	97~257	136~362	32~84	68~181	70~100		

Structure and Function of Hard Lock Nuts®

Hard Lock Nuts® is a registered trademark of Hard Lock Industry Co., Ltd.

Cautions

Screws or shafts should be machined in accordance with JIS6g (Class 2) for thread precision. Nuts may not fit well due to different thread precision. Although O.D. of the upper nut and the lower nut may become eccentric or clearance may occur during assembling caused by its structure, it does not affect the operation.

* Fig-1: When upper nut is tightened, stress is automatically applied in P1 arrow direction. Horizontal stress continues to increase with tightening until upper nut closely contacts lower nut as shown in Fig-2. The nuts are fully locked by the wedge effect.

** Fig-2: After nuts are tightened, internal stress remains distributed as composite stress of P₁+P₂+P₃ to resist external impact.