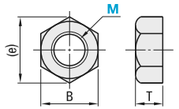
Nuts JIS Class 1 / JIS Class 3
Available in Box



Nuts - JIS Class 1

Type	Material	Surface Treatment
BOX-LBNR	SAE1008 (JIS-SWRCH Equiv.)	Trivalent Chromate
BOX-SLBNR	EN 1.4301 Equiv.	-

BOX-LBNR
BOX-SLBNR



MxP (Coarse)	B	(e)	T
2 x0.4	4	4.6	1.6
2.5x0.45	5	5.8	2
2.6x0.45	5	5.8	2
3 x0.5	5.5	6.4	2.4
4 x0.7	7	8.1	3.2
5 x0.8	8	9.2	4
6 x1.0	10	11.5	5
8 x1.25	13	15	6.5
10 x1.5	17	19.6	8

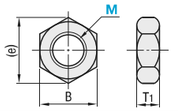
Can be ordered as a separate item. P.240



Nuts - JIS Class 3

Type	Material	Surface Treatment
BOX-KNTR	SAE1008 (JIS-SWRCH Equiv.)	Trivalent Chromate
BOX-SKNTR	EN 1.4301 Equiv.	-

BOX-KNTR
BOX-SKNTR



MxP (Coarse)	B	(e)	T1
3x0.5	5.5	6.4	1.8
4x0.7	7	8.1	2.4
5x0.8	8	9.2	3.2
6x1.0	10	11.5	3.6
8x1.25	13	15	5
10x1.5	17	19.6	6

Can be ordered as a separate item. P.240

Please specify in box quantity when ordering.
One box is shipped for an order of 1.

Ordering Example — Part Number
BOX-LBNR2.5
BOX-SKNTR10

Box package is cost-saving for in-house stock or when large quantities are needed.

Part Number: Type	M	Unit Price 1 to 10 boxes: Price per pkg.	1 Box	Pcs./ Box
BOX-LBNR	2			1,000 pcs./box
	2.5			
	2.6			
	3			
	4			
	5			
	6			
	8			500 pcs./box
	10			200 pcs./box

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

Part Number: Type	M	Unit Price 1 to 10 boxes: Price per pkg.	1 Box	Pcs./ Box
BOX-SLBNR (Stainless Steel)	2			1,000 pcs./box
	2.5			
	2.6			
	3			
	4			
	5			
	6			
	8			500 pcs./box
	10			200 pcs./box

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

Part Number: Type	M	Unit Price 1 to 10 boxes: Price per pkg.	1 Box	Pcs./ Box
BOX-KNTR	3			1,000 pcs./box
	4			
	5			
	6			
	8			500 pcs./box
	10			200 pcs./box

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

Part Number: Type	M	Unit Price 1 to 10 boxes: Price per pkg.	1 Box	Pcs./ Box
BOX-SKNTR (Stainless Steel)	3			1,000 pcs./box
	4			
	5			
	6			
	8			500 pcs./box
	10			200 pcs./box

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

Nuts
Single Item Sale

Nuts (LBNR, SLBNR, KNTR, SKNTR) can be ordered by cost saving boxes. P.239

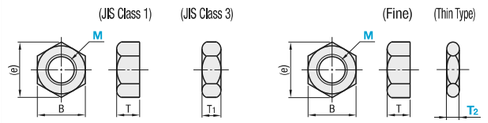
Nuts



(JIS Class 1)
LBNR (Right-Hand Thread)
SLBNR (Stainless Steel Right-Hand Thread)
LBNL (Left-Hand Thread)
SLBNL (Stainless Steel Left-Hand Thread)

(JIS Class 3)
KNTR (Right-Hand Thread)
SKNTR (Stainless Steel Right-Hand Thread)
KNTL (Left-Hand Thread)

ANN (Right-Hand Fine Thread)
SANN (Stainless Steel Right-Hand Fine Thread)
TNTR (Thin Right-Hand Fine Thread)
STNTR (Stainless Steel Thin Right-Hand Fine Thread)



ANN
M Material: EN 1.0038 Equiv.
S Surface Treatment: Trivalent Chromate Plating

LBNR, LBNL, KNTR, KNTL, TNTR
M Material: JIS-SWCH Equiv.
S Surface Treatment: Trivalent Chromate Plating

SLBNR, SLBNL, SANN, SKNTR, STNTR
M Material: EN 1.4301 Equiv.

M	(Coarse) Pitch	B	(e)	T	T1
2	0.4	4	4.6	1.6	1.2
2.5	0.45	5	5.8	2	1.6
2.6	0.45	5	5.8	2	1.6
3	0.5	5.5	6.4	2.4	1.8
4	0.7	7	8.1	3.2	2.4
5	0.8	8	9.2	4	3.2
6	1.0	10	11.5	5	3.6
8	1.25	13	15	6.5	5
10	1.5	17	19.6	8	6
12	1.75	19	21.9	10	7
16	2.0	24	27.7	13	10
20	2.5	30	34.6	16	12
24	3.0	36	41.6	19	14

Part Number: Type	M	B	(e)	T	LBNR: Unit Price (1 ~ 9 pc(s).)	LBNR: Volume Discount Rate (10 ~ 49 pcs.)	LBNR: Volume Discount Rate (50 ~ 200 pcs.)	KNTR: Unit Price (1 ~ 9 pc(s).)	KNTR: Volume Discount Rate (10 ~ 49 pcs.)	KNTR: Volume Discount Rate (50 ~ 200 pcs.)	SLBNR: Unit Price (1 ~ 49 pc(s).)	SLBNR: Volume Discount Rate (50 ~ 99 pcs.)	SLBNR: Volume Discount Rate (100 ~ 200 pcs.)	SKNTR: Unit Price (1 ~ 9 pc(s).)	SKNTR: Volume Discount Rate (10 ~ 49 pcs.)	SKNTR: Volume Discount Rate (50 ~ 500 pcs.)	LBNL: Unit Price (1 ~ 99 pc(s).)	LBNL: Volume Discount Rate (100 ~ 200 pcs.)	KNTL: Unit Price (1 ~ 99 pc(s).)	KNTL: Volume Discount Rate (100 ~ 200 pcs.)	SLBNL: Unit Price (1 ~ 99 pc(s).)	SLBNL: Volume Discount Rate (100 ~ 200 pcs.)
LBNR	2													-	-	-	-	-	-	-	-	-	-
LBNL (M3~M16)	2.5													-	-	-	-	-	-	-	-	-	-
SLBNR (M2~M20)	2.6													-	-	-	-	-	-	-	-	-	-
SLBNL (M3~M16)	3																						
KNTR	4																						
KNTL (M3~M20)	5																						
SKNTR	6																						
	8																						
	10																						
	12																						
	16																						
	20																-	-			-	-	
	24										-	-	-				-	-	-	-	-	-	

No specifications available for sizes with no prices shown.

Part Number: Type	M (Fine)	B	(e)	T	ANN: Unit Price (1 ~ 99 pc(s).)	ANN: Volume Discount Rate (100 ~ 200 pcs.)	SANN: Unit Price (1 ~ 99 pc(s).)	SANN: Volume Discount Rate (100 ~ 200 pcs.)
ANN	4-0.5	7	8.1	4				
SANN	5-0.5	8	9.2					
	6-0.75	10	11.5					
	8-0.75	13	15	5				
	8-1.0			6			-	-
	10-1.0	17	19.6	6				
	10-1.25			8			-	-
	12-1.0	19	21.9	6				
	12-1.25			10			-	-
	12-1.5						-	-
	14-1.5	22	25.0	11			-	-
	16-1.5	24	27.7	8				
	20-1.5	30	34.6	10				

Part Number: Type	M-P-T2	B	(e)	TNTR: Unit Price (1 ~ 99 pc(s).)	TNTR: Volume Discount Rate (100 ~ 200 pcs.)	STNTR: Unit Price (1 ~ 99 pc(s).)	STNTR: Volume Discount Rate (100 ~ 200 pcs.)
TNTR	6-0.75-1.5	8	9.2				
STNTR	6-0.75-2	9	10.4				
	8-0.75-2	10	11.5				
	10-0.75-2	14	16.2				
	10-1.0-2	14	16.2				
	10-1.0-3	14	16.2				
	10-1.0-4	14	16.2				
	12-1.0-2	14	16.2				
	12-1.0-3	17	19.6				
	12-1.0-4	17	19.6				
	16-1.0-2.5	19	21.9				

Ordering Example — Part Number
SLBNR10
ANN10-1.25
TNTR10-1.0-4

U-Nuts® / Double Locking Nuts

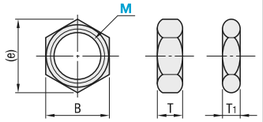
Hard Lock Nuts®

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)



PACK- contains 10 pcs.

RoHS

M Material: EN 1.4301 Equiv.
* Strength Class SNTRC: 5T Equiv.
SNTRCS: 4T Equiv.

Part Number Type	M	(Coarse) Pitch	B	(e)	T	T1	SNTRC Unit Price 1 ~ 4 pc(s).	SNTRC Volume Discount Rate 5 ~ 99 pc(s)	SNTRC Volume Discount Rate 100 ~ 500 pcs.	SNTRCS Unit Price 1 ~ 4 pc(s).	SNTRCS Volume Discount Rate 5 ~ 99 pc(s)	SNTRCS Volume Discount Rate 100 ~ 500 pcs.
SNTRC SNTRCS	4	0.7	6	6.9	2.4	2						
	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	T1	Qty.	PACK-SNTRC Unit Price 1 ~ 2 pkg(s).	PACK-SNTRC Volume Discount Rate 3 ~30 pkgs.	PACK-SNTRCS Unit Price 1 ~ 2 pkg(s).	PACK-SNTRCS Volume Discount Rate 3 ~30 pkgs.
PACK-SNTRC PACK-SNTRCS	4	0.7	6	6.9	2.4	2	10				
	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				

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

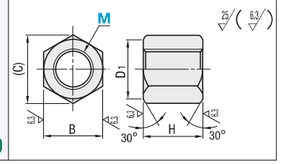
Ordering Example — Part Number: SNTRC5, PACK-SNTRC4

■Tall Nuts



RoHS

Type	M Material	S Surface Treatment	H Hardness
NT	EN 1.1191 Equiv.	Trivalent Bright Chromate Plating	25~30HRC
SNT	EN 1.4301 Equiv.	-	-



Part Number Type	M (Coarse)	H	B	(C)	D1	NT Unit Price 1 ~ 49 pc(s).	NT Volume Discount Rate 50 ~ 500 pcs.	SNT Unit Price 1 ~ 49 pc(s).	SNT Volume Discount Rate 50 ~ 500 pcs.
NT SNT	6	9	10	11.5	9.8				
	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.

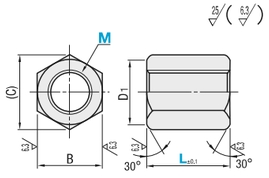
Ordering Example — Part Number: NT6

■Configurable Length Nuts



RoHS

Type	M Material	S Surface Treatment
NTFL	EN 1.0038 Equiv.	Electroless Nickel Plating
NTFLS	EN 1.4301 Equiv.	-



■L Dimension Selectable

Part Number Type	M (Coarse)	L	B	(C)	D1	NTFL Unit Price 1 ~ 19 pc(s)	NTFL Volume Discount Rate 20 ~ 49 pcs.	NTFL Volume Discount Rate 50 ~ 99 pcs.	NTFL Volume Discount Rate 100 ~ 200 pcs.	NTFLS Unit Price 1 ~ 19 pc(s)	NTFLS Volume Discount Rate 20 ~ 49 pcs.	NTFLS Volume Discount Rate 50 ~ 99 pcs.	NTFLS Volume Discount Rate 100 ~ 200 pcs.
NTFL NTFLS	3	4 5 6 8 10	6	6.9	5.3								
	4	5 6 8 10 12 15	7	8.1	6.8								
	5	6 8 10 12 15 20	8	9.2	7.8								
	6	10 12 15 20 25	10	11.5	9.8								
	8	10 15 20 25 30	13	15	12.5								
	10	10 20 25 30 40	17	19.6	16.5								

Part Number - L
NTFL6 - 10

■L Dimension Configurable

Part Number Type	M (Coarse)	L 1mm Increment	B	(C)	D1	Unit Price NTFL	Unit Price NTFLS
NTFL NTFLS	3	3~10	6	6.9	5.3		
	4	4~15	7	8.1	6.8		
	5	5~20	8	9.2	7.8		
	6	6~25	10	11.5	9.8		
	8	8~30	13	15	12.5		
	10	10~40	17	19.6	16.5		
	12	10~50	19	21.9	18		
	16	10~50	24	27.7	23		

■U-Nuts®

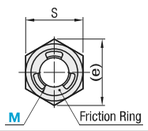


Part Numbers in [ ] are not RoHS compliant.

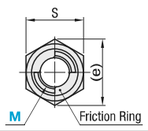
RoHS

Type Single Item	Type Pkg.	Body Material	Friction Ring Material	S Surface Treatment	Screw Precision
UNUTZ	PACK-UNUT	EN 1.0038 Equiv. or Equiv.	EN 1.4319 Equiv.	Bright Chromate Plating	JIS6H (Class 2)
UNUTKZ	PACK-UNUTK	EN 1.0038 Equiv. or Equiv.	EN 1.4319 Equiv.	Trivalent Chromate	JIS6H (Class 2)
UNUTSZ	PACK-UNUTS	EN 1.4301 Equiv. or Equiv.	EN 1.4319 Equiv.	-	JIS6H (Class 2)

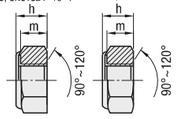
(M6 or Less)



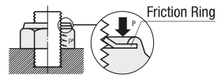
(M8 or More)



(UNUT, UNUTZ16 UNUTK, UNUTKZ16 UNUTS, UNUTSZ4~16) (UNUT, UNUTZ4~12 UNUTK, UNUTKZ4~12)



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 Unit Price 1 ~ 9 pc(s).	UNUTZ Volume Discount Rate 10 ~ 500 pcs.	UNUTKZ Unit Price 1 ~ 9 pc(s).	UNUTKZ Volume Discount Rate 10 ~ 500 pcs.	UNUTSZ Unit Price 1 ~ 9 pc(s).	UNUTSZ Volume Discount Rate 10 ~ 500 pcs.
UNUTZ UNUTKZ UNUTSZ	4						
	5						
	6						
	8						
	10						
	12						
	16						

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

Part Number Type	M	Qty. /1 pkg.	PACK-UNUT Unit Price 1 ~ 9 pkg(s).	PACK-UNUT Volume Discount Rate 10 pkgs.	PACK-UNUTK Unit Price 1 ~ 9 pkg(s).	PACK-UNUTK Volume Discount Rate 10 pkgs.	PACK-UNUTS Unit Price 1 ~ 9 pkg(s).	PACK-UNUTS Volume Discount Rate 10 pkgs.
PACK-UNUT PACK-UNUTK PACK-UNUTS	4	100						
	5	100						
	6	100						
	8	100						
	10	50						
	12	50						
	16	50						

* 100 pcs./pkg. for M4 ~ 8; 50 pcs./pkg. for M10 ~ 16.

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

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

Ordering Example — Part Number: UNUTZ4, PACK-UNUT12

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

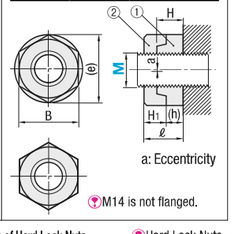
Features of U-Nuts®
- Capable of stable anti-loosening effect. Prevents screws from falling off even when declines in axial tension.
- Being a solid metal product, the nuts are highly resistant to heat and cold.
- Simplified fastening task makes work management easier.
- Easy parts management prevents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

■Double Locking Nuts



RoHS

Type	M Material	S Surface Treatment
HLN	EN 1.0038 Equiv.	Trivalent Chromate
HLNS	EN 1.4301 Equiv.	-



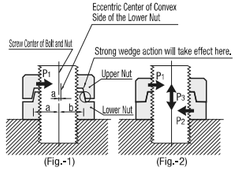
M14 is not flanged.

Part Number Type	M	MxPitch	B	(e)	①Lower Nut H	①Lower Nut Tolerance	②Upper Nut H1	②Upper Nut Tolerance	Pair Height (Tolerance	(h)	Weight per Set (g)	Unit Price HLN	Unit Price HLNS
HLN HLNS (Stainless Steel)	6	6x1.0	10	11.5	5	±0.3	5	$^{0}_{-0.3}$	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 -0.58	8	0 -0.58	13.2	5.2	18		
	12	12x1.75	19	21.9	10		9.3		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	①Lower Nut By Material: Tightening Torque Reference Value Chart (N·m) EN 1.0038 Equiv. or Equiv. 4.8(320N/mm²)	EN 1.1191 Equiv. or Equiv. 8.8(640N/mm²)	EN 1.7220 Equiv. or Equiv. 10.9(900N/mm²)	EN 1.4301 Equiv., 316 or Equiv. 50(210N/mm²)	EN 1.4301 Equiv., 316 or Equiv. 70(450N/mm²)	②Upper Nut All Materials 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.

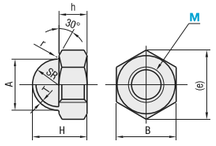
Part Number: HLN8

Nuts

■Domed (Acorn) Nuts

Type	Material	Surface Treatment
FNT	EN 1.4301 Equiv.	-





Hex nut section and the dome section are welded together.

JIS B 1183 (Type 3)

RoHS

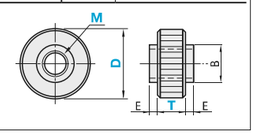
Part Number Type	M (Coarse)	H	h	B	A(min.)	T(min.)	e (Approx.)	r (Approx.)	Unit Price 1 ~ 5 pc(s).	Volume Discount Rate 6 ~ 9 pcs.	10 ~ 29 pcs.	30 ~ 500 pcs.
FNT	3	5.0	2.4	5.5	4.6	0.3	6.1	0.5				
	4	6.2	3.2	7	5.6		8.1					
	5	7.5	4	8	6.6	0.6	9.2					
	6	9.5	5	10	8.5		11.5	0.5				
	8	12.5	6.5	13	11.5	0.8	15					
	10	15.5	8	17	14.5	1.0	19.6					
	12	18.5	10	19	16.5	1.2	21.9					
	16	24	13	24	21.5	1.6	27.7	1.0				
	20	29	16	30	26.5		34.6					
	24	35.5	19	36	32.5	2.0	41.6					

Ordering Example: Part Number **FNT20**

■With Knurled Heads

Type	Material	Surface Treatment
FRNT	EN 1.1191 Equiv.	Black Oxide
FRNTS	EN 1.4301 Equiv.	-





RoHS

Part Number Type	M (Coarse)	D	T	E	B	FRNT Unit Price 1 ~ 49 pc(s).	FRNT Volume Discount Rate 50 ~ 500 pcs.	FRNTS Unit Price 1 ~ 49 pc(s).	FRNTS Volume Discount Rate 50 ~ 500 pcs.
FRNT FRNTS	3	12	3 5	0.5	6				
	4	16	4 6	0.5	8				
	5	20	5 8	0.5	10				
	6	24	6 8	1	12				
	8	30	8 10	1	16				
	10	36	10 12	1	20				

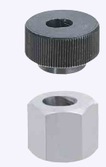
For orders larger than indicated quantity, please check with WOS.

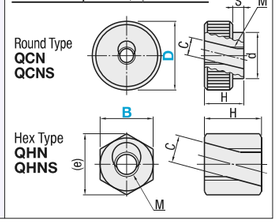
Ordering Example: Part Number **FRNT** - **D** - **T**

FRNT8 - 30 - 10

■Quick-Lock Nuts

Type	Material	Surface Treatment
QCN	EN 1.0715 Equiv.	Black Oxide
QCNS	EN 1.4305 Equiv.	-
QHN	EN 1.1191 Equiv.	Black Oxide
QHNS	EN 1.4305 Equiv.	-





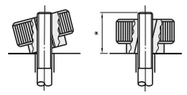
RoHS

Part Number Type	D	M (Coarse)	H	S	d	C	Reference Tightening Torque N(kgf)/m	Unit Price QCN	Unit Price QCNS
QCN QCNS	24	6	14	4	16	6.7	4.9(0.5)		
	30	8	17	5	20	8.7	9.0(0.9)		
	36	10	20	6	28	11.0	17.5(1.8)		
	40	12	24	8	32	13.7	17.5(1.8)		

Part Number Type	B	M (Coarse)	H	C	(e)	Reference Tightening Torque N(kgf)/m	Unit Price QHN	Unit Price QHNS
QHN QHNS	17	6	14	6.7	19.6	4.9(0.5)		
	19	8	17	8.7	21.9	9.8(1.0)		
	24	10	20	11.0	27.7	15.6(1.6)		
	27	12	24	13.7	31.2	19.6(2.0)		

■Features and Precautions for Use

- Long threaded screws can be tightened quickly.
- Use at the reference tightening torque or less to avoid over tightening.
- Move the nut to the tightening position after inserting a screw into the straight hole. Then rotate the knob perpendicular to the screw and tighten it.
- Tightening strength is not adequate if the thread length of a screw (*) is shorter than the nut's H dimension. Design the thread length of a screw (*) to be larger than the H dimension.



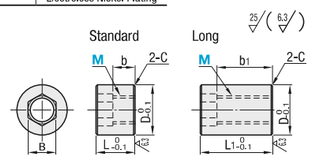
Ordering Example: Part Number **QCN30**, **QHN19**

■Cylindrical Nuts with Hex Socket

Type Standard	Type Long	Material	Hardness	Surface Treatment
RNSB	RNLB	EN 1.1191 Equiv.	35~40HRC	Black Oxide
RNSM	RNLM			Electroless Nickel Plating



RoHS



*Since D dimensions are made to correspond to the head diameter of hex socket head cap screws, counterbore tools can be used for recess holes. (For one size larger diameters, for example M4→M5:Ø8.5)

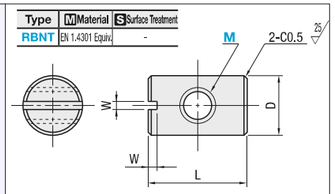
Part Number Type	M (Coarse)	D	L	L1	B	b	b1	C	Unit Price RNSB, RNSM	Unit Price RNLB, RNLM
RNSB RNSM RNLB RNLM	4	8.5	5	10	4	3	8	0.3		
	5	10	7	13	5	4	10			
	6	13	9	16	6	5	12	0.5		
	8	16	12	22	8	6.5	16.5			
	10	18	14	26	10	8	20			

Ordering Example: Part Number **RNSB6**

■Cylindrical Nuts

Type	Material	Surface Treatment
RBNT	EN 1.4301 Equiv.	-





RoHS

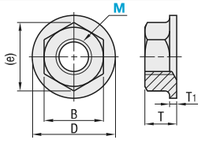
Part Number Type	M	D	L	W	Unit Price
RBNT	3	6	8	1	
	4	8	10		
	5	10	11	1.5	
	6	12	12		
	8	14	16		
	10	18	20	2	
	12	20	24	2.5	

Ordering Example: Part Number **RBNT10**

■Flanged Nuts

Type	Material	Surface Treatment
FRNUT	JIS-SWCH10R	Trivalent Chromate
FRSNUT	EN 1.4301 Equiv.	-





Not serrated

RoHS

Part Number Type	M	(Coarse)	D	B	(e)	T	T1 (Min.)	FRNUT Unit Price 1 ~ 49 pc(s).	FRNUT Volume Discount Rate 50 ~ 500 pcs.	FRSNUT Unit Price 1 ~ 49 pc(s).	FRSNUT Volume Discount Rate 50 ~ 500 pcs.
FRNUT FRSNUT	3	0.5	8	5.5	6.3	3.7	1				
	4	0.7	10	7	8	4.5	1.1				
	5	0.8	12	8	9.2	5.5	1.1				
	6	1	13	10	11.5	6	1.5				
	8	1.25	17	12	13.8	7.5	1.5				
	10	1.5	19	14	16.2	9	1.8				

Ordering Example: Part Number **FRNUT5**

■Knurled Thumb Nuts with Side Holes

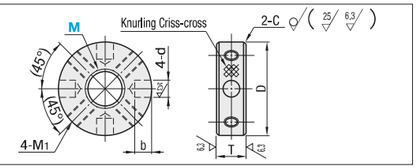
Type Coarse	Type Fine	Material	Surface Treatment
CRNT	CRNTS	EN 1.1191 Equiv.	Black Oxide
SCRNT	SCRNTS	EN 1.4301 Equiv.	-



RoHS

■Features

1. The nuts can be tightened with hex key wrenches using the holes, made to fit the wrenches, on the side.
2. The tapped holes can be used for retaining set screws.
3. Use in spaces where standard hex wrenches cannot reach.



Part Number Type	M	MxPitch Coarse	MxPitch Fine	D	T	d	b	Applicable Hex Key Wrench Size	M1	C	Unit Price CRNT	Unit Price CRNTS	Unit Price SCRNT	Unit Price SCRNTS
CRNT (Coarse) CRNTS (Fine) SCRNT (Coarse) SCRNTS (Fine)	10	10x1.5	10x1.0	25	8	4.6	5	4	4	0.5				
	12	12x1.75	12x1.0	30	10	5.8	6	5	5					
	16	16x2	16x1.5	38	12	6.9	7	6	6	1				
	20	20x2.5	-	45	16	9.2	8	8	8		-	-	-	
	24	24x3	-	50	18		9				-	-	-	
	30	30x3.5	-	60	20	11.5	10	10			-	-	-	

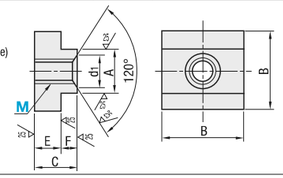
Ordering Example: Part Number **CRNT10**

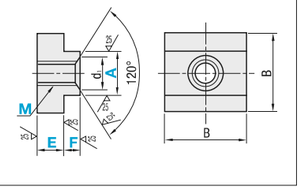
■T-Nuts

Type		Material	Surface Treatment
Standard Type	NTS	EN 1.0038 Equiv.	Trivalent Bright Chromate Plating
Configurable	NTSF		Black Oxide



RoHS





■Standard Type

Part Number Type	M (Coarse)	A	B	C	E	F	d1	Unit Price 1 ~ 49 pc(s).	Volume Discount Rate 50 ~ 500 pcs.
NTS	3	3.9	7	5	3	2.0	3.5		
	4	4.8	8	6.5	4	2.5	4.5		
	5	5.8	10	8	5	3	5.5		
	6	7.7	13	9.5	6	3.5	7		
	8	9.7	13	10.5	6	4.5	9		
	10	11.7	16	12.5	7	5.5	11		
	12	17.6	25	18.5	10	8.5	14		
	16	21.6	32	24.5	14	10.5	18		
	20	24.6	35	30.5	20	10.5	22		

Ordering Example: Part Number - **A** - **E** - **F**

NTS8

NTSF12 - A9.5 - E5.2 - F4.8

■Configurable

Part Number Type	M (Coarse)	0.1mm Increment A	0.1mm Increment E	0.1mm Increment F	B	d1	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10 ~ 50 pcs.
NTSF	3	3.9~17.6	3~10	2~8.5	7	3.5		
	4				8	4.5		
	5				10	5.5		
	6				13	7		
	8				13	9		
	10				16	11		
	12				25	14		

A<B

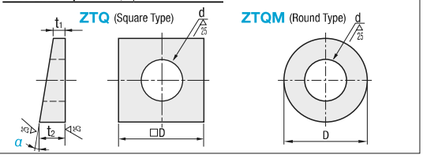
Tapered Washers / Tapered Nuts / Square Nuts / Square Washers

Tapered Washers



RoHS

Type	M Material	S Surface Treatment
ZTQ	EN 1.0038 Equiv.	Trivalent Bright Chromate Plating
ZTQM	EN 1.1191 Equiv.	Trivalent Chromate



Part Number					Angle 3°		Angle 5°		Angle 8°		ZTQ		ZTQM	
Type	No.	Angle α	d	D	t1	t2	t1	t2	t1	t2	Unit Price 1 ~ 49 pc(s).	Volume Discount Rate 50 ~ 200 pcs.	Unit Price 1 ~ 49 pc(s).	Volume Discount Rate 50 ~ 100 pcs.
ZTQ ZTQM	6	3	7	16	1.2	2	1.6	3	1.7	4				
	8		9	18	1.1		1.4		1.5					
	10		11	22	1.8	3	2	4	1.9	5				
	12	5	14	26	1.6		1.7		2.3	6				
	16	8	18	32	3.3	5	3.2	6	3.5	8				
	20		21	40	2.9		2.5		3.4	9				
	24		27	52	3.3	6	3.5	8	3.7	11				

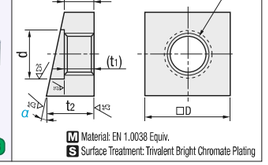
Ordering Example: Part Number - α
ZTQ6 - 5

Tapered Nuts



RoHS

ZTN



M Material: EN 1.0038 Equiv.
S Surface Treatment: Trivalent Bright Chromate Plating

Part Number				Angle 3°		Angle 5°		Angle 8°			Unit Price	Volume Discount Rate
Type	M (Coarse)	Angle α	D	t1	t2	t1	t2	t1	t2	d	1 ~ 49 pc(s).	50 ~ 100 pcs.
ZTN	6	3	16	5	5.8	5	6.4	5	7.2	7		
	8		18	6.5	7.4	6.5	8.1	6.5	9	9		
	10	5	22	8	9.2	8	9.9	8	11.1	11		
	12	8	26	10	11.2	10	12.2	10	13.5	13		
	16		32	13	14.7	13	15.8	13	17.5	17		

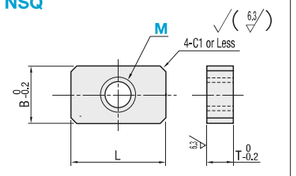
Ordering Example: Part Number - α
ZTN10 - 5

Square Nuts



RoHS

NSQ



M Material: EN 1.0038 Equiv. S Surface Treatment: Trivalent Bright Chromate Plating

Part Number		L	B	T	Unit Price	Volume Discount Rate
Type	M (Coarse)				1 ~ 49 pc(s).	50 ~ 500 pcs.
NSQ	4	7	7	3.2		
	5	8	8	4		
	6	16	10	4.5		
	8	42	15.5	6		

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

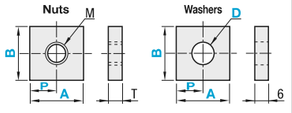
Ordering Example: Part Number
NSQ8

Square Nuts, Square Washers - Dim. Configurable 1-Hole



RoHS

Type		M Material	S Surface Treatment
Nuts	Washers		
FKT	FKW	EN 1.1191 (cold drawn) Equiv.	-
FKTB	FKWB	EN 1.1191 (cold drawn) Equiv.	Black Oxide
FKTS	FKWS	EN 1.4301 Equiv.	-



Part Number		1mm Increment	0.5mm Increment	M (Coarse)	T	Unit Price		
Type	B	A	P			FKT	FKTB	FKTS
Nuts FKT FKTB FKTS	16	16~50	M/2+2≤P≤A-M/2-2	6	6			
	22			8	6			
	25			10	9			
	38			12	10			

Part Number		1mm Increment	0.5mm Increment	D Selection				Unit Price		
Type	B	A	P					FKW	FKWB	FKWS
Washers FKW FKWB FKWS	16	16~50	D/2+2≤P≤A-D/2-2	7	9					
	22			7	9					
	25			7	9	11	14			
	38			7	9	11	14			

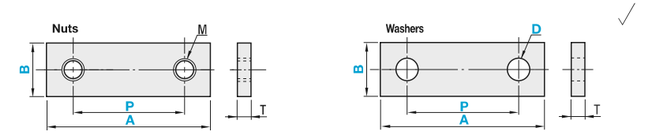
Ordering Example: Part Number - A - P - D
FKW16 - A20 - P10 - D7

Square Nuts, Square Washers2-Hole



RoHS

Type		M Material	S Surface Treatment
Nuts	Washers		
FK2T	FK2W	EN 1.1191 (cold drawn) Equiv.	-
FK2TB	FK2WB	EN 1.1191 (cold drawn) Equiv.	Black Oxide
FK2TS	FK2WS	EN 1.4301 Equiv.	-



Part Number		A	P	M	T	Unit Price	Volume Discount Rate		
Type	B					1 ~ 4 pc(s).	5 ~ 9 pcs.	10 ~ 49 pcs.	50 ~ 200 pcs.
Nuts FK2TS	10	25	15	2	3				
		30	20	3	3				
		35	25	3	3				
		50	40	3	3				
	16	30	15	6	6				
		40	20	6	6				
		50	30	6	6				
		60	40	6	6				
		120	100	6	6				

Ordering Example: Part Number - A - P
FK2TS10 - A25 - P15

Part Number		1mm Increment		M (Coarse)	T
Type	B	A	P		
Nuts FK2T FK2TB FK2TS	6	30~200	2M≤P≤A-2M	3	2
	10			3	3
	16			6	6
	22			8	6
	25			10	9
	38			12	10

Part Number		1mm Increment		D Selection				T
Type	B	A	P					
Washers FK2W FK2WB FK2WS	6	30~200	2D≤P≤A-2D	4				2
	10			4	6			3
	16			7	9			6
	22			7	9			6
	25			7	9	11	14	6
	38			7	9	11	14	6

B		Unit Price			
		A30~50	A51~100	A101~150	A151~200
6	FK2TS				
10	FK2TS				
16	FK2T				
	FK2TB				
	FK2TS				
22	FK2T				
	FK2TB				
	FK2TS				
25	FK2T				
	FK2TB				
	FK2TS				
38	FK2T				
	FK2TB				
	FK2TS				

B		Unit Price			
		A30~50	A51~100	A101~150	A151~200
6	FK2WS				
10	FK2WS				
16	FK2W				
	FK2WB				
	FK2WS				
22	FK2W				
	FK2WB				
	FK2WS				
25	FK2W				
	FK2WB				
	FK2WS				
38	FK2W				
	FK2WB				
	FK2WS				

Ordering Example: Part Number - A - P - D
FK2T16 - A40 - P25
FK2WS25 - A50 - P20 - D7