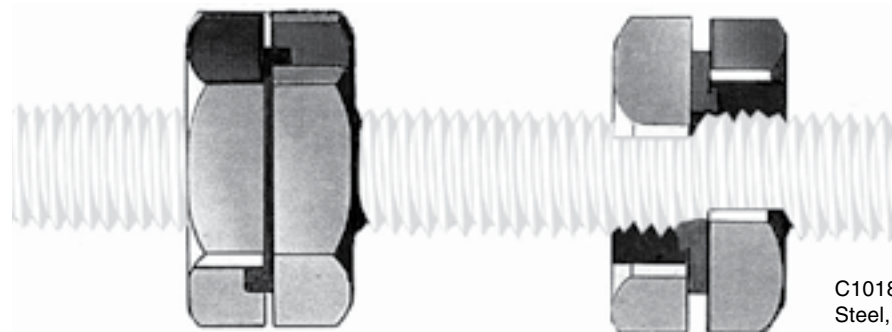


Slip-on® Locknut

Inch

Écrous freinés Slip-on^{MD}

Pouce



C1018 Cold Rolled Steel, Bright Zinc Pltd.

Slip-on® LockNut

**Position at any desired location without threading.
A nut that does not have to be “threaded on.”**

A must for electricians, mechanical contractors, plumbers, steamfitters, sprinkler installers, general contractors, mining contractors, telecommunication industry, television industry, plant maintenance, original equipment manufacturers—and the list goes on. The Slip-On Lock Nut can be used on pipe racks, clevis hangers, cable trays, all-thread rod, anchor bolts that are rusted or bent, and in high vibratory situations. The list of applications is endless.

- Saves time
- Saves money
- Solves rod and retrofit problems

SPAENAUR No.	Thread Size	Width A/F	Approx. Thick.	Recommended Loads	Recommended Torque
165-199	1/4"-20 UNC	5/8"	3/8"	650 lbs.	6-8 ft. lbs.
165-200	3/8"-16 UNC	7/8"	15/32"	2,000 lbs.	19-25 ft. lbs.
165-201	1/2"-13 UNC	1-1/16"	5/8"	4,000 lbs.	50-60 ft. lbs.
165-W02-1A	5/8"-11 UNC	1-5/16"	13/16"	5,000 lbs.	100-120 ft. lbs.
165-207	3/4"-10 UNC	1-5/8"	1"	8,000 lbs.	180-200 ft. lbs.

PKG QTY. 10

**MANUFACTURER’S RECOMMENDED INSTALLATION PROCEDURE
FOR RIGHT-HAND THREADED SLIP-ON LOCK NUTS**

- STEP 1. Line up slot on both halves and position at desired location, placing threads of rod/bolt all the way back into the base of the slot.
- STEP 2. Turn half of the nut, following the direction of the arrows, until both halves tighten down against one another.
- STEP 3. Put wrench on the half of the Slip-On Lock Nut that is farthest away from your fixed structure and tighten, following the direction of the arrows, until slots of both halves are opposite one another (180°).

NOTE: In order to adjust or torque the nut as a unit, turn half of the Slip-On Lock Nut until slot is 120° (2 flats). Then put wrench on entire nut to adjust or torque as you would a conventional nut with compatible materials. Next, follow STEP 3, putting slots at 180° of each other to complete installation.

Other sizes available on B287

Inch

K-LOK Locknuts

Pouce

Écrous freinés K-LOK

STEEL

Inch Sizes



Assembled "K-LOK" Locknuts

STEEL, Zinc Plated

PRE-ASSEMBLED NUTS AND EXTERNAL LOCKWASHERS.
LOCKWASHERS FREE TO TURN BUT CANNOT DROP OFF.



UNC and UNF Threads

SPAENAUR No.	THREAD SIZE	WIDTH ACROSS FLATS	OVERALL THICKNESS	O.D. OF LOCKWASHER	SERIES	PKG QTY. 100
175-B02-2P	4-40	1/4"	1/8"	17/64"	AMERICAN STANDARD HEXAGON MACHINE SCREW NUT SERIES	
N-206K	5-40	5/16"	9/64"	11/32"		
175-B03-2Y	6-32	5/16"	9/64"	11/32"		
175-B06-2T	8-32	11/32"	5/32"	3/8"		
175-B05-2N	10-24	3/8"	5/32"	13/32"		
175-B04-2C	10-32					
N-295K	12-24	7/16"	7/32"	1/2"	AMERICAN STANDARD HEXAGON (FINISHED-FULL) NUT SERIES	
175-B01-2A	1/4-20	7/16"	15/64"	1/2"		
N-7K	1/4-20	7/16"	17/64"	1/2"		
N-8K	1/4-28					
N-9K	5/16-18	1/2"	21/64"	37/64"		
N-10K	5/16-24					
N-11K	3/8-16	9/16"	25/64"	5/8"		
N-12K	3/8-24					

STAINLESS STEEL

Inch Sizes



Assembled "K-LOK" Locknuts

PRE-ASSEMBLED NUTS AND EXTERNAL LOCKWASHERS.
LOCKWASHERS FREE TO TURN BUT CANNOT DROP OFF.



SPAENAUR No.	THREAD SIZE	18-8 STAINLESS STEEL (For Hex. Nut part of Assembly)		AISI-410-420 STAINLESS STEEL (For Toothed Lockwasher of Assembly)		SERIES	PKG QTY. 100
		WIDTH ACROSS FLATS	OVERALL THICKNESS	O.D. OF LOCKWASHER			
175-B08-2A	4-40	1/4"	7/64"	17/64"	STANDARD MACHINE SCREW NUT SERIES UNIT		
175-801	5-40	5/16"	9/64"	11/32"			
175-B12-1X	6-32	5/16"	9/64"	11/32"			
175-B13-1A	8-32	11/32"	5/32"	3/8"			
175-B14-1P	10-24	3/8"	5/32"	13/32"			
175-805	10-32						
175-B11-1M	1/4-20	7/16"	15/64"	1/2"			
175-807	1/4-28						
175-808	3/8-16	9/16"	25/64"	21/32"			

CATALOG 14

SPAENAUR

K-LOK Locknuts / Locknuts Assortment

Metric

Assortiment de contre-écrous et de contre-écrous K-LOK

Métrique

STEEL



Assembled
"K-LOK" Locknuts



STEEL, Zinc Plated

Metric Sizes

PRE-ASSEMBLED NUTS AND EXTERNAL LOCKWASHERS.
LOCKWASHERS FREE TO TURN BUT CANNOT DROP OFF.

ISO METRIC THREADS

SPAENAUR No.	THREAD SIZE		WIDTH ACROSS FLATS	OVERALL THICKNESS	O.D. OF LOCKWASHER	SERIES	PKG QTY. 100
	Dia.	Pitch					
175-100	M3	0.50	5.5 mm	3.4 mm	6.8 mm	ISO METRIC Standard (Coarse) THREAD	
175-B07-1K	M4	0.70	7.0 mm	4.0 mm	8.0 mm		
175-102	M5	0.80	8.0 mm	5.1 mm	9.2 mm		
175-B10-1W	M6	1.00	10.0 mm	6.1 mm	11.0 mm		
175-104	M8	1.25	13.0 mm	7.9 mm	14.9 mm		
175-105	M10	1.50	17.0 mm	9.6 mm	19.5 mm		



PKG QTY. 100



This nut has a special slot in the collar for locking

PKG QTY. 100

HEX NUT

with conical spring washer
STEEL Zinc Plated

SPAENAUR No. 175-107

Thread: M12 x 1.75 mm O/A Height: 13.2 mm
Across Flat: 19 mm Washer O.D.: 25.5 mm

METRIC THERMAG NUT

SPAENAUR No. 166-132

Standard Coarse Thread
Steel, Copper Plated

Thread: M8 x 1.25 mm Overall Height: 8.5 mm
Across Flat: 12 mm Collar O.D.: 11.5 mm

ASSORTMENT 805-522

**16 SIZES
805 PIECES**

Natural Nylon Locking Insert (Zytel-101)

Stainless Steel 18-8

NYLON INSERT LOCKNUTS



Name	Spaenaur No.	Thread Size	Qty.	Page
Locknut Machine Screw	179-005	#2-56	100	C26
	179-006	#4-40		
	179-W08-2M	#6-32		
	179-W07-1K	#8-32		
	179-W12-1A	#10-24		
	179-003	#10-32		
Locknut Cap Screw	179-W04-2N	1/4"-20	50	
	179-W02-2Y	5/16"-18	25	
	179-W05-2M	3/8"-16		
	179-007	3/8"-24		
	HN-2038	7/16"-14	10	
	179-W03-2C	1/2"-13		
	179-W18-1K	5/8"-11	5	
	179-008	5/8"-18		
	179-W17-1T	3/4"-10		
HN-2043	3/4"-16			

Furnished in REGULAR SIZE grey enamelled drawer.

Drawer will fit into Slide Racks shown on A2

Shipping Weight: **4.99 kg** (11 lbs.)

Inch

Fujilok Self-Locking Hex Nuts

Pouce

Écrous hexagonaux autobloquants Fujilok



REGULAR SERRATED FLANGE LOCKNUTS

These items are compliant to all requirements of ASME B18.16.4 for Regular Serrated Flange Locknuts, except that they are not case hardened.



Size A	Spenaaur No.	Across Flats B Max. Min.	Thickness C Max. Min.	Flange Dia. D Max. Min.	Wrench Height Min.	Proof Load Min. Lb.	Seating Torque In.-Lb.	PKG QTY.
#10-24	224-015	0.375 0.365	0.219 0.203	0.500 0.480	0.13	1650	70	100
1/4-20	N-49	0.438 0.428	0.236 0.222	0.594 0.574	0.14	2900	108	100
5/16-18	N-51	0.500	0.283	0.680	0.17	4700	168	100
5/16-24	N-50	0.489	0.268	0.660		5200	180	
3/8-16	N-70	0.562 0.551	0.347 0.330	0.750 0.728	0.23	7000	324	100
7/16-14	HN-196	0.688	0.395	0.937	0.26	9550	480	100
7/16-20	HN-198	0.675	0.375	0.910		10,700	516	
1/2-13	224-016	0.750	0.458	1.031	0.31	12,800	744	50
1/2-20	HN-145	0.736	0.437	1.000		14,400	816	

STEEL WHEEL NUTS

Will fit nearly all North American CARS and TRUCKS
Zinc plated finish



SPAENAUR No.	THREAD	HEX DIMENSION (across flats)	HEIGHT	PKG QTY.
167-001	7/16"-20 Rt. Hand	3/4"	9/16"	50
167-C01-1W	1/2"-20 Rt. Hand	3/4"	9/16"	50
167-005	1/2"-20 Rt. Hand	13/16"	5/8"	25
167-007	3/4"-16 Rt. Hand	1-1/2"	7/8"	10
167-008	3/4"-16 Left Hand	1-1/2"	7/8"	10

Wheel Nut - Stainless Steel Capped

(Zinc Plated with Stainless Steel Cap)

GENERAL MOTOR PRODUCTS

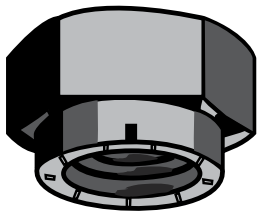
Right Hand Thread



PKG QTY.
10

SPAENAUR No.
167-013
Thread Size 7/16"-20
(414188)

STEEL Alloy L'9 STOVER® LOCKNUT



Cadmium Plated and Waxed
Yellow Dichromate Finish

NOMINAL SIZE	COARSE THREAD (U.N.C.)		FINE THREAD (U.N.F.)		WIDTH ACROSS FLAT MAX./MIN.	THICKNESS MAX./MIN.	PKG. QTY.
	SPAENAUR No.	THD.	SPAENAUR No.	THD.			
1/4	172-001	20	172-R03-1T	28	.437/.428"	.301/.281"	100
5/16	172-002	18	172-015	24	.500/.489"	.336/.316"	50
3/8	172-R02-1N	16	172-016	24	.562/.551"	.400/.380"	50
7/16	172-004	14	172-017	20	.687/.675"	.449/.429"	25
1/2	172-005	13	172-018	20	.750/.736"	.516/.496"	25
9/16	172-006	12	172-019	18	.875/.861"	.580/.560"	25
5/8	172-007	11	172-R01-1C	18	.937/.922"	.660/.640"	25
3/4	172-008	10	172-021	16	1.125/1.088"	.767/.747"	20
7/8	172-009	9	172-022	14	1.312/1.269"	.887/.867"	15
1	172-010	8	172-023	14	1.500/1.450"	1.023/1.003"	10
1-1/8	172-011	7	172-024	12	1.687/1.631"	1.181/1.161"	10
1-1/4	172-012	7	172-025	12	1.875/1.812"	1.277/1.257"	10
1-1/2	172-013	6	172-026	12	2.250/2.175"	1.531/1.511"	10

NOTE: L'9 STOVER® LOCKNUTS are recommended for use exclusively with L'9 Bolts and L'9 Washers.

The complete L'9® FASTENING SYSTEM appears on pages B147 to B150.

Rockwell Hardness
1/4"-5/8" Dia. C28-34
3/4"-1-1/2" Dia. C32-38

Fujilok Self-Locking Hex Nuts

Inch and Metric

Écrous hexagonaux autobloquants Fujilok

Pouce et Métrique

**With the
Stainless
Steel
Locking
Insert**



FUJILOK Nuts: Use them with confidence under demanding conditions, including high vibration applications.

FUJILOK Nuts: Reusable over and over, without loss of locking ability.

FUJILOK Nuts: **Have wide temperature range** for applications—
 Low Carbon Steel: **-30°C to +250°C**
 High Carbon Steel: **-50°C to +350°C**
 Stainless Steel: **-100°C to +350°C**

FUJILOK Nuts: The AISI-301 Stainless Steel inserts are not affected by alcohol, gasoline, oil or commercial solvents.

FUJILOK Nuts: Seating of nut is not necessary for locking action. Nut will lock on bolt when a minimum of one bolt thread extends above nut.

See following page C25 for list of stock sizes of FUJILOK Nuts.

SUGGESTED TIGHTENING TORQUE VALUES FOR FUJILOK LOCKNUT

ISO METRIC THREADS

Bolt & Nut Materials		Low Carbon Steel	High Carbon Steel	Stainless Steel
Size mm	Prevailing Torque Kg/cm	TS 40 Kg/mm ²	TS 70 Kg/mm ²	TS 53 Kg/mm ²
		YS 32 Kg/mm ²	YS 50 Kg/mm ²	YS 21 Kg/mm ²
		Kgf/cm	Kgf/cm	Kgf/cm
M3	0.1-0.5	6.29		
M4	0.4-0.8	14.29		10.5
M5	0.9-2.3	29.6		20.2
M6	1-3	39.4	76	33.4
M8	3-6	119	182	80
M10	4-8	231	356	154
M12	5-13	402	620	268
M14	7-25	644	991	431
M16	14-34	999	1,550	667
M18	20-40	1,370	2,120	911
M20	30-50	1,940	2,990	1,290
M22	40-60	2,620	4,060	1,740
M24	55-75	3,330	5,160	2,210
M27	60-100	4,860	7,540	3,230
M30	75-115	6,580	10,200	4,360
M33	80-130	8,930	13,900	5,900
M36	105-165	11,500	17,800	7,580
M39	110-170	15,000	23,200	9,760
M42	180-300	18,400	28,600	12,160

ASA INCH THREADS

Bolt & Nut Materials		Low Carbon Steel	High Carbon Steel	Stainless Steel
Size Inch	Prevailing Torque In. - Lb.	TS 57,000 psi	TS 100,000 psi	TS 75,000 psi
		YS 46,000 psi	YS 71,000 psi	YS 30,000 psi
		In. - Lb.	In. - Lb.	In. - Lb.
#10	0.8 - 2	21		
#12	0.8 - 2	31		
1/4	0.8 - 2	47	72	31
5/16	2.5 - 4.5	96	147	65
3/8	3 - 5	166	257	111
7/16	3.5 - 7	265	410	176
1/2	4 - 11	404	624	269
9/16	5 - 15	581	900	387
5/8	12 - 29	810	1,250	542
3/4	18 - 35	1,419	2,198	908
7/8	35 - 52	2,282	3,484	1,515
1	50 - 70	3,414	5,295	2,264
1-1/8	60 - 80	4,823	7,491	3,193
1-1/4	65 - 100	6,777	10,533	4,482
1-3/8	70 - 115	8,880	13,811	5,867
1-1/2	90 - 145	11,767	18,303	7,770

TS = TENSILE STRENGTH OF BOLT, MINIMUM
 YS = YIELD STRENGTH OF BOLT, MINIMUM

The torque figures in this chart when used as recommended above should result in a fastener tension which is equal to 60% of the ultimate yield strength of the fastener material, and the coefficient is 0.2. They are computed using the following formula:

$$T = 0.2(0.6 \times \sigma_y) \times A_s \times d + RT$$

Where T = Torque figures σ_y = Ultimate tensile strength A_s = Tensile stress area
 d = Nominal size RT = Run-down torque

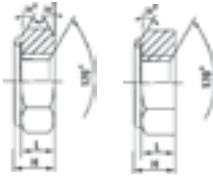
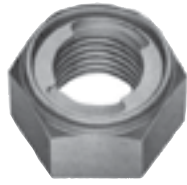
The torque figures are suggested to be increased for a given job as much as 80% or more for stainless steel above those figures in the chart, as the material is stressed less than those fasteners made of steel.

Inch and Metric

Fujilok Self-Locking Hex Nuts

Pouce et Métrique

Écrous hexagonaux autobloquants Fujilok



Double Chamfer Single Chamfer

Sizes listed below are all **HEXAGON FINISHED FULL Style**

Also available "to order"—Jam-style and Closed-end Cap (Acorn) Styles, in low carbon steel, hi-carbon steel, and stainless steel.

METRIC THREADS

Zinc Chromate Finish on all Carbon Steel items.

Size mm		Low Carbon STEEL	Hi-Carbon STEEL	Grade 304 STAINLESS STEEL	Width Across Flats (F)	Thickness (H)	Thread Length (L)	PKG QTY.
Coarse Thread	DIA.							
	Pitch	ORDER BY SPAENAUR NUMBERS			Basic	Basic	Basic	
M3	0.5	166-A12-1W			5.5	3.0	2.4	100
M4	0.7	166-003		166-801	7	3.8	3	100
M5	0.8	166-A08-1T		166-A03-1A	8	4.6	3.8	100
M6	1.0	166-005		166-803	10	5.3	4.4	100
M8	1.25	166-007	166-030	166-805	13	7.3	6.3	100
M10	1.5	166-008	166-031	166-806	17	8.3	7.1	100
M12	1.75	166-009	166-032	166-807	19	10.5	9.0	100
M14	2.0	166-A09-1K	166-033	166-A10-1T	22	12.5	10.8	100
M16	2.0	166-011	166-034	166-809	24	14.5	13.0	100
M18	1.5	166-012	166-035	166-821	27	16	13.0	50
M18	2.5				27	16.0	14.0	50
M20	1.0				30	17.5	15.2	10
M20	2.5	166-013	166-036	166-811	30	17.5	15.2	50
M22	1.5	166-166			32	19.5	17.2	50
M22	2.5	▲166-014	166-037	166-812	32	19.5	17.2	50
M24	3.0	166-015	166-038	166-813	36	21.5	19.2	50
M27	3.0	166-016	166-039	166-814	41	24.0	21.0	25
M30	1.5		166-134		46	27.0	24.0	5
M30	3.5	166-017	166-040	166-815	46	27.0	24.0	25
M33	3.5	166-018			50	29.5	26.0	10
M36	4.0	166-019			55	32.5	29.0	10
M39	4.0	166-020			60	35.0	31.0	10
M42	4.5	166-021			65	38.0	34.0	10
M45	4.5	166-022			70	40.0	36.0	5
M48	5.0	166-024			75	42.0	38.0	5
M56	5.5	166-025			85	49.0	45.0	5
M64	6.0	166-026			95	54.0	50.0	5

Nuts in "Metric" sizes up to **M12** in low carbon steel, along with all sizes in hi-carbon steel, are double chamfered. Sizes above **M12** in low carbon steel, and all sizes in stainless steel, are single chamfered. ▲166-166 1.5mm Fine Thread

INCH THREADS

Zinc Chromate Finish on all Carbon Steel items.

All Inch sizes are double chamfered.

U.N.C. Coarse Thread	Low Carbon STEEL	Grade 304 STAINLESS STEEL	U.N.F. FINE Thread	Low Carbon STEEL	Grade 304 STAINLESS STEEL	Width Across Flats (F)	Thickness (H)	Thread Length (L)	PKG QTY.
Inch	SPAENAUR No.		Inch	SPAENAUR No.		Basic	Basic	Basic	
10-24	165-000	165-800	10-32	165-016	165-809	3/8	0.156	0.125	100
12-24	165-001	165-801	-	-	-	7/16	0.191	0.156	100
1/4-20	165-002	165-802	1/4-28	165-017	165-810	7/16	0.254	0.219	100
5/16-18	165-003	165-803	5/16-24	165-018	165-811	1/2	0.305	0.266	100
3/8-16	165-004	165-W07-1K	3/8-24	165-019	165-W09-1K	9/16	0.371	0.328	100
7/16-14	165-005	165-805	7/16-20	165-020	165-813	11/16	0.422	0.375	50
1/2-13	165-006	165-806	1/2-20	165-021	165-814	3/4	0.497	0.438	50
9/16-12	165-007		-	-	-	7/8	0.551	0.484	50
5/8-11	165-008	165-807	5/8-18	165-022	165-W10-1T	15/16	0.614	0.547	50
3/4-10	165-009	165-808	3/4-16	165-023	165-816	1-1/8	0.719	0.641	50
7/8-9	165-010		7/8-14			1-5/16	0.841	0.750	25
1-8	165-011		1-14			1-1/2	0.950	0.859	25
1-1/8-7	165-012		1-1/8-12			1-11/16	1.087	0.969	10
1-1/4-7	165-013		1-1/4-12			1-7/8	1.181	1.063	10
1-3/8-6	165-014		-			2-1/16	1.310	1.172	10
1-1/2-6	165-015		-			2-1/4	1.439	1.281	5

CATALOG 14 SPAENAUR

Nylon Insert Hex Locknuts





Inch

Écrous freinés hexagonaux à douille de nylon

Pouce

Steel Zinc or Cad Plated (our option) & Stainless Steel Grade 18-8

LOCKING INSERT: Natural Nylon (Zytel-101) TEMPERATURE RANGE TO **121°C.** (250°F)

TYPE	THREAD	WIDTH A.F. (In Inches)	HEIGHT O.A. (In Inches)	STEEL			STAINLESS STEEL		
				SPAENAUR No.	REF. No.	PKG. QTY.	SPAENAUR No.	REF. No.	PKG. QTY.
MACHINE SCREW SIZES REGULAR HEX THIN HEIGHT 	4-40 UNC	.251-.243	.094-.124	178-009	21NTM-40	100			
	5-40 UNC	.251-.243	.094-.124	178-011	21NTM-50	100			
	6-32 UNC	.313-.305	.110-.140	178-012	21NTM-62	100			
	8-32 UNC	.345-.336	.157-.187	178-013	21NTM-82	100			
	10-24 UNC	.376-.367	.157-.187	178-014	21NTM-04	100			
	10-32 UNF	.376-.367	.157-.187	178-015	21NTM-02	100			
	12-24 UNC	.439-.430	.188-.218	178-006	21NTM-124	100			
MACHINE SCREW SIZES REGULAR HEX STANDARD HEIGHT 	2-56 UNC	.251-.243	.133-.153	HN-248	21NM-26	100	179-005	79NM-26	100
	4-40 UNC	.251-.243	.133-.153	178-C01-1Y	21NM-40	100	179-006	79NM-40	100
	4-48 UNF	.251-.243	.133-.153	HN-244	21NM-48	100			
	5-40 UNC	.251-.243	.133-.153	178-004	21NM-50	100			
	5-44 UNF	.250	.133-.153	178-005	21NM-54	100			
	6-32 UNC	.313-.305	.168-.188	178-C02-1C	21NM-62	100	179-W08-2M	79NM-62	100
	8-32 UNC	.345-.336	.219-.239	HN-171	21NM-82	100	179-W07-1K	79NM-82	100
	10-24 UNC	.376-.367	.229-.249	HN-172	21NM-04	100	179-W12-1A	79NM-82	100
	10-32 UNF	.376-.367	.229-.249	178-C06-1X	21NM-02	100	179-003	79NM-02	100
		10-32 UNF	.376-.367	.229-.249	180-003	99NM-02	100		
	12-24 UNC	.439-.430	.298-.328	178-C25-1Y	21NM-124	100			
CAP SCREW SIZES REGULAR HEX THIN HEIGHT 	1/4-20 UNC	.439-.430	.188-.218	178-016	21NTE-040	100			
	1/4-28 UNF	.439-.430	.188-.218	178-017	21NTE-048	100			
	5/16-18 UNC	.502-.492	.235-.265	178-053	21NTE-058	100			
	5/16-24 UNF	.502-.492	.235-.265	178-003	21NTE-054	100			
	3/8-24 UNF	.564-.553	.251-.281	178-002	21NTE-064	100			
	7/16-20 UNF	.627-.615	.313	178-043	21NTE-070	100			
	1/2-13 UNC	.752-.741	.298-.328	178-048	21NTE-083	50			
	1/2-20 UNF	.752-.741	.298-.328	178-039	21NTE-080	50			
CAP SCREW SIZES REGULAR HEX STANDARD HEIGHT 	5/8-11 UNC	.940-.928	.376-.406	178-041	21NTE-101	50			
	5/8-18 UNF	.940-.928	.376-.406	178-056	21NTE-108	50			
	1/4-20 UNC	.439-.430	.298-.328	178-C03-1N	21NE-040	100	179-W04-2N	79NE-040	100
	1/4-28 UNF	.439-.430	.298-.328	HN-176	21NE-048	100	179-W01-2P	79NE-048	100
	5/16-18 UNC	.502-.492	.329-.359	178-C26-1C	21NE-058	100	179-W02-2Y	79NE-058	100
	5/16-24 UNF	.502-.492	.329-.359	HN-178	21NE-054	100			
	3/8-16 UNC	.564-.553	.251-.281	178-058	21NE-066	100			
	3/8-16 UNC	.564-.553	.438-.468	178-C05-2P	21NE-066	100	179-W05-2M	79NE-066	50
	3/8-24 UNF	.564-.553	.438-.468	HN-180	21NE-064	100	179-007	79NE-064	50
	7/16-14 UNC	.627-.616	.438-.468	HN-181	21NE-074	100	HN-2038	79NE-074	100
	7/16-20 UNF	.627-.616	.438-.468	HN-182	21NE-070	100	179-009	79NE-070	100
	1/2-13 UNC	.751-.741	.579-.609	178-C23-1A	21NE-083	50	179-W03-2C	79NE-083	50
	1/2-13 UNC	.751-.741	.579-.609	180-002	99NE-083	50			
	1/2-20 UNF	.751-.741	.579-.609	HN-184	21NE-080	50			
	9/16-12 UNC	.877-.865	.626-.656	HN-185	21NE-092	50			
	9/16-18 UNF	.877-.865	.626-.656	HN-186	21NE-098	50			
	5/8-11 UNC	.940-.928	.735-.765	178-C27-1N	21NE-101	25	179-W18-1K	79NE-101	25
	5/8-18 UNF	.940-.928	.735-.765	HN-188	21NE-108	25	179-008	79NE-108	25
	3/4-10 UNC	1.064-1.052	.860-.890	HN-189	41NE-120	25	179-W17-1T	79NE-120	25
	3/4-16 UNF	1.064-1.052	.860-.890	HN-190	41NE-126	25	HN-2043	79NE-126	25
	7/8-9 UNC	1.252-1.239	.969-.999	HN-191	41NE-149	10			
	7/8-14 UNF	1.252-1.239	.969-.999	HN-192	41NE-144	10			
	1-8 UNC	1.440-1.428	1.016-1.078	178-018	41NE-168	10	HN-2042	79NE-168	10
	1-14 UNF	1.440-1.428	1.016-1.078	178-019	41NE-164	10			
1-1/8-7 UNC	1.627-1.615	1.141-1.203	178-020	41NE-187	10				
1-1/8-12 UNF	1.627-1.615	1.141-1.203	178-021	41NE-182	10				
1-1/4-7 UNC	1.815-1.803	1.360-1.422	178-022	41NE-207	10				
1-1/4-12 UNF	1.815-1.803	1.360-1.422	178-023	41NE-202	10				
1-3/8-6 UNC	2.008-1.973	1.547-1.609	178-024	41NE-226	5				
1-3/8-12 UNF	2.009-1.973	1.547-1.609	178-025	41NE-222	5				
1-1/2-6 UNC	2.197-2.159	1.578-1.640	178-026	41NE-246	5				
1-1/2-12 UNF	2.197-2.159	1.578-1.640	178-007	41NE-242	5				

■ Plain Brass

Inch

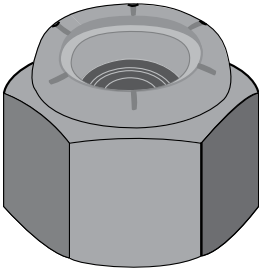
Nylon Insert Heavy Hex Locknuts

Pouce

Écrous freinés hexagonaux à douille de nylon épaisse

Steel Zinc or Cad Plated (our option)

LOCKING INSERT: Natural Nylon (Zytel-101) TEMPERATURE RANGE TO **121°C**.

TYPE	THREAD	WIDTH A.F. (In Inches)	HEIGHT O.A. (In Inches)	STEEL		PKG QTY.
				SPAENAUR No.	REF. No.	
HEX - HEAVY THIN	3/8-16 UNC	.688	.406	178-042	21NTU-066	100
<p>HEX - HEAVY</p> 	1/4-20 UNC	.503-.489	.375	178-054	21NU-040	100
	5/16-18 UNC	.566-.551	.438	178-055	21NU-058	100
	3/8-16 UNC	.691-.675	.532-.562	178-001	21NU-066	50
	1/2-13 UNC	.879-.861	.688-.718	178-027	21NU-083	50
	5/8-11 UNC	1.067-1.045	.844-.874	178-028	21NU-101	25
	5/8-18 UNF	1.067-1.045	.844-.874	178-040	21NU-108	25
	3/4-10 UNC	1.255-1.231	.985-1.015	178-029	41NU-120	25
	7/8-9 UNC	1.444-1.417	1.110-1.140	178-030	41NU-149	10
	1-8 UNC	1.632-1.602	1.250-1.312	HN-193	41NU-168	10
	1-14 UNF	1.632-1.602	1.250-1.312	HN-194	41NU-164	10
	1-1/8-7 UNC	1.820-1.788	1.407-1.469	HN-233	41NU-187	10
	1-1/8-12 UNF	1.820-1.788	1.407-1.469	HN-234	41NU-182	10
	1-1/4-7 UNC	2.008-1.973	1.610-1.672	HN-235	41NU-207	10
	1-1/4-12 UNF	2.008-1.973	1.610-1.672	HN-236	41NU-202	10
	1-3/8-6 UNC	2.197-2.159	1.766-1.828	HN-237	41NU-226	5
	1-3/8-12 UNF	2.197-2.159	1.766-1.828	HN-238	41NU-222	5
	1-1/2-6 UNC	2.384-2.344	1.891-1.953	HN-239	41NU-246	5
	1-1/2-12 UNF	2.384-2.344	1.891-1.953	HN-240	41NU-242	5
	1-3/4-5 UNC	2.762-2.715	2.250-2.376	178-035	41NU-285	1
	1-3/4-12 UNF	2.762-2.715	2.250-2.376	178-031	41NU-2812	1
	2-4-1/2 UNC	3.137-3.086	2.343-2.469	178-036	41NU-324	1
	2-12 UNF	3.137-3.086	2.343-2.469	178-032	41NU-3212	1
	2-1/4-4-1/2 UNC	3.514-3.457	2.750-2.876	178-037	41NU-364	1
	2-1/4-12 UNF	3.514-3.457	2.750-2.876	178-C14-1C	41NU-3612	1
2-1/2-4 UNC	4.015-3.875	3.078-3.204	178-038	41NU-404	1	
2-1/2-12 UNF	4.015-3.875	3.078-3.204	178-034	41NU-4012	1	
2-3/4-12 UNF	4	3.141	178-051	49NU-4412	1	

CATALOG 14

SPAENAUR

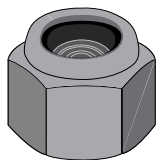
Grade 8 Nylon Insert Hex Locknuts on page C28

Nylon Insert Hex Locknuts / Assortment

Inch

Écrous hexagonaux à insert en nylon / assortiment

Pouce



NYLON INSERT HEX LOCKNUTS SAE GRADE 8

Zinc, Yellow Zinc or Cad Plated Finish (our option)

Nylon Insert resists temperatures up to **121°C** (250°F).

(Ref: NE8 Series)

SPAENAUR No. UNC COARSE THREAD		SPAENAUR No. UNF FINE THREAD		Width Across Flat	Thick- ness	PKG QTY.
178-100	1/4"-20	178-114	1/4"-28	.438"	.313"	100
178-C18-1W	5/16"-18	178-115	5/16"-24	.500"	.344"	100
178-102	3/8"-16	178-116	3/8"-24	.562"	.453"	100
178-103	7/16"-14	178-117	7/16"-20	.625"	.453"	100
178-104	1/2"-13	178-118	1/2"-20	.750"	.594"	50
178-105	9/16"-12		9/16"-18	.875"	.641"	50
178-106	5/8"-11	178-120	5/8"-18	.938"	.750"	25
178-107	3/4"-10	178-C24-1P	3/4"-16	1.062"	.875"	25
178-C21-1M	7/8"-9	178-122	7/8"-14	1.250"	.984"	10
178-109	1"-8	178-123	1"-14	1.438"	1.047"	10
*178-110YZ	1-1/8"-7	178-124	1-1/8"-12	1.625"	1.172"	10
178-111	1-1/4"-7	178-125	1-1/4"-12	1.812"	1.391"	10
178-112	1-3/8"-6	178-126	1-3/8"-12	2.000"	1.578"	5
178-113	1-1/2"-6	178-C13-1Y	1-1/2"-12	2.188"	1.609"	5

*Yellow Zinc

ASSORTMENT
ASSORTIMENT 805-658B

HEX NUTS & NYLON INSERT LOCKNUTS STEEL, ZINC PLATED

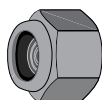
COARSE (UNC) and FINE (UNF)

All Inch Sizes

32 Sizes — 2,140 Pieces

Furnished in Large Size grey enamel steel drawer with scooped bins for easy access.

Drawer will fit into Slide Racks shown on page A3.



Name	Spaenaur No.	Thread Size	Qty.	Page	
Hex Nuts	B-91	1/4"-20	75	B265	
	155-P36-1W	1/4"-28		C3	
	B-92	5/16"-18	50	B265	
	155-P31-1Y	5/16"-24		B273	
	B-93	3/8"-16	30	C3	
	155-P23-1K	3/8"-24		C3	
	155-P39-1A	7/16"-14			
	B-104	7/16"-20	25	C3	
	B-95	1/2"-13			
	B-105	1/2"-20			
Machine Screw Nuts	B-96	9/16"-12	25	C2	
	155-P16-1P	5/8"-11	20		
	155-P11-1K	#4-40	100	C2	
	155-P03-2A	#6-32			
	155-P04-1P	#8-32			
	155-P08-1T	#10-24	75	B273	
	155-P02-1X	#10-32		C2	
	155-P22-1T	#12-24			
	Nylon Insert Locknuts	178-C01-1Y	#4-40	50	C26
		178-C02-1C	#6-32		
HN-171		#8-32			
HN-172		#10-24	75	C26	
178-C06-2X		#10-32			
178-C03-1N		1/4"-20			
HN-176		1/4"-28	50	C26	
178-C26-1C		5/16"-18			
HN-178		5/16"-24	30	C26	
178-C05-2P		3/8"-16			
HN-180	3/8"-24				
HN-181	7/16"-14	15	C26		
178-C23-1A	1/2"-13				
178-C27-1N	5/8"-11				

Inch

Nylon Insert Hex Locknut Assortments

Pouce

Assortiments d'écrous freinés hexagonaux à douille de nylon

ASSORTIMENT 805-521A

Natural Nylon Locking Insert (Zytel-101)
Steel, Zinc Plated

NYLON INSERT LOCKNUTS

24 SIZES - 979 PIECES

Furnished in regular size grey enamelled steel drawer, with hinged lid and scoop bins.

Drawer will fit Slide Racks shown on page A2

Shipping Weight: **5.90 kg** (13 lbs.)



Name	Spaenaur No.	Thread Size	Qty.	Page
Locknut (Machine Screw)	HN-248	#2-56	100	C26
	178-C01-1Y	#4-40		
	178-004	#5-40		
	178-C02-1C	#6-32		
	HN-171	#8-32		
	HN-172	#10-24		
	178-C06-2X	#10-32		
178-C25-1Y	#12-24	50	C26 L93	
Locknut (Cap Screw)	178-C03-1N	1/4"-20	25	C26 L93
	HN-176	1/4"-28		
	178-C26-1C	5/16"-18		
	HN-178	5/16"-24	20	C26
	178-C05-2P	3/8"-16		
	HN-180	3/8"-24	10	C26
	HN-181	7/16"-14		
	178-C23-1A	1/2"-13		
	HN-184	1/2"-20	5	C26
	HN-185	9/16"-12		
	178-C27-1N	5/8"-11		
	HN-188	5/8"-18		
	HN-189	3/4"-10	2	C26
	HN-190	3/4"-16		
HN-191	7/8"-9			
178-018	1"-8			

ASSORTIMENT 805-522

Natural Nylon Locking Insert (Zytel-101)
Stainless Steel 18-8

NYLON INSERT LOCKNUTS

**16 SIZES
805 PIECES**



Name	Spaenaur No.	Thread Size	Qty.	Page
Locknut Machine Screw	179-005	#2-56	100	C26
	179-006	#4-40		
	179-W08-2M	#6-32		
	179-W07-1K	#8-32		
	179-W12-1A	#10-24		
	179-003	#10-32		
Locknut Cap Screw	179-W04-2N	1/4"-20	50	C26
	179-W02-2Y	5/16"-18		
	179-W05-2M	3/8"-16		
	179-007	3/8"-24	25	C26
	HN-2038	7/16"-14		
	179-W03-2C	1/2"-13	10	C26
	179-W18-1K	5/8"-11		
	179-008	5/8"-18		
	179-W17-1T	3/4"-10	5	C26
HN-2043	3/4"-16			

Furnished in regular size grey enamelled steel drawer, with hinged lid and scoop bins.

Drawer will fit Slide Racks shown on page A2

Shipping Weight: **4.99 kg** (11 lbs.)

Nylon Insert Hex Locknut / Nylon Insert Locknuts Assortment

Metric

Écrou freiné hexagonal à douille de nylon / Assortiment d'écrous freinés hexagonaux à douille de nylon

Métrique

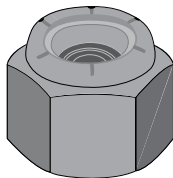
NYLON INSERT HEX LOCKNUTS

REGULAR TYPE

DIN 985

This Standard has been replaced. Please see Catalog Page R21 for more information.

Metric



Property Class 8 Steel

All Dimensions in millimetres

Zinc Plated

Thread Size	COARSE THREAD SPAENAUR No.	Pitch	FINE THREAD SPAENAUR No.	Pitch	Width Across Flats	Thick-ness	PKG QTY.
M3	178-527	0.50			5.5	4	100
M4	178-C04-1T	0.70			7	5	100
M5	178-C10-1X	0.80			8	5	100
M6	178-C16-1T	1.00			10	6	100
M7	178-531	1.00			11	7.5	100
M8	178-532	1.25	178-533	1.00	13	8	100
M10	178-534	1.50	178-535	1.00	17	10	100
			178-536	1.25	17	10	100
M12	178-537	1.75	178-538	1.00	19	12	50
			178-539	1.25	19	12	50
			178-540	1.50	19	12	50
M14	178-541	2.00	178-542	1.50	22	14	50
M16	178-543	2.00	178-556	1.50	24	16	50
M18	178-544	2.50	178-545	1.50	27	18.5	50
M20	178-526	2.50	178-547	1.50	30	20	25
			178-548	2.00	30	20	25
M22	178-549	2.50	178-550	2.00	32	22	25
M24	178-551	3.00	178-C19-1M	1.50	36	24	25
			178-553	2.00	36	24	25
M27	178-554	3.00	178-555	1.50	41	27	25
M30	178-525	3.50	178-557	1.50	46	30	10
			178-558	2.00	46	30	10
M33	178-559	3.50	178-560	1.50	50	33	10
M36	178-561	4.00	178-562	1.50	55	36	10
M42	178-563	4.50			65	42	10
M45	178-564	4.50			70	45	5

Plain

Thread Size	COARSE THREAD SPAENAUR No.	Pitch	FINE THREAD SPAENAUR No.	Pitch	Width Across Flats	Thick-ness	PKG QTY.
M6	178-C22-1X	1.00			10	6	100

Yellow Zinc

M6	178-530YZ	1.00			10	6	100
M8	178-532YZ	1.25			13	8	100
M10	178-534YZ	1.50			17	10	100
M12	178-537YZ	1.75	178-540YZ	1.50	19	12	50

NYLON INSERT HEX LOCKNUTS

Regular Type Property Class 6

STEEL - Zinc Plated

METRIC



DIN 985

This Standard has been replaced. Please see Catalog Page R21 for more information.

Metric "Regular" Coarse Thread

SPAENAUR No.	THREAD SIZE	PITCH (mm)	WIDTH A.F.	HEIGHT O.A.	PKG QTY.
178-566	M2	0.40			100
178-523	M2.5	0.45	5	3.8	100
178-C29-1K	M3	0.50	5.5	4	100
178-510	M4	0.70	7	5	100
178-511	M5	0.80	8	5	100
178-C20-1W	M6	1.00	10	6	100
178-513	M7	1.00	11	7.5	100
178-514	M8	1.25	13	8	100
178-516	M12	1.75	19	12	50
178-517	M14	2.00	22	14	50
178-518	M16	2.00	24	16	50
178-519	M18	2.50	27	18.5	50
178-520	M20	2.50	30	20	25
178-521	M22	2.50	32	22	25
178-522	M24	3.00	36	24	25

See page C31 for Regular Type Property Class 10 Steel & C32 for Property Class 8 & 10 Heavy Type.

ASSORTMENT 805-410A

- plus -
6 sizes of

NYLON INSERT LOCKNUTS

Contains 14 METRIC SIZES
Total Pieces in Assortment 300

METRIC WING NUTS

Cold Forged Steel Bright Zinc Plated
Style 220 Medium Pattern
Dia. Range M4 - M12 Regular Thread



Regular Size Welded Steel Drawer, will fit into Slide Racks shown on page A2.
Shipping Wt. 4.31 kg (9-1/2 lbs.)



For the complete assortment contents turn to A62

Metric

Nylon Insert Hex Locknuts

Métrique

Écrous freinés hexagonaux à douille de nylon

Metric

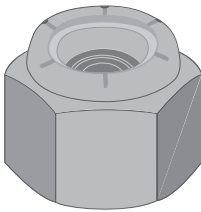
NYLON INSERT HEX LOCKNUTS - Regular Type

Property Class 10
STEEL

DIN 985

This Standard has been replaced. Please see Catalog Page R21 for more information.

All Dimensions in Millimetres

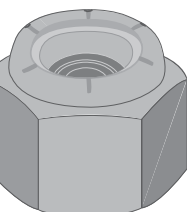
Finishes	Thread Size	COARSE THREAD		FINE THREAD		Width Across Flats	Thick-ness	PKG QTY.
		SPAENAUR No.	Pitch	SPAENAUR No.	Pitch			
Plain	M12			178-602	1.50	19	12	50
Yellow Zinc Plated	M10	178-583YZ	1.50	178-589YZ	1.50	17	10	100
	M18					27	18.5	50
 Zinc Plated	M5	178-C12-1P	0.80			8	5	100
	M6	178-581	1.00			10	6	100
	M8	178-C28-1T	1.25			13	8	100
	M10	178-583	1.50			17	10	100
	M12	178-C17-1K	1.75	178-C07-1M	1.50	19	12	50
	M16	178-586	2.00	178-587	1.50	24	16	50
	M18	178-588	2.50	178-589	1.50	27	18.5	50
	M20	178-590	2.50	178-591	2.00	30	20	25
	M24	178-592	3.00	178-593	1.50	36	24	25
	M30	178-C30-1T	3.50			46	30	25
	M36	178-595	4.00			55	36	10
	M48	178-596	5.00			75	48	1

NYLON INSERT HEX LOCKNUTS - Regular Type A2 and A4 Stainless Steel

DIN 985

This Standard has been replaced. Please see Catalog Page R21 for more information.

Thread Size	A2 Stainless Steel		A4 Stainless Steel		Width Across Flats	Thick-ness	PKG QTY.
	SPAENAUR No.	Pitch	SPAENAUR No.	Pitch			
M2.5	179-800	0.45			5	3.8	100
M3	179-W13-1P	0.50			5.5	4	100
M4	179-W09-1X	0.70			7	5	100
M5	179-803	0.80			8	5	100
M6	179-804	1.00	179-100	1.00	10	6	100
M8	179-W10-1M	1.25	179-101	1.25	13	8	100
M10	179-806	1.50	179-W14-1Y	1.50	17	10	100
M12	179-W11-1X	1.75	179-103	1.75	19	12	50
M14	179-808	2.00			22	14	50
M16	179-809	2.00	179-104	2.00	24	16	50
M18	179-810	2.50			27	18.5	50
M20	179-811	2.50	179-105	2.50	30	20	25
M22	179-812	2.50			32	22	25
M24	179-813	3.00			36	24	25
M27	179-814	3.00			41	27	10
M30	179-815	3.50			46	30	10



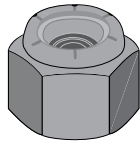
Plain Finish

Nylon Insert Heavy / Prevailing Torque Locknuts

Metric

Douille en nylon épaisse / Écrous freinés trilobés

Métrique



**NYLON INSERT HEX LOCKNUT
Heavy Type**

DIN 982

This Standard has been replaced. Please see Catalog Page R21 for more information.

All Dimensions in Millimetres

Metric Property Class 8 Steel, Plain Finish	Size (Dia.) in mm	COARSE THREAD SPAENAUR No.	Pitch mm	FINE THREAD SPAENAUR No.	Pitch mm	Width Across Flats	Thick-ness	PKG QTY.					
		M20			178-600	1.50	30	22.8	25				
Metric Property Class 8 Steel Zinc Plated	M5	178-300	0.80			8	6.8	100					
	M6	178-301	1.00			10	8	100					
	M8	178-302	1.25	178-303	1.00	13	9.5	100					
	M10		178-304	1.50	178-305	1.00	16	11.9	100				
					178-306	1.25	16	11.9	100				
	M12		178-C08-1X	1.75	178-308	1.50	18	14.9	50				
		M14					178-309	2.00	21	17	50		
	M16		178-310	2.00	178-311	1.5	24	19.1	50				
		M18					178-312	2.50	27	20	50		
	M20		178-313	2.50	178-314	1.50	30	22.8	25				
M24		178-315					3.00	36	27.1	25			
M27		178-316					3.00	41	30.8	25			
M30							178-317	3.50			46	32.6	25
Metric Property Class 10 Steel Zinc Plated		M6					178-350	1.00			10	8	100
	M8	178-351	1.25			13	9.5	100					
	M10		178-352	1.50			16	11.9	100				
		M12					178-C15-1N	1.75	18	14.9	50		
	M16		178-354	2.00			24	19.1	50				
		M20					178-355	2.50	30	22.8	25		
	M24	178-356	3.00	36	27.1	25							

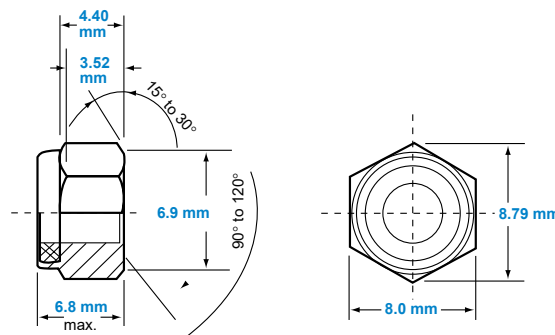
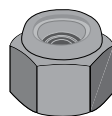
NYLON INSERT HEX LOCKNUT - Prevailing Torque Type

DIN 6924

This Standard has been replaced. Please see Catalog Page R21 for more information.

PKG QTY. 100

SPAENAUR No.	Description
178-379	M5 x 0.80 mm, Property Class 8 Steel, Zinc Plated.
178-C09-1A	M5 x 0.80 mm, Property Class 8 Steel, Yellow Zinc Plated.

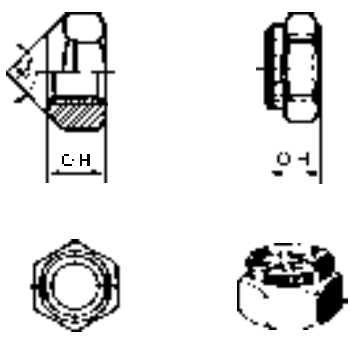


Metric

Nylon Insert Hex Locknuts

Métrique

Écrous freinés hexagonaux à douille de nylon

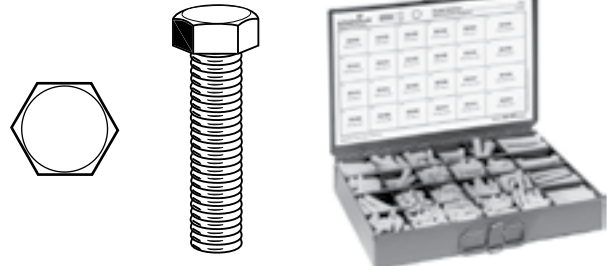
	Size (Dia.) in mm	COARSE THREAD SPAENAUR No.	Pitch mm	FINE THREAD SPAENAUR No.	Pitch mm	Width Across Flats	Overall Height (Max.)	PKG QTY.
	<p>Supplied with or without Collar - our option.</p> <p>All Metallic</p> <p>DIN 980V</p> <p><small>This Standard has been replaced. Please see Catalog Page R21 for more information.</small></p> <p>Metric</p> <p>Property Class 8 Steel</p> <p>Zinc Plated</p>	M4 M5 M6	166-157 166-A05-1Y 166-159	0.70 0.80 1.00			7 8 10	4.2 5.1 6
	M8 M10	166-161 166-061	1.25 1.50	166-060 166-062 166-063	1.00 1.00 1.25	13 17 17	8 10 10	100 100 100
	M12	166-064	1.75	166-065 166-066	1.25 1.50	19 19	12 12	100 100
	M14 M16 M18	166-067 166-069 166-072	2.00 2.00 2.50	166-068 166-070 166-074	1.50 1.50 1.50	22 24 27	14 16 18	100 100 50
	M20	166-094	2.50	166-075	1.50	30	20	50
	M22	166-077	2.50	166-078	1.50	32	22	50
	M24	166-079	3.00	166-080	1.50	36	24	50
	M27	166-081	3.00			41	27	25
	M30	166-082	3.5	166-073	2.00	46	30	25
	M36	166-083	4.00			55	36	10
	M5 M6 M8	166-144 166-160 166-059	0.80 1.00 1.25			8 10 13	5.1 6 8	100 100 100
	M8 M10	166-163 *166-A02-1X	1.25 1.50			12.75-13.00 17	7.14-8.00 10	100 100
	M12	166-147	1.75			19	12	100
	M14	166-148	2.00			22	14	100
	M16	166-149	2.00			24	16	100
	M18	166-150	2.50			27	18	50
	M20	166-152	2.50			30	20	50
	M22	166-153	2.50			32	22	50
	M24	▲166-154	3.00			36	24	50
	M30	166-155	3.50			46	30	25
	M36	166-156	4.00			55	36	10
	DIN 980V A2 (18-8) Stainless Steel Plain Finish	M12	166-143	1.75		19	11	100
	DIN 980V A2 (18-8) Stainless Steel Plain Finish	M5	166-A01-1M	0.80		8	4	100

◆ This Standard has been replaced. Please see Catalog Page R21 for more information.

*166-099YZ Yellow Zinc ▲166-154YZ Yellow Zinc

ASSORTMENT **805-494**

NYLON HEXAGON CAP SCREWS
INCH SIZES COARSE THREAD
24 SIZES - 180 PIECES



For the complete assortment contents turn to A49

Hex Locknuts / Assortiment

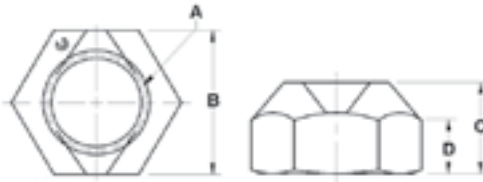
Inch

Écrous freinés hexagonaux / Assortiment

Pouce

**AUTOMATION LOCKNUTS
GRADE A**

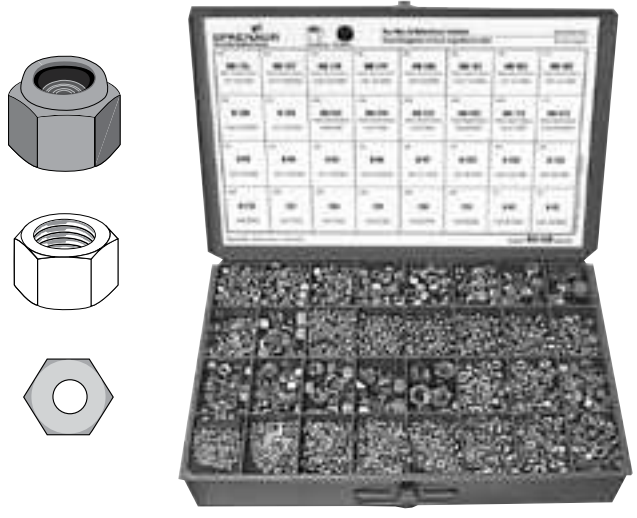
These items are compliant to all requirements of IFI 100/107 for Grade A All Metal Prevailing Torque Hex Locknuts.



Size A	Spaenaur No.	Across Flats B Max. Min.	Thickness C Max. Min.	Wrench Height D Min.	Bearing Dia. Min.	Proof Load Min. Lb.	1 st Install Max. In.-lb.	1 st Removal Min. In.-lb.	3 rd Removal Min. in.-lb.	PKG QTY.
1/4-20	165-058	0.438 0.428	0.224 0.213	0.145	0.438	2,900	40	5.0	1.5	100
5/16-18	165-060	0.502 0.489	0.272 0.259	0.166	0.475	4,700	80	8.0	2.5	100
3/8-16	165-062	0.564 0.555	0.337 0.320	0.198	0.534	7,000	110	12	4.0	100
7/16-14	165-064	0.689 0.675	0.385 0.366	0.233	0.653	9,550	135	17	5.0	50
1/2-13	165-066	0.752 0.736	0.448 0.427	0.262	0.712	12,800	204	22	7.5	50
3/4-10	165-072	1.125 1.088	0.665 0.617	—	—	—	—	—	—	50
3/4-16	165-073	1.125 1.088	0.665 0.617	—	—	—	—	—	—	50

ASSORTMENT 805-658B

HEX NUTS & NYLON INSERT LOCKNUTS
STEEL, ZINC PLATED
COARSE (UNC) and FINE (UNF)
All Inch Sizes
32 Sizes — 2,140 Pieces



Name	Spaenaur No.	Thread Size	Qty.	Page
Hex Nuts	B-91	1/4"-20	75	B265
	155-P36-1W	1/4"-28		C3
	B-92	5/16"-18		C3
	155-P31-1Y	5/16"-24	50	B265
	B-93	3/8"-16		B273
	155-P23-1K	3/8"-24	30	C3
	155-P39-1A	7/16"-14		C3
	B-104	7/16"-20		B265
	B-95	1/2"-13	25	C3
	B-105	1/2"-20		C3
B-96	9/16"-12	20	C3	
155-P16-1P	5/8"-11		C3	
Machine Screw Nuts	155-P11-1K	#4-40	100	C2
	155-P03-2A	#6-32		C2
	155-P04-1P	#8-32		C2
	155-P08-1T	#10-24		C2
	155-P02-1X	#10-32		C2
Nylon Insert Locknuts	155-P22-1T	#12-24	75	C26
	178-C01-1Y	#4-40		C26
	178-C02-1C	#6-32		C26
	HN-171	#8-32		C26
	HN-172	#10-24		C26
	178-C06-2X	#10-32		C26
	178-C03-1N	1/4"-20	50	L93
	HN-176	1/4"-28		C26
	178-C26-1C	5/16"-18		C26
	HN-178	5/16"-24	30	L93
	178-C05-2P	3/8"-16		C26
	HN-180	3/8"-24		C26
HN-181	7/16"-14	C26		
178-C23-1A	1/2"-13	C26		
178-C27-1N	5/8"-11	15	C26	

Furnished in Large Size grey enamel steel drawer with scooped bins for easy access. Drawer will fit into Slide Racks shown on page A3.

Inch

Hex Locknuts

Pouce

Écrous freinés hexagonaux

AUTOMATION LOCKNUTS GRADE B

These items are compliant to all requirements of IFI 100/107 for Grade B All Metal Prevailing Torque Hex Locknuts



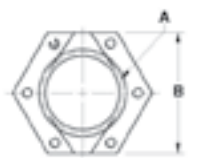
Size A	Spaenaur No.	Across Flats B Max. Min.	Thickness C Max. Min.	Wrench Height D Min.	Bearing Dia. Min.	Proof Load Min. Lb.	1 st Install Max. In.-lb.	1 st Removal Min. In.-lb.	3 rd Removal Min. in.-lb.	PKG QTY.
1/4-20	165-102	0.438 0.428	0.257 0.244	0.145	0.438	3,800	40	5.0	1.5	100
5/16-18	165-104	0.502	0.302	0.166	0.475	6,300	80	8.0	2.5	100
5/16-24	165-105	0.489	0.292			6,950				
3/8-16	165-106	0.564	0.377	0.198	0.534	9,300	110	12	4.0	100
3/8-24	165-107	0.555	0.36			10,500				
7/16-14	165-108	0.689	0.429	0.223	0.653	12,800	135	17	5.0	50
7/17-20	165-109	0.675	0.410			14,200				
1/2-13	165-110	0.752	0.510	0.262	0.712	17,000	204	22	7.5	50
1/2-20	165-111	0.736	0.490			19,200				
9/16-12	165-112	0.877 0.861	0.555 0.535	0.286	0.830	21,800	300	30	10.0	50
5/8-11	165-114	0.939	0.645	0.329	0.890	27,200	420	39	12.5	50
5/8-18	165-115	0.922	0.621			30,700				
3/4-10	165-116	1.127	0.745	0.382	1.069	40,100	540	58	20	50
3/4-16	165-117	1.088	0.707			44,800				
7/8-9	165-118	1.314	0.858	0.450	1.246	55,400	840	88	30	50
7/8-14	165-119	1.269	0.815			61,100				
1-8	165-120	1.502	0.954	0.513	1.452	72,700	1080	120	40	25
1-14	165-121	1.450	0.907			81,500				

AUTOMATION LOCKNUTS GRADE C

These items are compliant to all requirements of IFI 100/107 for Grade C All Metal Prevailing Torque Hex Locknuts.

Size A	Spaenaur No.	Across Flats B Max. Min.	Thickness C Max. Min.	Wrench Height D Min.	Bearing Dia. Min.	Proof Load Min. Lb.	1 st Install Max. In.-lb.	1 st Removal Min. In.-lb.	3 rd Removal Min. in.-lb.	PKG. QTY.
1/4-20	165-130	0.438	0.224	0.145	0.438	4750	40	5.0	1.5	100
1/4-28	165-131	0.428	0.213			5450				
5/16-18	165-132	0.502	0.272	0.166	0.475	7850	80	8.0	2.5	100
5/16-24	165-133	0.489	0.259			8700				
3/8-16	165-134	0.564	0.337	0.198	0.534	11,600	110	12	4.0	100
3/8-24	165-135	0.555	0.320			13,200				
7/16-14	165-136	0.689	0.385	0.233	0.653	15,900	135	17	5.0	50
7/17-20	165-137	0.675	0.366			17,800				
1/2-13	165-138	0.752	0.448	0.262	0.712	21,300	204	22	7.5	50
1/2-20	165-139	0.736	0.427			24,000				
9/16-12	165-140	0.877	0.496	0.286	0.830	27,300	300	30	10.0	50
9/16-18	165-141	0.861	0.473			30,400				
5/8-11	165-142	0.939	0.559	0.329	0.890	33,900	420	39	12.5	50
5/8-18	165-143	0.922	0.535			38,400				
3/4-10	165-144	1.127	0.653	0.382	1.069	50,100	540	58	20	50
3/4-16	165-145	1.088	0.629			56,000				
7/8-9	165-146	1.314	0.769	0.450	1.246	69,300	840	88	30	50
7/8-14	165-147	1.269	0.731			76,400				
1-8	165-148	1.502	0.881	0.513	1.452	90,900	1080	120	40	25
1-14	165-149	1.450	0.837			101,900				
1 1/8-7	165-150	1.689	0.999	0.576	1.603	115,000	1200	150	50	25
1 1/8-12	165-151	1.631	0.939			128,000				
1 1/4-7	165-152	1.877	1.094	0.628	1.781	145,000	1320	188	60	10
1 1/4-12	165-153	1.812	1.030			161,000				

Items of 1 1/2" diameter and smaller are compliant to all requirements of IFI 100/107 for Grade C All Metal Prevailing Torque Hex Locknuts.



Hex Flange Locknuts

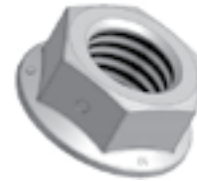
Inch

Écrous freinés hexagonaux à embase

Pouce

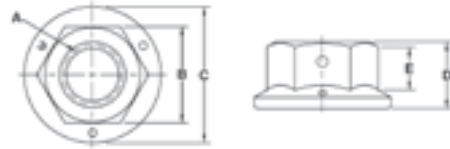
STEEL REGULAR FLANGE CENTER LOCKNUTS

Dimensions of the 1/4, 3/8, 1/2, and 5/8 sizes are compliant to ASME B18.2.2 Regular Hex Flange Nuts. Dimensions of the 7/8 and 1 inch sizes are compliant to the Locknut Large Regular Flange Nut standard. Dimensions of all other sizes are compliant to IFI 100/107 for Hex Flange Locknuts. Performance and material characteristics are compliant to IFI 100/107 for Grade B or F.



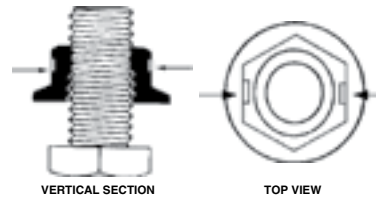
REGULAR FLANGE SIDE DISTORTION HEX LOCKNUT

The threads of a Regular Flange Hex Locknut have been scientifically deflected at two 180° opposing sides. The locking concept provides gripping surfaces on the flank, root, and crest of mating part threads and a spring-back effect of a body deflection through repeated shock loads. Reuseable many times. In addition, the nut locks adequately even when the bolt threads only reach the top of the nut.



Grade F (.23 max. carbon steel)
Finish: Cadmium Plated & Waxed or Zinc Plated - Our Option.

HOW IT WORKS



GRADE F FLANGE LOCKNUT Standard for most applications



Large Flange Locknuts on following page.

Size A	Spaenaur No.	Across Flats B Max. Min.	Flange Dia. C Max.	Thickness D Max. Min.	Wrench Height E Min.	Proof Load Min. Lb.	1 st Install Max. In.-lb.	1 st Removal Min. In.-lb.	3 rd Removal Min. in.-lb.	PKG. QTY.
10-24	*165-158	0.375 0.365	0.500	0.219 0.203	—	—	—	—	—	100
10-32	*165-W04-1Y	0.375 0.365	0.500	0.219 0.203	—	—	—	—	—	100
1/4-20	165-160	0.438	0.594	0.234	0.14	3,800	40	5.0	1.5	100
1/4-28	165-W03-1P	0.428		0.223		4,350				
5/16-18	165-162	0.502 0.489	0.680	0.281 0.268	0.17	6,300	80	8.0	2.5	100
3/8-16	165-164	0.562	0.750	0.347	0.23	9,300	110	12	4.0	50
3/8-24	165-165	0.551		0.330		10,500				
7/16-14	165-166	0.689 0.675	0.930	0.395 0.378	0.23	12,800	135	17	5.0	50
1/2-13	165-168	0.750	1.031	0.458	0.31	17,000	204	22	7.5	50
1/2-20	165-169	0.736		0.437		19,200				
1/2-13	▲165-168YZ	0.877 0.861	1.190	0.560 0.542	.029	21,800	300	30	10.0	50
5/8-11	165-170	0.938 0.922	1.281	0.569 0.545	0.40	27,200	420	39	12.5	50
3/4-10	165-172	1.127	1.585	0.672	0.38	40,100	540	58	20	25
3/4-16	*165-173	1.088		0.645		44,800				
3/4-16	*165-209	1.314 1.269	1.750	0.780 0.757	0.51	55,400	840	88	30	25
1-8	165-176	1.502	2.060	0.896	0.55	72,700	1080	120	40	5
1-14	*165-177	1.450		0.870		81,500				

*Lock on Top ▲Yellow Zinc Plated

OTHER APPLICATIONS

ELONGATED HOLE SPRING SPACER SLOTTED PART MOUNT SLOTTED BRACKET MULTIPLE PARTS ASSEMBLY YOKE ASSEMBLY

Inch

Hex Flange Locknuts

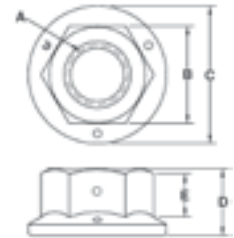
Pouce

Écrous freinés hexagonaux à embase

LARGE FLANGE CENTER LOCKNUTS

GRADE F

Dimensions Per ASME B18.2.2
Large Hex Flange Nuts Performance Per IFI 100/107 Grade F

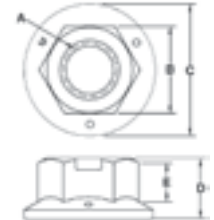


Size A	Spaenaur No.	Across Flats B Max. Min.	Flange Dia. C Max. Min.	Thickness D Max. Min.	Wrench Height E Min.	Proof Load Min. Lb.	1 st Install Max. In.-lb.	1 st Removal Min. In.-lb.	3 rd Removal Min. in.-lb.	PKG. QTY.
3/8-16	165-182	0.562 0.551	0.915 0.885	0.406 0.390	0.24	9,300	110	12	4.0	50
1/2-13	165-186	0.750 0.736	1.205 1.175	0.515 0.485	0.29	17,000	204	22	7.5	25

SUPER FLANGE TechPlus® LOCKNUTS

GRADE F

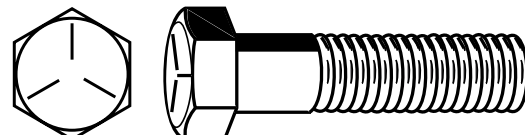
Performance Per IFI 100/107 Grade F



Size A	Spaenaur No.	Across Flats B Max. Min.	Flange Dia. C Max. Min.	Thickness D Max. Min.	Wrench Height E Min.	Proof Load Min. Lb.	1 st Install Max. In.-lb.	1 st Removal Min. In.-lb.	3 rd Removal Min. in.-lb.	PKG. QTY.
1/4-20	165-188	0.500 0.488	0.906 0.812	0.303 0.290	0.15	3,800	40	5.0	1.5	50
5/16-18	165-190	0.562 0.546	0.968 0.875	0.366 0.353	0.20	6,300	80	8.0	2.5	25
3/8-16	165-192	0.687 0.669	1.093 1.000	0.405 0.392	0.24	9,300	110	12	4.0	25


SPAENAUR
Fasteners Right Now®

See SAE Grade 5 Hex Head Cap Screws
on Pages B138-B141



Hex Flange / Disc-Lock® Nuts

Inch and Metric

Écrous hexagonaux à embase / Disc-Lock®

Pouce et Métrique

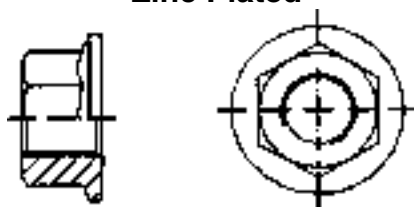
HEX FLANGE NUTS

DIN 6923

This Standard has been replaced. Please see Catalog Page R21 for more information.

Metric

Property Class 8 & 10 Steel
Zinc Plated



METRIC SIZES — Dimensions in Millimetres

Property Class	Nom. Size	SPAENAUR No.	Pitch mm	Width A/F	Thick-ness	Maximum Flange Dia.	PKG QTY.
8	M5	175-114	0.80	8.00	5	11.8	100
	M6	175-115	1.00	10.0	6	14.2	100
	M8	175-116	1.25	13.0	8	17.9	100
	M10	175-117	1.50	16.0	10	21.8	50
	M12	175-118	1.75	18.0	12	26.0	50
	M14	175-119	2.00	21.0	14	29.9	50
10	M16	175-120	2.00	24.0	16	34.5	50
	M20	175-121	2.50	30.0	20	42.8	25
	M5	175-122	0.80	8.00	5	11.8	100
	M6	175-123	1.00	10.0	6	14.2	100
	M8	175-124	1.25	13.0	8	17.9	100
	M10	175-125	1.50	16.0	10	21.8	50
M12	175-126	1.75	18.0	12	26.0	50	
M14	175-127	2.00	21.0	14	29.9	50	
M16	175-B09-1M	2.00	24.0	16	34.5	50	
M20	175-129	2.50	30.0	20	42.8	25	

HEX NUT

with serrated flange

Tension Locking

Metric

Property Class 8 Steel
Black Finish



METRIC SIZES — Dimensions in Millimetres

Size Dia.	SPAENAUR No.	Pitch mm	Width A/F	Thick-ness	O/A Dia.	PKG QTY.
M5	224-211	0.80	8	4.3	11.2	100
M5	*224-211ZP	0.80	8	4.3	11.2	100
M5	▲224-302	0.80	8	4.3	11.2	100
M6	224-212	1.00	10	5.5	14.25	100
M6	*224-212ZP	1.00	10	5.5	14.25	100
M8	224-213	1.25	13	7	18.25	50
M8	*224-213ZP	1.25	13	7	18.25	50
M10	224-G01-1X	1.50	15	7.9	21	50
M12	224-215	1.75	17	8.7	24	50

▲ Class 10 * Zinc Plated

HEX FLANGE DISC-LOCK® NUTS - Inch Sizes

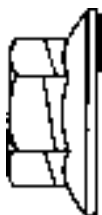
MEETS PHYSICAL REQUIREMENTS OF ASTM A 194 - 2H MTL: STEEL

MIL TEST MIL- STD 1312
VIBRATION TEST #7

INCH SIZES

Sizes 1/2" - 5/8" Zinc Chromate Plated Steel
3/4" & larger Zinc Plated & Phosphated to MIL - 46010

150,000 PSI & 1040 MPa
PROOF LOAD
HARDNESS RC 24-38



Nominal Size	COARSE THREAD		FINE THREAD		Width A/F (Inches)		Maximum Flange Diameter	Nominal Overall Height	PKG QTY.
	Nominal Size	SPAENAUR No.	Nominal Size	SPAENAUR No.	Max.	Min.			
5/8"-11		175-202	1/2"-20	175-201	0.942	0.922	1.281"	0.820"	25
3/4"-10		175-204	5/8"-18	175-203	0.942	0.922	1.281"	0.820"	25
					1.250	1.212	1.732"	0.875"	20

Inch

Hex Center Locknuts

Pouce

Écrous freinés hexagonaux pour moyeux

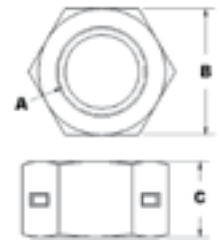
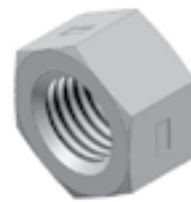
FINISHED HEX CENTER LOCKNUTS GRADE A

Zinc Plated, Clear or Yellow Dichromate - Our Option.

Unless Otherwise Indicated, Dimensions per ASME B18.2.2

Unless Otherwise Indicated, Performance Per IFI 100/107 for Grade

A All Metal Prevailing Torque Hex Locknuts.



STEEL TWO-WAY LOCKNUT

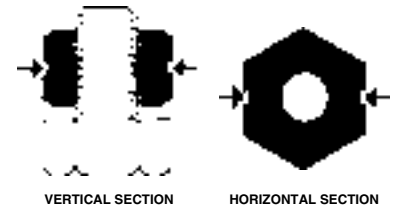
The TWO-WAY locks to the mating part by means of deflected threads in the centre of the nut. Holds at any point on the screw. Saves on length of screw as threads need not protrude from nut to lock securely. Top and bottom are identical; nut is ideal for automation. Economical - one piece

HOW IT WORKS

The centre threads of the Two-Way Locknut have been precision deflected at two 180° opposing centre pressure points, thus uniformly ovalizing the centre threads of the nut and deflecting the centre threads of the nut out of their true helix.

This locking element spreads over several of the centre threads and engages the mating threads of a bolt or stud with a resilient 180° spring lock. Even before the bolt end reaches the top of the nut, the lock is fully engaged.

For AUTOMATION . . . The double chamfer (the top and bottom are alike) make the nut always right side up. Ideal for hopper or hand feeding.



Grade A-Finished Hexagon Dimensions -(Standard for most applications) Low carbon steel C1110 or equivalent, Rockwell B80-B90, for use on most applications SAE grade bolts 2 and 5. By common practice Grade A Two-Way Lock-nuts are used in conjunction with all sizes of Grade 5 bolts where coarse threads require 120,000 psi and fine threads require 109,000 psi.

Note: Special Thick Machine Screw Hexagon Dimension below 1/4".

Size A	Spaenaur No.	Across Flats B Max. Min.	Thickness C Max. Min.	Across Corners Min.	Bearing Dia. Min.	Proof Load Min. Lb.	1 st Install Max. In.-lb.	1 st Removal Min. In.-lb.	3 rd Min. in.-lb.	PKG. QTY.
#8-32	165-031	0.344 0.332	0.134 0.123	0.378	0.328	1250	12	2	0.5	100
#10-24	165-032	0.375 0.362	0.172 0.160	0.413	0.357	1550	17	2.5	1	100
#10-32	165-033					1800				
1/4-20	165-034	0.438 0.428	0.226 0.212	0.488	0.407	2900	40	5.0	1.5	100
1/4-28	165-035					3300				
5/16-18	165-036	0.502 0.489	0.273 0.258	0.557	0.465	4700	80	8.0	2.5	100
5/16-24	165-037					5200				
3/8-16	165-038	0.563 0.555	0.337 0.320	0.628	0.523	7000	110	12	4.0	50
3/8-24	165-039					7900				
7/16-14	165-040	0.688 0.675	0.385 0.366	0.768	0.641	9550	135	17	5.0	50
7/17-20	165-041					10,700				
1/2-13	165-042	0.750 0.736	0.448 0.427	0.840	0.699	12,800	204	22	7.5	50
1/2-20	165-043					14,400				
9/16-18	165-045	0.875 0.861	0.496 0.473	0.982	0.818	18,300	300	30	10.0	50
5/8-11	165-046	0.938 0.922	0.559 0.535	1.051	0.876	20,300	420	39	12.5	50
5/8-18	165-047					22,900				
3/4-10	165-048	1.125 1.088	0.665 0.617	1.240	1.034	30,000	540	58	20	50
3/4-16	165-049					33,600				
7/8-9	165-050	1.312 1.269	0.776 0.724	1.447	1.206	41,600	840	88	30	50
7/8-14	165-051					45,800				
1-8	165-052	1.500 1.450	0.887 0.831	1.653	1.377	54,500	1080	120	40	25
1-14	165-053					61,100				

■165-082 Three Way Locknut

CATALOG 14

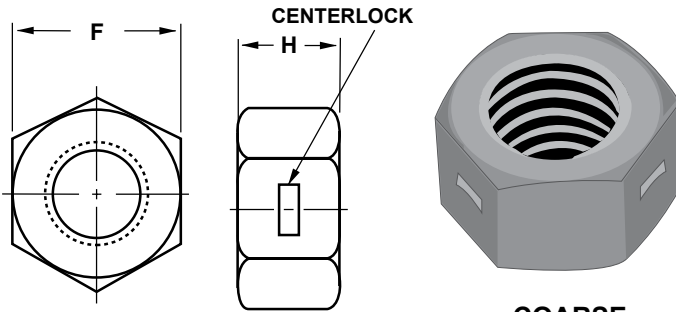
SPAENAUR

Hex Full & Jam Centerlock Nuts

Inch

Écrous hexagonaux Centerlock complets et contre-écrous

Pouce



**CENTERLOCK NUTS
GRADE A - GRADE B**

The Grade A Centerlock Nuts are manufactured from low carbon steel to meet Grade A performance specifications. The Centerlock design permits thread-start from either end of the nut. These prevailing torque nuts are designed for use with Grade 2 bolts. The Grade B Centerlock Nuts are manufactured from medium carbon steel, and processed to meet Grade B performance specifications. These prevailing torque nuts are designed for use with Grade 5 bolts.

Contact Sales Desk For
Package Quantities

**COARSE
and
FINE
THREAD**

- Cadmium and Wax Finish is being replaced by Zinc Dichromate (Gold). Cadmium will be supplied until stock is depleted.
- Centerlock Nuts meet or exceed all current I.F.I. specifications.

FULL CENTERLOCK NUT - GRADE A

Coarse Thread Size	SPAENAUR No.	Fine Thread Size	SPAENAUR No.	Dimensions in Inches			
				(F) WIDTH ACROSS FLATS		(H) THICKNESS	
				MAX.	MIN.	MAX.	MIN.
5/16"-18	165-345			.500	.489	.273	.258
		3/8"-24	165-352	.563	.551	.337	.320
7/16"-14	165-347	7/16"-20	165-353	.688	.675	.385	.365
1/2"-13	165-348	1/2"-20	165-354	.750	.736	.448	.427
		5/8"-18	165-355	.938	.922	.559	.535

JAM - CENTERLOCK NUT - GRADE A

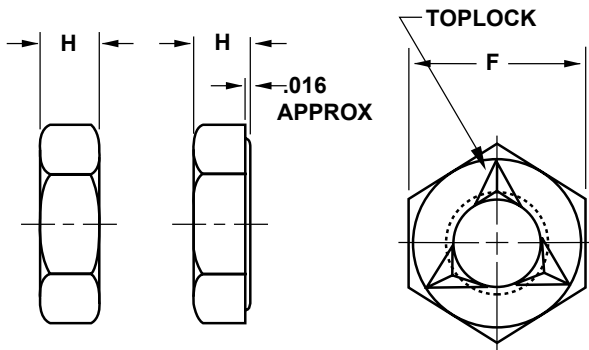
Coarse Thread Size	SPAENAUR No.	Fine Thread Size	SPAENAUR No.	Dimensions in Inches			
				(F) WIDTH ACROSS FLATS		(H) THICKNESS	
				MAX.	MIN.	MAX.	MIN.
3/8"-16	165-357	3/8"-24	165-359	.563	.551	.227	.210
1/2"-13	165-358	1/2"-20	165-360	.750	.736	.323	.302

Inch

Hex Toplock Jam Locknuts / Locknuts Assortment

Pouce

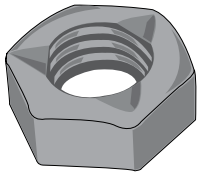
Assortiment de contre-écrous et d'écrous à blocage hexagonal Toplock



TOPLOCK NUTS JAM SERIES

Toplock Nuts are manufactured from low carbon steel to meet Grade A performance specifications. These prevailing torque nuts are designed for use in non-critical applications with Grade 2 bolts.

- Jam Toplock Nuts are available.
- No markings are required for this series of nuts.
- Cadmium and Wax Finish is being replaced by Zinc Dichromate (Gold).
- Toplock Nuts meet or exceed all current I.F.I. specifications.



COARSE and FINE
THREAD

Finished Hexagon Jam Nut Series

Coarse Thread Size	SPAENAUR No.	Fine Thread Size	SPAENAUR No.	Dimensions in Inches			
				(F) WIDTH ACROSS FLATS		(H) THICKNESS	
				MAX.	MIN.	MAX.	MIN.
1/4"-20	165-336	1/4"-28	165-340	.438	.428	.164	.150
5/16"-18	165-337			.500	.489	.195	.180
3/8"-16	165-338	3/8"-24	165-342	.563	.551	.227	.210
1/2"-13	165-339			.750	.736	.323	.302

PKG QTY. 100

ASSORTMENT **805-522**
ASSORTIMENT

Natural Nylon Locking Insert (Zytel-101)

Stainless Steel 18-8
NYLON INSERT LOCKNUTS

16 SIZES
805 PIECES



Name	Spaenaur No.	Thread Size	Qty.	Page
Locknut Machine Screw	179-005	#2-56	100	C26
	179-006	#4-40		
	179-W08-2M	#6-32		
	179-W07-1K	#8-32		
	179-W12-1A	#10-24		
179-003	#10-32	50		
179-W04-2N	1/4"-20			
179-W02-2Y	5/16"-18			
Locknut Cap Screw	179-W05-2M	3/8"-16	25	
	179-007	3/8"-24		
	HN-2038	7/16"-14	10	
	179-W03-2C	1/2"-13		
	179-W18-1K	5/8"-11		5
	179-008	5/8"-18		
179-W17-1T	3/4"-10	10		
HN-2043	3/4"-16			

Furnished in REGULAR SIZE grey enameled drawer.
Drawer will fit into Slide Racks shown on A2

Shipping Weight: **4.99 kg** (11 lbs.)