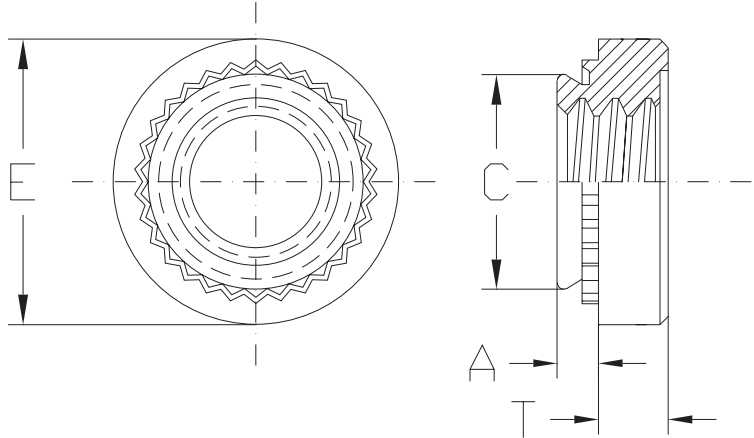
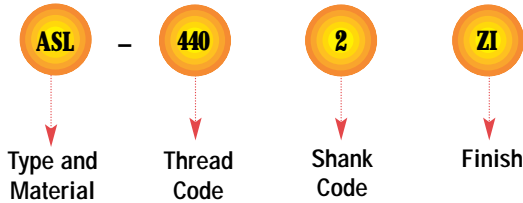


SELF-CLINCHING NUTS

SELF-CLINCHING LOCKNUTS TYPE ASL



Part Number Designation



UNIFIED (inch)	Thread Size	Type	Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	E ±.010	T ±.010	Min. Dist. Hole C/L To Edge
	.112-40 (#4-40)	ASL	440	1	1	.038	.040	.166	.165	.250	.070
2					.054	.056					
.138-32 (#6-32)	ASL	632	1	1	.038	.040	.1875	.187	.280	.070	.220
				2	.054	.056					
.164-32 (#8-32)	ASL	832	1	1	.038	.040	.213	.212	.310	.090	.270
				2	.054	.056					
.190-32 (#10-32)	ASL	032	1	1	.038	.040	.250	.249	.340	.090	.280
				2	.054	.056					
.250-20 (1/4-20)	ASL	0420	1	1	.054	.056	.344	.343	.440	.170	.340
				2	.087	.091					

METRIC (mm)	Thread Size x Pitch	Type	Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +0.08	C Max.	E ±0.25	T ±0.25	Min. Dist. Hole C/L To Edge
	M3 x 0.5	ASL	M3	1	1	0.98	1	4.25	4.22	6.3	1.5
2					1.38	1.4					
M3.5 x 0.6	ASL	M3.5	1	1	0.98	1	4.75	4.73	7.1	1.5	5.6
				2	1.38	1.4					
M4 x 0.7	ASL	M4	1	1	0.98	1	5.4	5.38	7.9	2	6.9
				2	1.38	1.4					
M5 x 0.8	ASL	M5	1	1	0.98	1	6.4	6.38	8.7	2	7.1
				2	1.38	1.4					
M6 x 1	ASL	M6	1	1	1.38	1.4	8.75	8.72	11.05	4.08	8.6
				2	2.21	2.3					

PERFORMANCE DATA⁽¹⁾

UNIFIED (inch)	Type	Thread Code	Shank Code	Locking Specifications (1)		Test Sheet Material					
				Max. Torque (1st thru 3rd) (in. lbs.)	Min. Torque (1st thru 3rd) (in. lbs.)	5052-H34 Aluminum			Cold-rolled Steel		
						Installation (lbs.)	Pushout (lbs.)	Torque-out (in. lbs.)	Installation (lbs.)	Pushout (lbs.)	Torque-out (in. lbs.)
ASL	440	1	2	6	0.4	1500 - 2000	90	10	2500 - 3500	125	15
							170	13		230	18
ASL	632	1	2	12	0.8	2500 - 3000	95	17	3000 - 6000	130	20
							190	22		275	28
ASL	832	1	2	18	1.2	2500 - 3000	105	23	4000 - 6000	145	35
							220	35		285	45
ASL	032	1	2	21	1.65	2500 - 3000	110	32	4000 - 9000	180	40
							190	50		250	60
ASL	0420	1	2	35	3.75	4000 - 7000	360	90	6000 - 9000	400	150
							360	125		400	150

SELF-CLINCHING NUTS

SELF-CLINCHING LOCKNUTS TYPE ASL



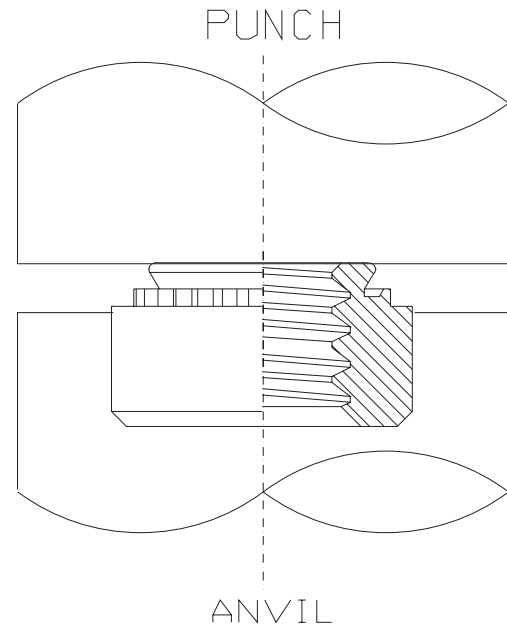
METRIC (mm)	Type	Thread Code	Shank Code	Locking Specifications (1)			Test Sheet Material					
				Max. Torque (1st thru 3rd) (N·m)	Min. Torque (1st thru 3rd) (N·m)	Installation (kN)	5052-H34 Aluminum			Cold-rolled Steel		
							Pushout (N)	Torque-out (N·m)	Installation (kN)	Pushout (N)	Torque-out (N·m)	
ASL	M3		1	0.7	0.04	6.7 - 8.9	400	1.13	11.2 - 15.6	550	1.7	
			2				750	1.47		1010	2.03	
ASL	M3.5		1	1.4	0.08	11.2 - 13.5	400	1.92	13.4 - 26.7	570	2.3	
			2				840	2.5		1210	2.3	
ASL	M4		1	2.1	0.13	11.2 - 13.4	470	2.6	18 - 27	645	4	
			2				970	4		1250	5.1	
ASL	M5		1	2.4	0.18	11.2 - 15.6	480	3.6	18 - 38	800	4.5	
			2				845	5.7		1112	6.8	
ASL	M6		1	4	0.30	18 - 32	1580	10.2	27 - 38	1760	17	
			2				1580	14.1		1760	17	

(1) 3 cycle locking performance. Spec PRS-C90 Max. on / Min. off torque for 1st thru 3rd cycles.

INSTALLATION

Types ASL

1. Punch or drill properly sized mounting hole in sheet. Do not perform any secondary operations such as deburring.
2. Place fastener into the anvil hole and place the mounting hole over the shank of the fastener as shown in diagram to the right.
3. With punch and anvil surfaces parallel, apply squeezing force until the head of the nut comes into contact with the sheet material.



MATERIAL & FINISH SPECIFICATIONS

Type	Threads			Fastener Materials				Standard Finishes				Optional Finish (1)	For Use in Sheet Hardness:					
	Internal, ANSI B1.1 2B/ANSI/ASME B1.13M, 6H	Meets Torque Requirements for IFI 100/107 Grade B (unified) and ANSI B18.16.1M (metric) Locknuts	3 Cycle Locking Performance PEM spec PRS-C90	Heat Treated Carbon Steel	#302/303 Stainless Steel	2024-T4 Aluminum	Carbon Steel	Precipitation Hardening Grade Stainless Steel	Passivated and/or Tested per ASTM A380	Zinc per ASTM B 633 SC1 (5µm), Type III, Colorless	Cadmium Spec SAE AMS-QQ-P-416, Type I, Class 3, Plus Clear Chromate Passivation	No Finish (2) (3)	Zinc per ASTM B 633 SC1 (5µm), Type II, Yellow	90 or Less on the Rockwell 'B' Scale	80 or Less on the Rockwell 'B' Scale	70 or Less on the Rockwell 'B' Scale	60 or Less on the Rockwell 'B' Scale	50 or Less on the Rockwell 'B' Scale
ASL	•		•	•						•				•				
Part number codes for finishes									None	ZI	CI	X	C					

- (1) Special order with additional charge.
- (2) Part numbers for aluminum nuts have no plating suffix.
- (3) Unplated threads are sized to accept a basic go gauge after .00025" plating.