

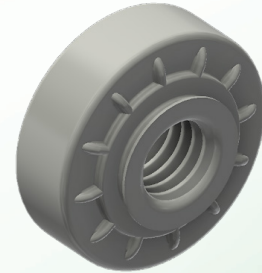


Strux SM™

STRUX SM™ NUTS

SUPERIOR SOFT METAL CLINCH SOLUTION

Strux SM™ is our next generation of clinch product designed for soft metal, offering a stronger and more reliable assembly alternative to traditional clinch nuts into the same material. Using an identical hole size and installation method to that of Strux®, Strux SM™ offers the ultimate performance in soft metal.



FEATURES

- ▶ New rib profile equally spaced around the body
 - ▶ Prevents rotation after being staked into sheet material
- ▶ Displacement Collar
 - ▶ Displaces sheet material into retaining groove
- ▶ Retaining Groove
- ▶ Retaining Ring
 - ▶ Barrier for displaced material to prevent pushout

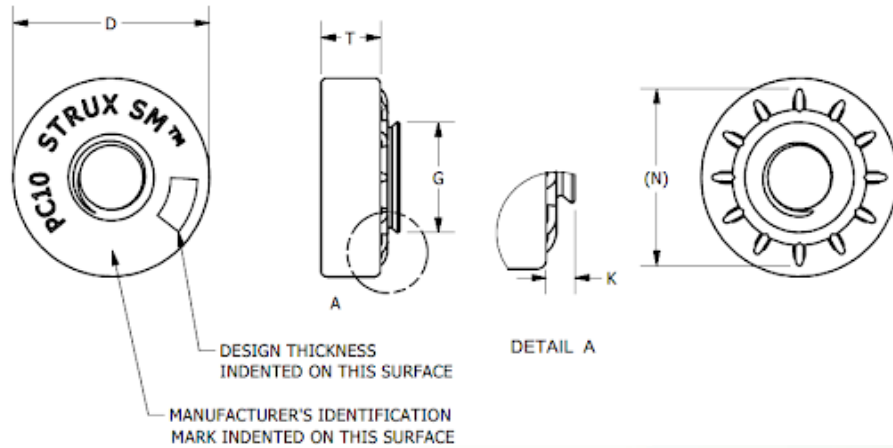
BENEFITS

- ▶ Significantly higher torsional resistance in aluminum vs. current competing clinch product
- ▶ Each thread size (M5 - M12) has a single design for reduced product complexity
- ▶ Minimalized panel distortion from installation
- ▶ Fasteners may be installed close together with less panel distortion than current competing clinch product
- ▶ Consistent performance
- ▶ Fast and easy installation - can be installed in-die or using automated equipment
 - ▶ Low-cost, long-life installation tooling compared to competitors
- ▶ May be installed into difficult-to-weld materials
- ▶ Clinch feature seals against fluids without the need for expensive chemical sealants between the nut and mating material

APPLICATIONS INCLUDE:

- ▶ Bumpers and Beams
- ▶ Heat Shield
- ▶ Battery Pack Enclosures
- ▶ Body and Closures
- ▶ Roof Rails





THREAD SIZE	DESIGN (MIN. APPLICATION MATERIAL THICKNESS) (mm)	D (mm)	T (mm)	G (mm)	K (mm)	N (mm)
		BODY DIA.	BODY THICKNESS	RETAINING RING O.D.	K MAX.	RIB END (REF.)
M5	1.5	13.25	4.32	7.68	1.50	11.25
		12.75	4.06	7.54		
M6	1.5	15.75	4.84	8.68	1.50	13.80
		15.25	4.58	8.54		
M8	1.5	19.50	6.06	10.68	1.50	17.10
		19.00	5.80	10.54		
M10	2.3	24.25	7.33	13.16	2.30	20.10
		23.75	7.07	13.02		
M12	2.3	29.25	9.74	15.68	2.30	23.10
		28.75	9.48	15.54		

THREAD SIZE	DESIGN (mm)	APPROXIMATE PUSH OUT (kN)	APPROXIMATE UNSUPPORTED TORSIONAL RESISTANCE (Nm)
M5	1.5	1.68	15.0
M6	1.5	1.98	27.9
M8	1.5	2.30	61.3
M10	2.3	4.66	108.2
M12	2.3	4.93	164.0

Performance approximations based on 5052-H32 Aluminium.