

MATERIALS AND MANUFACTURING

HELIX™ Linear Technologies manufactures precision lead screws by thread rolling, thread milling, or thread grinding. HELIX™ lead screw products feature centralizing and custom thread forms for smooth, no-wedging performance.

THREAD ROLLING

HELIX™ offers the largest selection of rolled lead screw sizes in the industry. Rolled thread screws are precise, cost effective, and are stocked for quick delivery.

THREAD MILLING

Milled screws allow more variety in journal machining, particularly where a design requires the journal O.D. to be larger than the screw major diameter.

THREAD GRINDING

Ground thread screws offer higher lead accuracy for applications where positioning tolerances are extremely critical.

BRONZE ACME & TRAPEZOIDAL NUTS

Special high tensile bronze is selected for our smooth running, anti-wedging bronze nuts.

- Material: Bronze
- Tensile Yield: 50,000 psi
- Tensile Ultimate: 65,000 psi
- Hardness: HB75
- Dynamic Coefficient of Friction: 0.125 with HELIX™ Lubricant

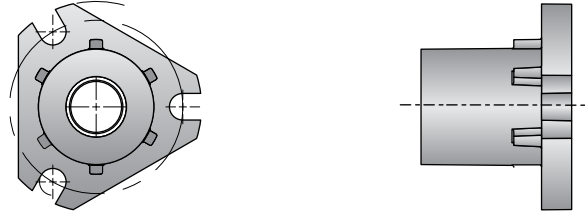
PLASTIC ACME & TRAPEZOIDAL NUTS

The high strength and inherent lubricity of our proprietary plastic nut material can result in product life that can equal or exceed conventional nut materials.

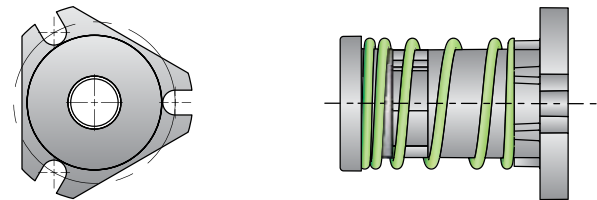
- Material: HELIX™ ACETAL/PTFE blend
- Tensile Strength @70°F: 8,000 psi
- Compressive Strength @70°F: 16,000 psi
- PV Limit: 2,700 lubricated
- Coefficient of Friction: 0.10 lubricated

STANDARD NUT DESIGNS

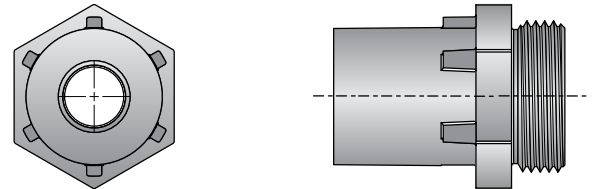
General Purpose Nut - NAB Series - Flange Mount Style



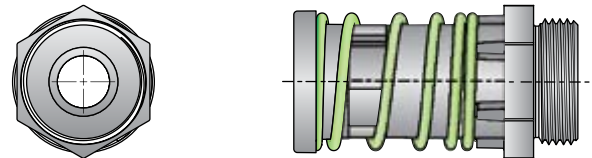
Anti-Backlash Nut - AAB Series - Flange Mount Style



General Purpose Nut - NAB Series - Flange Thread Style



Anti-Backlash Nut - AAB Series - Thread Mount Style



FLANGES FOR BRONZE & PLASTIC NUTS

Made from carbon steel with black oxide finish. See page 8 for instructions on how to secure a flange to a thread mount style nut.



Custom Acme Screw.

Screw Type	Material	Thread Class	Lead Accuracy	Screw Dia.	Screw Lengths
Rolled	Alloy	HELIX Centralizing 2C or Stub	± .0003 in/in up to 2 1/2" dia.	1/8" to 6"	Limited only by material availability
	Stainless	HELIX Centralizing 2C or Stub	± .0003 in/in up to 1 1/2" dia.	1/8" to 1 1/2"	Limited only by material availability
Milled	Alloy	HELIX Centralizing 2C or 3C	± .002"/ft	1/2" to 3" (single starts)	up to 96"
	Stainless	HELIX Centralizing 2C or 3C	± .002"/ft	1/2" to 3" (single starts)	up to 96"
Ground	Alloy	HELIX Centralizing 3C or 4C	± .0005"/ft	1/4" to 4"	up to 120"
	Stainless	HELIX Centralizing 2C or 3C	± .0005"/ft	1/4" to 4"	up to 120"

	Acme & Trapezoidal Alloy	Stainless Steel
Screw Material	4140	300 Series
Minimum Hardness	200 Brinell	170 Brinell
Tensile Ultimate Strength	95,000 psi	85,000 psi
Finish	Black Oxide	Polished



Lead screws control surveillance cameras.