

FEATURES

- 1/2" Screw Diameter
- 0.10" to 1.4016" Leads
- Available in Left and Right Hand Threads
- Dynamic Loads up to 290 lbs
- Static Loads up to 1,450 lbs
- Standard with a Plastic Nut
- Bronze and Custom Nut Types Available Upon Request
- Custom Screw Machining Available Upon Request



DESCRIPTION

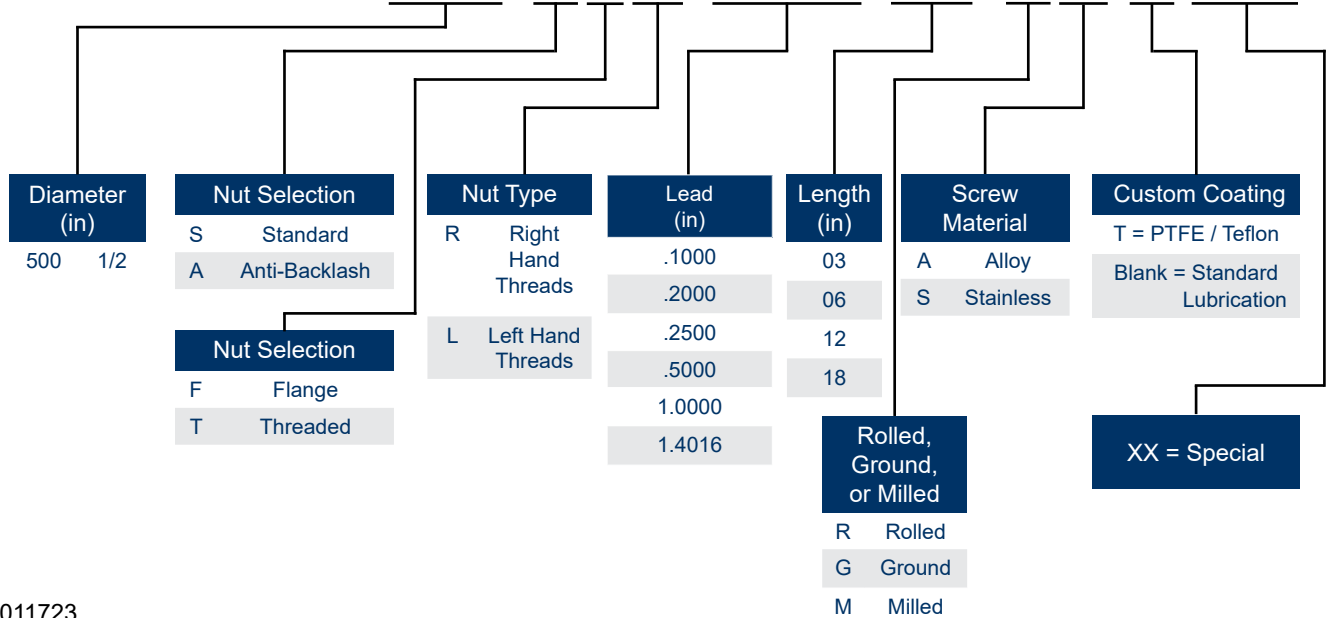
Lead screws are cost-effective and self-locking* (do not require a braking system), and provide the accuracy and repeatability required by most mechanical design applications. The SF, ST, AF, and AT Series Lead Screws have a diameter of 1/8" to 1.00" with a .024" to 3.0" lead.

The ends of the screw can be customized per your drawing. Please contact Anaheim Automation to discuss your specific requirements.

*Self locking will require an efficiency lower than 35%

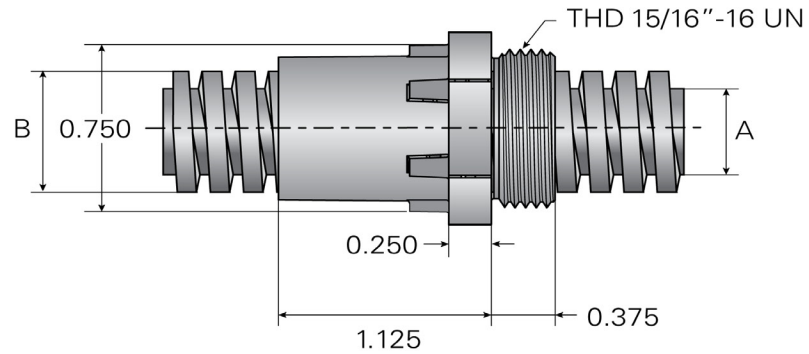
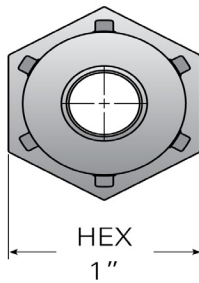
PART NUMBER LAYOUT

LSC-AAH-500-SFR-2500-06-RA-T-XX



L011723

STANDARD THREADED NUT



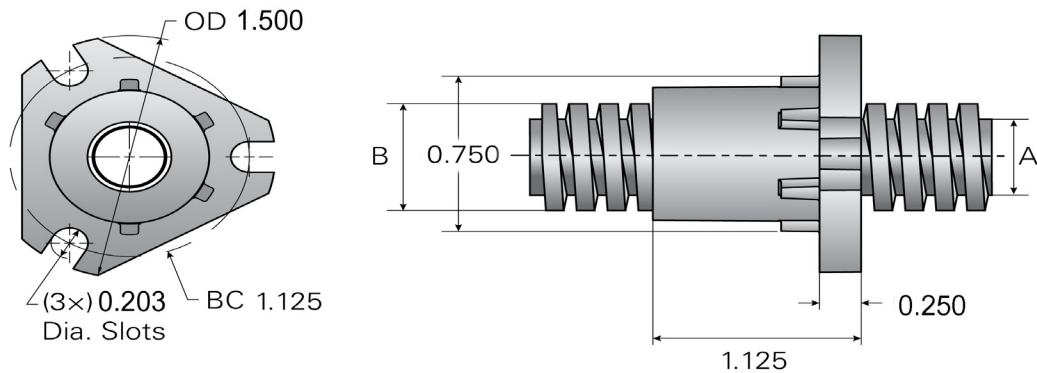
Units are in inches

Screw Diameter (in)	Lead (in)	% Efficiency	Torque* (in-lb)	"A" Root Diameter (in)	"B" Outside Diameter (in)	Weight Per Foot (oz)	Coefficient of Friction (f)	Load Capacity (lb)	
								Dynamic	Static
1/2	0.1000	32-40	0.044	0.359	0.500	7.9	0.15	290	1450
	0.2000	46-57	0.062	0.391	0.375	8.5		290	1450
	0.2500	50-63	0.071	0.332	0.500	7.4		290	1450
	0.5000	60-75	0.119	0.406	0.500	8.8		290	1450
	1.0000	64-80	0.221	0.392	0.500	8.5		290	1450
	1.4016	69-86	0.290	0.378	0.504	8.3		120	600

* Torque required to raise 1lb.

*PLEASE NOTE - Each standard lead screw includes one nut. Additional nuts will be considered a custom request, and will require creation of a special part number.

STANDARD FLANGED NUT



Units are in inches

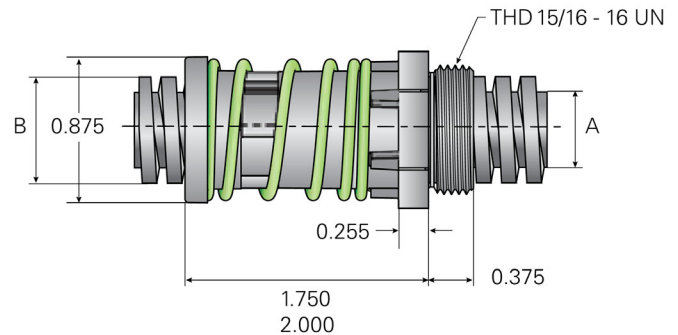
Screw Diameter (in)	Lead (in)	% Efficiency	Torque* (in-lb)	"A" Root Diameter (in)	"B" Outside Diameter (in)	Weight Per Foot (oz)	Coefficient of Friction (f)	Load Capacity (lb)	
								Dynamic	Static
1/2	0.1000	32-40	0.044	0.359	0.500	7.9	0.15	200	1000
	0.2000	46-57	0.062	0.391	0.375	8.5			
	0.2500	50-63	0.071	0.332	0.500	7.4			
	0.5000	60-75	0.119	0.406	0.500	8.8			
	1.0000	64-80	0.221	0.392	0.500	8.5			
	1.4016	69-86	0.290	0.378	0.504	8.3			

* Torque required to raise 1lb.

*PLEASE NOTE - Each standard lead screw includes one nut. Additional nuts will be considered a custom request, and will require creation of a special part number.

ANTI-BACKLASH THREADED NUT

Preload Force (lb)	
Low Force Spring	1.75 - 4.0
High Force Spring	3.75 - 9.5



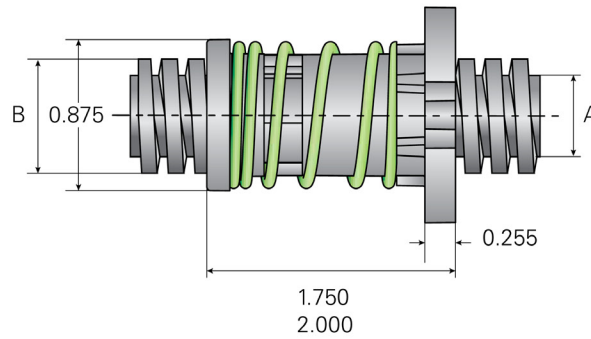
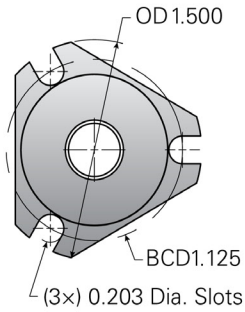
Units are in inches

Screw Diameter (in)	Lead (in)	% Efficiency	Torque* (in-lb)	"A" Root Diameter (in)	"B" Outside Diameter (in)	Weight Per Foot (oz)	Drag Torque (oz-in)	Load Capacity (lb)	
								Dynamic	Static
1/2	0.1000	32-40	0.044	0.359	0.500	7.9	2 to 6	290	1450
	0.2000	46-57	0.062	0.391	0.500	8.5			
	0.2500	50-63	0.071	0.332	0.500	7.4			
	0.5000	60-75	0.119	0.406	0.500	8.8			
	1.0000	64-80	0.221	0.392	0.500	8.5			
	1.4016	69-86	0.290	0.378	0.504	8.3			

* Torque required to raise 1lb.

*PLEASE NOTE - Each standard lead screw includes one nut. Additional nuts will be considered a custom request, and will require creation of a special part number.

ANTI-BACKLASH FLANGED NUT



Preload Force (lb)	
Low Force Spring	1.75 - 4.0
High Force Spring	3.75 - 9.5

Units are in inches

Screw Diameter (in)	Lead (in)	% Efficiency	Torque* (in-lb)	"A" Root Diameter (in)	"B" Outside Diameter (in)	Weight Per Foot (oz)	Load Capacity (lb)		
							Drag Torque (oz-in)	Dynamic	Static
1/2	0.1000	32-40	0.044	0.359	0.500	7.9	2 to 6	85	425
	0.2000	46-57	0.062	0.391	0.375	8.5			
	0.2500	50-63	0.071	0.332	0.500	7.4			
	0.5000	60-75	0.119	0.406	0.500	8.8			
	1.0000	64-80	0.221	0.392	0.500	8.5			
	1.4016	69-86	0.290	0.378	0.504	8.3			

* Torque required to raise 1lb.

*PLEASE NOTE - Each standard lead screw includes one nut. Additional nuts will be considered a custom request, and will require creation of a special part number.

TORQUE, ROTARY LINEAR

Drive on the shaft to move the nut, or drive on the nut to move the shaft.

$$\text{Torque} = \frac{(\text{Load oz}) (\text{Lead inch})}{(2 \pi) (\text{Efficiency})}$$

(oz-in)

EFFICIENCY

$$\% \text{ efficiency} = \frac{\tan (\text{pitch angle})}{\tan [\text{pitch angle} + \arctan(f)]} \times 100$$

f = coefficient of friction