

Lead Screws SF/ST/AF/AT 1/8" Diameter



FEATURES

- 1/8" Screw Diameter
- 0.024" to .1575" Leads
- Available in Left and Right Helix
- Dynamic Loads up to 35 lbs
- Static Loads up to 175 lbs
- Standard with a Plastic Nut
- Bronze and Custom Nut Types Available Upon Request
- Custom Screw Machining Available Upon Request



DESCRIPTION

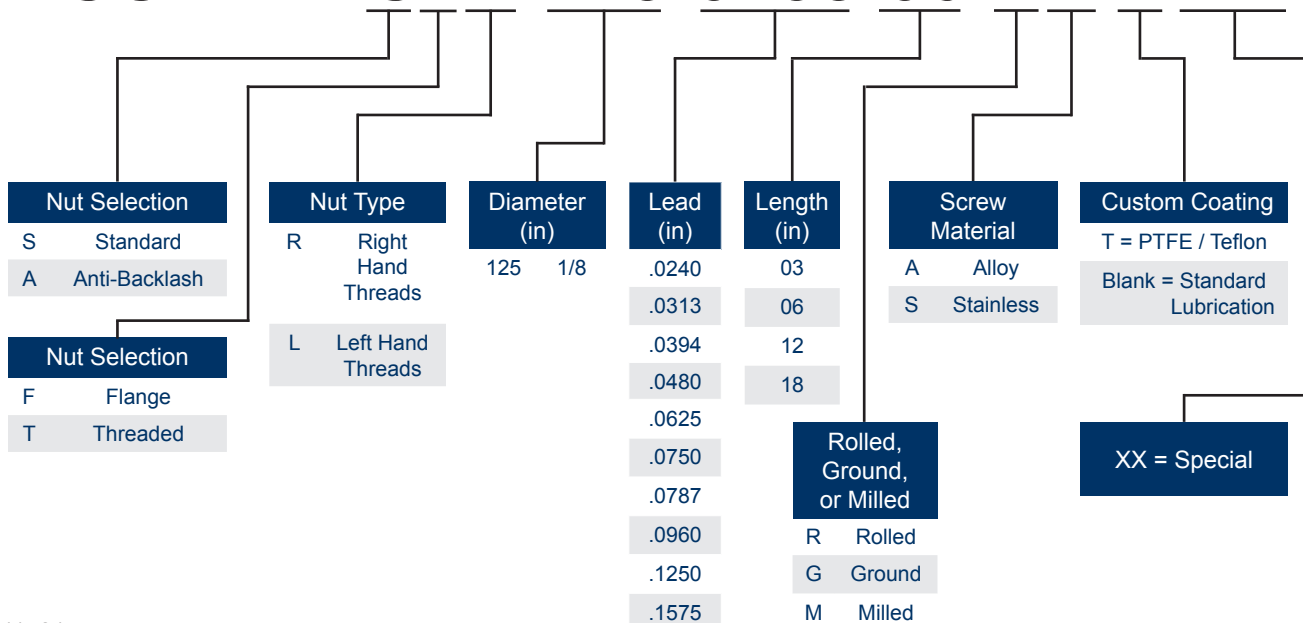
Lead screws are cost-effective and self-locking* (do not require a braking system), and provide the accuracy and repeatability required by most mechanical design applications. The SF, ST, AF, and AT Series Lead Screws have a diameter of 1/8" to 1.00" with a .024" to 3.0" lead.

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%

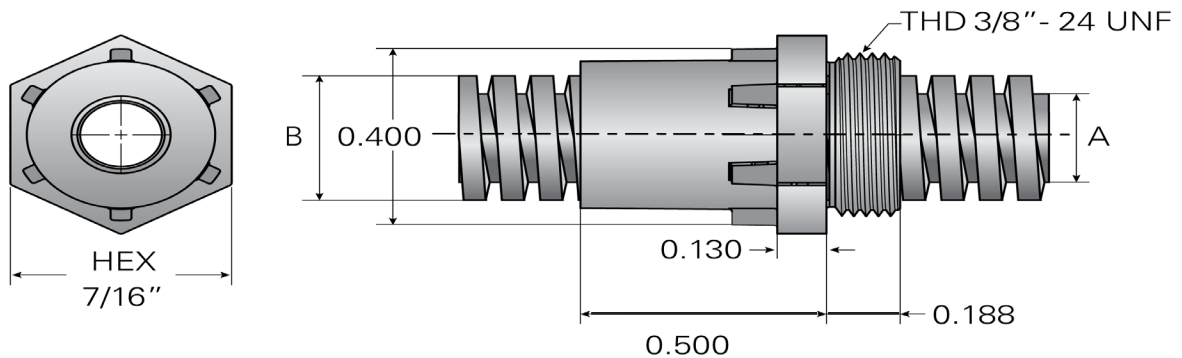
PART NUMBER LAYOUT

LSC-AAH-SFR-125-0158-06-RA-T-XX



L011721

STANDARD THREADED NUT



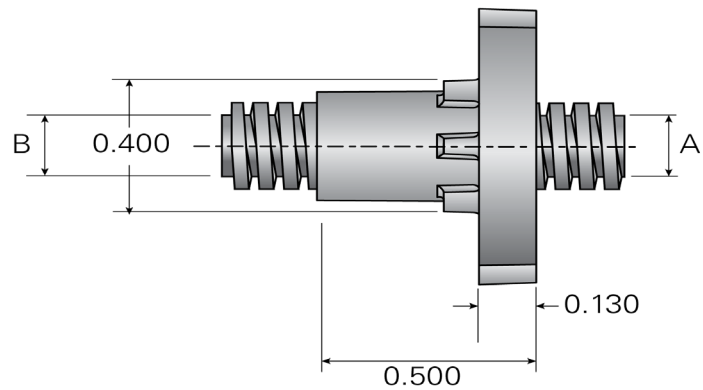
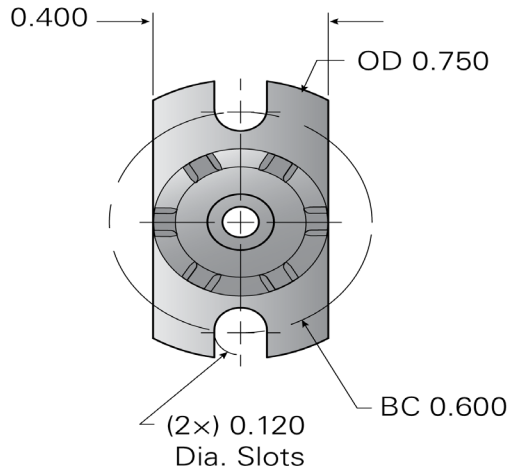
Units are in inches

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
1/8	0.0240	25-40	0.012	0.098	0.125	0.55	0.15	35	175
	0.0313	30-47	0.013	0.094	0.130				
	0.0394	35-52	0.015	0.090	0.134				
	0.0480	40-57	0.016	0.098	0.125				
	0.0625	45-63	0.018	0.094	0.130				
	0.0750	49-67	0.021	0.096	0.127				
	0.0787	50-68	0.021	0.090	0.134				
	0.0960	55-71	0.096	0.098	0.125				
	0.1250	59-75	0.125	0.094	0.130				
	0.1575	63-78	0.158	0.090	0.134				

* 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

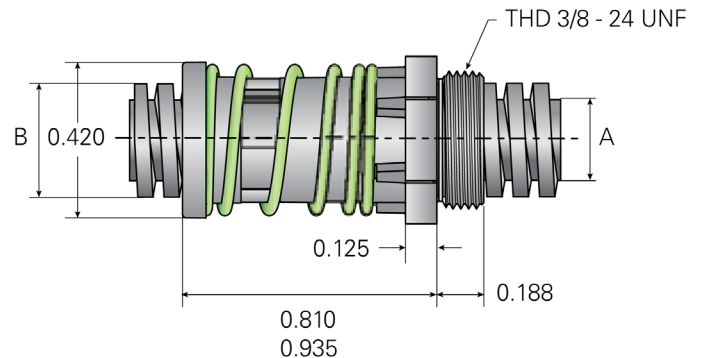
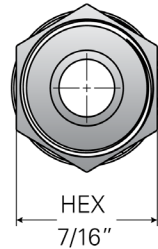
Screw Diameter (in)	Lead (in)	% Efficiency	Torque* (in-lb)	"A" Root Diameter (in)	"B" Outside Diameter (in)	Weight Per Foot (oz)	Coefficient of Friction (f)	Load Capacity (lb)	
								Dynamic	Static
1/8	0.0240	25-40	0.012	0.098	0.125	0.55	0.15	20	100
	0.0313	30-47	0.013	0.094	0.130				
	0.0394	35-52	0.015	0.090	0.134				
	0.0480	40-57	0.016	0.098	0.125				
	0.0625	45-63	0.018	0.094	0.130				
	0.0750	49-67	0.021	0.096	0.127				
	0.0787	50-68	0.021	0.090	0.134				
	0.0960	55-71	0.096	0.098	0.125				
	0.1250	59-75	0.125	0.094	0.130				
	0.1575	63-78	0.158	0.090	0.134				

* 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	0.5 - 1.5
High Force Spring	1 - 3.25



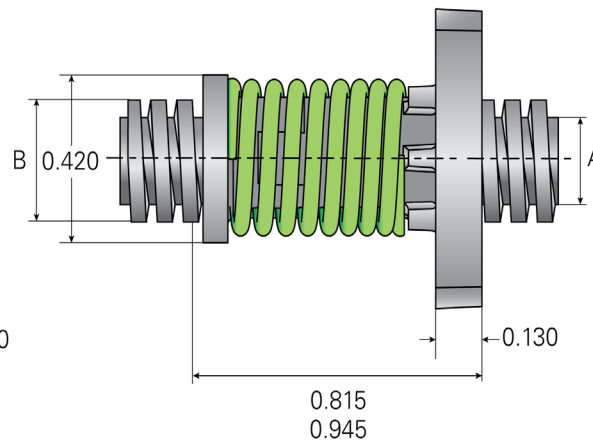
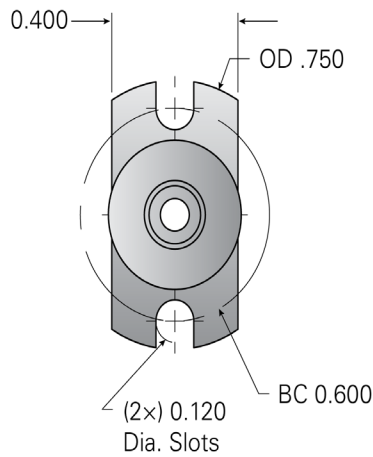
Units are in inches

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
1/8	0.0240	25-40	0.012	0.098	0.125	0.55		35	175
	0.0313	30-47	0.013	0.094	0.130				
	0.0394	35-52	0.015	0.090	0.134				
	0.0480	40-57	0.016	0.098	0.125				
	0.0625	45-63	0.018	0.094	0.130				
	0.0750	49-67	0.021	0.096	0.127				
	0.0787	50-68	0.021	0.090	0.134				
	0.0960	55-71	0.024	0.098	0.125				
	0.1250	59-75	0.030	0.094	0.130				
	0.1575	63-78	0.036	0.090	0.134				

* 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	0.5 - 1.5
High Force Spring	1 - 3.25

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
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	0.0787	50-68	0.021	0.090	0.134				
	0.0960	55-71	0.024	0.098	0.125				
	0.1250	59-75	0.030	0.094	0.130				
	0.1575	63-78	0.036	0.090	0.134				

* 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