

Screw Comparison Matrix

- Acme Screws
- Lead Screws
- Roller Screws
- Ball Screws

Screw Comparison Matrix

	Helix™ Acme Screws	Helix™ Lead Screws	Nook™ Ball Screws	Nook™ Roller Screws
Cost	Low	Low	High	Very High
Load Rating	High	High	High	Very High
Lifetime	Moderate – greatly improved with Helix PTFE dry lubricant	Moderate – greatly improved with Helix PTFE dry lubricant	High	Very High
Speed	Low	Moderate	High	High
Acceleration	Low	Moderate	Moderate	Very high
Electronic Positioning	Moderate	Moderate	Easy	Easy
Stiffness	Very High	Very High	Moderate	Very high
Shock Loads	Very High	Very High	High	Very high
Space Requirements	Minimum	Minimum	Moderate	Minimum

Screw Comparison Matrix

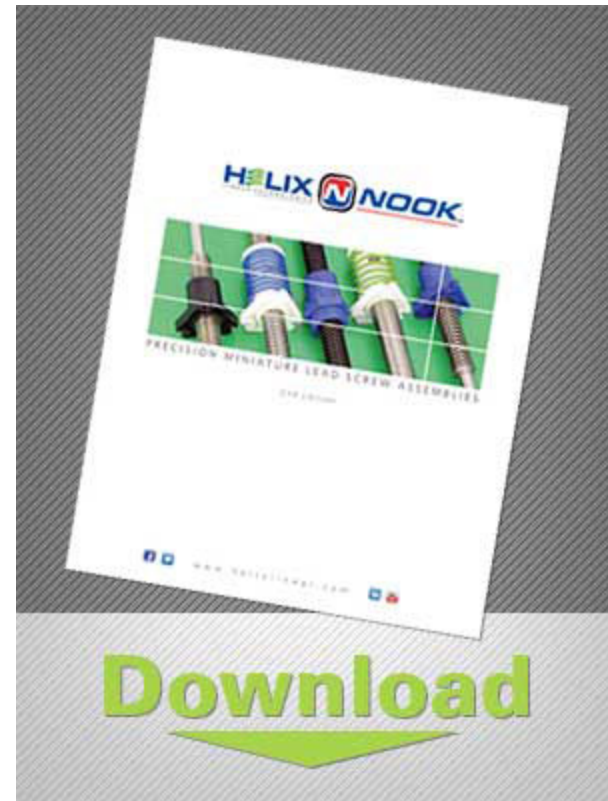
	Helix™ Acme Screws	Helix™ Lead Screws	Nook™ Ball Screws	Nook™ Roller Screws
Friction	High - greatly improved with Helix PTFE coating	Moderate - can be greatly improved with Helix PTFE coating	Low	Low
Efficiency	20 - 80%*	20 - 80%*	>90%	>90%
Installation	Compatible with stepper and servo electronic controls	Compatible with stepper and servo electronic controls	Compatible with standard servo electronic controls	Compatible with standard servo electronic controls
Maintenance	Moderate - Helix PTFE dry lubricants are maintenance free	Moderate - Helix PTFE dry lubricants are maintenance free	Low- must be lubricated in order to achieve specified life	Low- must be lubricated in order to achieve specified life
Environmental	Minimal	Minimal	Minimal	Minimal

* Higher efficiencies require Helix PTFE dry lubricant

Consult HELIX to Determine the Right Lead Screw for You

For design engineers who have more screw comparison questions, contact Helix. Whatever configuration you need, we can walk you through the process of specifying a screw size and thread form that best fits your particular application.

To learn more about HELIX lead screw product options and capabilities, download a copy of our newest catalog.



We hope you found this presentation helpful.

For more information, please contact us at:

www.helixlinear.com

(855) 435-4958

sales@helixlinear.com