



Solutions for the Medical & Life Science Industries

Precision Motion that
Supports Patient Care
and Scientific Discovery

Engineered Precision for Health and Healing

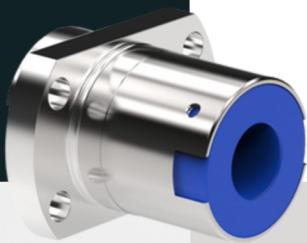
In the medical and life science industries, accuracy, consistency, and cleanliness are critical. Whether supporting surgical tools, diagnostic platforms, or laboratory automation systems, Helix Linear Technologies delivers miniature motion systems designed for sensitive environments and life-critical performance.



Our solutions enable the controlled movement of medical devices and instruments that doctors, researchers, and patients rely on daily.

From infusion pumps and robotic-assisted surgical devices to microfluidics and imaging systems, Helix Linear's components are engineered for quiet, smooth, and contamination-resistant operation. With compact footprints, cleanroom compatibility, and tight tolerance control, our motion systems help accelerate innovation, improve patient safety, and power the next generation of healthcare and research technologies.

Precision Motion for Health-Driven Innovation



Medical and life science equipment requires motion control that is highly accurate, smooth, and often miniaturized.

Helix Linear Technologies delivers the actuation and positioning components essential for advanced instruments in clinical, surgical, and research environments where reliability and sterility can't be compromised.

Key Applications:

- Diagnostic testing platforms
- Microfluidic control systems
- Robotic-assisted surgical tools
- Infusion and drug delivery systems
- Patient positioning equipment
- Automated lab testing and pipetting systems
- Biotech and DNA analysis tools

Core Products:

- Miniature Lead Screws
- High-Precision Ball Screws
- Sealed Linear Actuators
- Stepper Motor Actuators
- Anti-Backlash Nut Assemblies
- Lubrication-Free and Cleanroom-Compatible Systems

Motion Systems You Can Trust in Critical Environments

Helix Linear motion components are built to meet strict medical standards, offering contamination resistance, quiet operation, and ultra-precise control.

Our materials and finishes are designed for sterilization compatibility, and our assemblies are suitable for use in cleanroom or patient-facing environments.

Performance Features:

- Ultra-smooth linear travel and fine positional accuracy
- Low noise and vibration for patient comfort
- Compact form factors for embedded medical devices
- Sterilization-compatible materials (autoclave, gamma, etc.)
- RoHS- and REACH-compliant component options
- Available with anti-backlash designs for repeatable motion



Collaborative Design for Regulatory Excellence

We understand that regulatory compliance, traceability, and documentation are non-negotiable in the medical and life sciences industries.

Helix Linear Technologies is AS9100:2016 certified and offers full material traceability, validation testing, and design documentation. We work with medical OEMs, engineers, and designers to develop motion systems that meet your specifications.

Key Capabilities:

- Rapid prototyping and design customization
- FDA- and EU-compliant materials
- Material and lot traceability
- CAD models and validation support
- Built in accordance with medical device and biotech industry standards
- Cleanroom-ready components and finishes



Certifications & Standards:

- AS9100:2016 certified
- RoHS-compliant materials
- REACH-compatible grease and coatings
- Traceability on critical components



Empowering Healthcare Innovation with Every Precise Movement

From advanced diagnostics to life-sustaining devices, Helix Linear Technologies provides the motion systems that move medical breakthroughs forward. Our components are engineered with care and precision, so your equipment can deliver better outcomes, smoother workflows, and life-changing innovation. When it comes to precision motion for health and science, you can count on Helix.



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