



ThinGap's LS Line of Slotless Motor Kits  
Highest torque density with high power capability  
and low thermal resistance.

# Market Focus

## MEDICAL AND ROBOTICS

### Patented Zero Cogging Motor kits with Large Through-Hole, Low Hysteresis and Highly Linear Torque Output

[HAPTIC FEEDBACK](#) | [FORCE SENSING](#) | [PRECISION ACTUATION](#) | [DEEP INTEGRATION](#)

**Camarillo, CA (April 9, 2021)** – ThinGap has released its latest list of attributes of its slotless motor kits for addressing the Medical Device, Robotics and Precision Industrial market segments.



Today’s modern Robotic Systems and Collaborative Robots, including robotically assisted surgical-systems, require smooth precision motion in their robotic joints and end-effectors. Haptic systems require accurate torque feedback without mechanical disturbances to improve the human control experience. Multi-axis robots in manufacturing and semiconductor applications need low profile, frameless kits that fit inside articulating wrists, elbows, and shoulder axes while having high torque and low heat.

ThinGap’s patented slotless motors provide a range of benefits and features well suited for these applications:

- Zero-Cogging for Precise and Smooth Motion
- Little or No Hysteretic Drag for Torque Sensing
- Ultra-High Magnetic Efficiency
- Linear Smooth Torque Output
- Low Profile, Large Through-Hole and Frameless
- Lightweight with High Torque-to-Weight Ratio

ThinGap’s complete LS line of slotless motor kits range in size from 25 to 267 mm outer diameter and continuous torque from 0.1 to 12.0 N-m. With standard and modified standard configurations, the product line will cover voltages from 7-285 volts and current from 3-12 amps. Special configurations are also available.

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#### **About ThinGap**

*For over twenty years, ThinGap has been a world leader in the design and manufacturing of USA-made, high performance frameless electric motor and generator kits.*