



# **LSA Linear Servo Actuator**



PACKAGE DEAL PLUG-N-PLAY INSTALLATION



LM SYSTEM LM SYSTEM LM SYSTEM LM SYSTEM

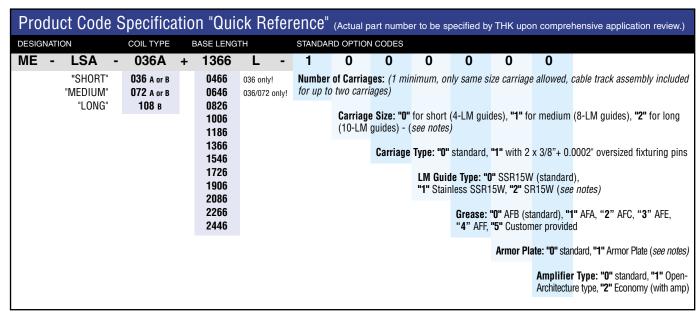
# LSA LINEAR SERVO ACTUATOR



THK's groundbreaking LSA Linear Servo Actuator brings the world of high-performance linear motors down to earth. Our LSA goes beyond use in industries such as semiconductor and biotech, and makes linear motors a reality in non-traditional fields. The LSA is comparable in price to a precision ballscrew actuator (including a servo package), but comes without the speed limitations, lead errors and frequent maintenance down time. The LSA will take your system to the next level of performance.

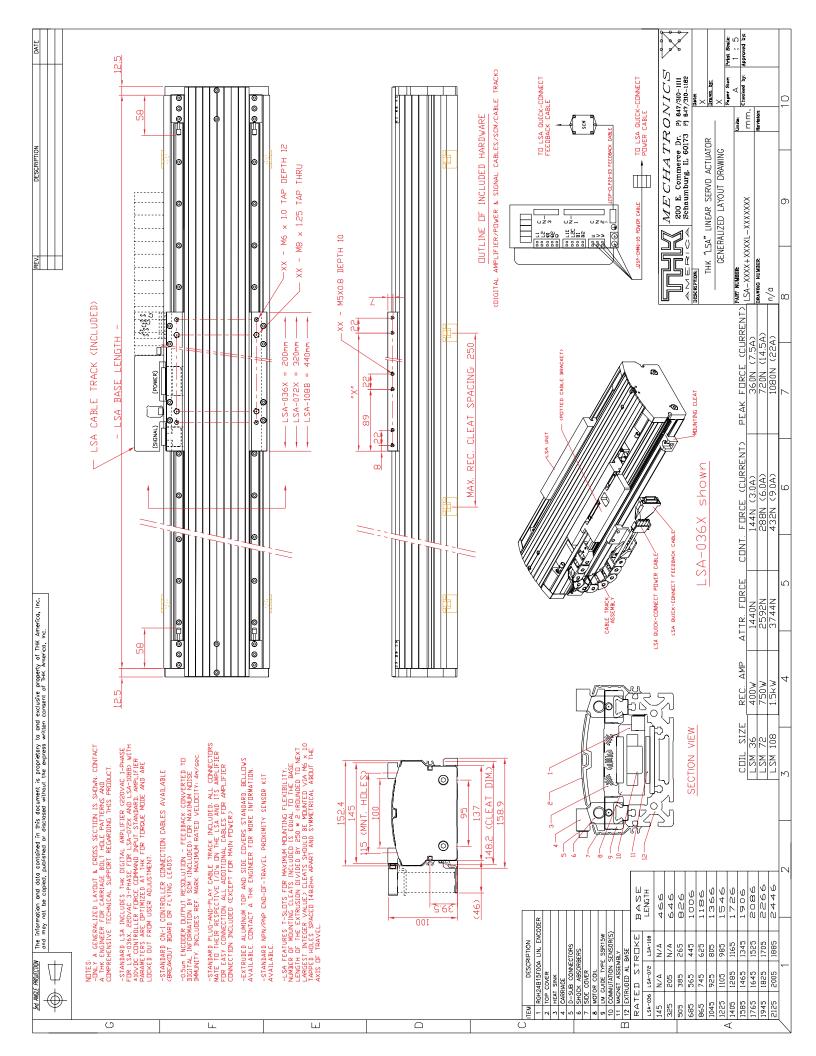
- Plug-and-Play operation out of the box to fully wired in ten minutes.
- Incorporates THK's revolutionary Type SSR Caged Ball technology.
- · Twelve standard base lengths: 466mm to 2446mm.
- Three standard coil sizes: peak forces up to 1080N.
- Pre-configured, plug-and-play digital amplifier included.
- Velocity up to 4 meters per second.
- High acceleration capability.
- Incorporates an integrated heat sink to minimize thermal effects of coil heating on the LSA carriage surface.
- Configurable for multiple, independent carriages on a common axis.
- 0.5 $\mu$ m encoder resolution standard; 0.3 $\mu$ m resolution capable.

- Part of the "Sabre" family of actuators, which includes a ballscrewdriven actuator, a belt-driven actuator, a low-cost leadscrew actuator, and a linear motor. All these actuators have exactly the same crosssectional dimensions.
- "Open-Architecture" version available for non-standard amplifiers.
- Non-contact drive system + Type SSR LM guides equal cleaner operation and extremely low maintenance.
- Pre-wired cable track assembly and all connecting cables included.
- Convenient T-slot mounting cleats included, 3 mounting configurations available.
- Designed and built in the USA.
- Standard multi-axis mounting brackets now available.



#### Notes

- Due to base length VS. carriage length limitations, LSA-072X units are not available in "+466L" length. LSA-108B units are not available in "+466L" and "+646L" lengths.
- Standard cable track assemblies (included in LSA price) are available for single and dual carriage LSA's only. Cable track assemblies may also be ordered separately based on carriage/base length.
- Standard 220VAC digital amplifier (-036X single phase, all others 3-phase) accepts standard +/-10VDC analog force command controller input and provides 0.5 \( \mu\) m encoder resolution.
- NPN/PNP photo or proximity sensor kits are available for the LSA and may be purchased separately. Includes 2-N/C & 1-N/O sensor, target, & fasteners. Contact a THK Engineer for more info. Standard 5m length extension cables for signal feedback and power supply are included with the price of the LSA. Additional cables or non-standard lengths may be purchased separately.
- Serial converter modules (SCM's) corresponding to coil size are included in the price of the LSA unit with the "standard" amplifier option. Additional SCM units may be purchased separately.
- 036X COILS can be used with ALL carriage options, 072X COILS can be used only with carriage options 1 and 2, 108B COILS can only be used with carriage option 2.
- AFB grease standard for SSR15W type LM guides. All other THK-manufactured grease for SSR15W will be custom ordered from THK Japan. Custom grease can ONLY be used with SR15 guides.
- "Open Architecture"- type LSA units incorporate 0.5µm resolution digital encoder & cable track with "flying leads" output; THK does not guarantee the performance of the LSA with an amplifier other than the "Standard" option.
- Armor plate option available ONLY with SR15W or stainless steel SSR15W LM quides. Includes vented, stainless steel fasteners and stainless steel balls.



# TINK LSA Linear Servo Actuator

### **Products from our Sabre Series include:**

- LSA (Linear Motor Driven)
  LLA (Low-Cost Leadscrew Driven)
  LTA (Belt Driven)



Specifications are subject to change without notice.

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