Sure motion

Linear Motion Products

Twin Round Shaft Slide Actuators



LARSD2-08T12BP2C

Description

Continuously-supported round rail slide with ball screw actuation provides a very robust precision linear motion. Units are complete except for a drive motor.

Features

- High-accuracy ball screw
- Continuously-supported guide rails
- Replacement components available
- Ready for NEMA 23 motor
- AISI 1566 Carbon Steel, 60 RC Round Shafts
- · AISI 1045 Carbon Steel, 56 RC Ball Screw

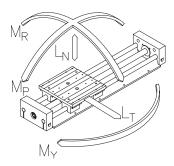
Applications

- Positioning systems
- Heavy loads

| Twin Round Shaft Slide Actuator Specifications | | | | | | | | | |
|--|-------|---------------|----------------|-------------------------------|---------------------------------|--------------------------------------|--------|-------------|------------|
| Part Number | Price | Drive Type | Drive Pitch | Drive Screw Efficiency (%) | Payload Inertia Factor (in2) | Constant System Inertia (Ibm-in2) | Travel | Weight (lb) | Fits Motor |
| LARSD2-08T12BP2C | 4.00 | Ball | 0.2 in | 83 | 0.001 | 0.11 | 12in | 10.5 | NEMA 23 |
| LARSD2-08T24BP2C | 5.00 | screw | | | | 0.16 | 24in | 14.0 | |

System Inertia Calculation:

- To calculate the inertia reflected to the motor in a particular actuator, multiply the carriage payload by the payload inertia factor and then add the constant system inertia value for that actuator. The constant system inertia value for each system includes the inertia of the shaft coupler, carriage, and lead/ball screw.
- The payload must be in units of lb_m.



Load rating diagram

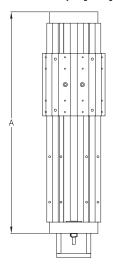
| Twin Round Shaft Slide Actuator Load/Moment Ratings | | | | | | | | |
|---|----------------------|------|------------|-------|-------|---------------|--------------|--|
| Part Number | Load (lb) Mome | | | | | loment (lb·ii | nent (lb·in) | |
| | Actuator Normal – LN | | Transverse | Roll | Pitch | Yaw | | |
| | Thrust | Down | Up | LT MR | MR | MP | MY | |
| LARSD2-08TxxBP2C | 200 | 920 | 644 | 920 | 1046 | 1210 | 1730 | |



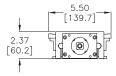
Linear Motion Products

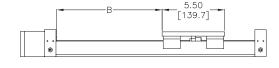
Twin Round Shaft Slide Actuators

Dimensions (in [mm])



| PART | Α | В |
|------------------|---------|----------|
| NUMBER | | (TRAVEL) |
| LARSD2-08T12BP2C | 19.50 | 12.00 |
| | [495.3] | [304.9] |
| LARSD2-08T24BP2C | 31.5 | 24.00 |
| | [800.1] | [609.8] |





LARSD2-08TxxBP2C

See our website _______ for complete Engineering drawings.

Accessories

| Twin Round Shaft Slide Actuator Accessories | | | | | | |
|---|-------------------------------|--|-----|--|--|--|
| Part Number | Part Number Price Description | | | | | |
| LARSACC-010 | | SureMotion linear ball bushing, open type, 1/2 inch inside diameter, with seals, self-aligning. | 0.5 | | | |
| LARSACC-013* | | SureMotion repair kit, for use with LARSD2-08T12BP2C actuators. Ballscrew, ballnut, end bearings and grease tube included. | 3.0 | | | |
| LARSACC-014* | | SureMotion repair kit, for use with LARSD2-08T24BP2C actuators. Ballscrew, ballnut, end bearings and grease tube included. | 5.0 | | | |
| LARSACC-015* | | SureMotion motor adapter, NEMA 23 frame. For use with LARSD2-08 series actuators. 1/4 x 1/4 inch coupler included. | 1.0 | | | |
| LARSACC-016* | | SureMotion motor adapter, NEMA 34 frame. For use with LARSD2-08 series actuators. 1/2 x 1/4 inch coupler included. | 1.0 | | | |

^{*} Repair kits and NEMA 23/34 motor adapter contain replacement components that are the same as the original components in the actuator assemblies.





LARSACC-013(014)

Some accessories not shown see ______ for additional product photos.

Linear Motion Slides and Components to Create up to 3 Axes of Motion





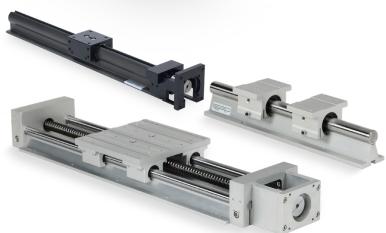
LAHP units can be attached to each other to provide up toa 3 axes of motion and from 52mm to 910mm of travel.





18 models, with travels from 6 to 36 inches

Ready to mount NEMA 17, 23 or 34 motors



/stepper-systems Motion Control mMNC-3



Linear Motion Products

Product Overview

Actuator Overview

SureMotion linear motion offers both motor-ready actuator assemblies, and a versatile assortment of sliding components and accessories to provide a wide variety of motion control solutions.

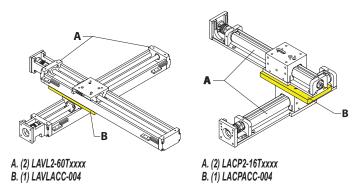
Linear Slide Actuator Comparisons

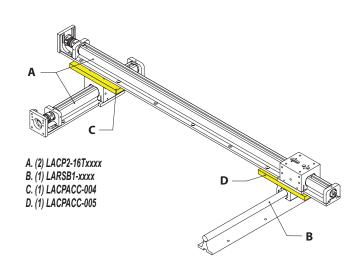
| Actuator Series Comparisons | | | | | | | | |
|-----------------------------|---------------------|---------------|------------------------------|------------------------|----------------|-------------------|--|--|
| Actuator Series | Actuator Type | Drive Type | Max Load Capacity (lb) | Max Speed (in/s) | Travel (in) | Relative Price | | |
| LARSD2 | Twin Round Shaft | Ball Screw | 920 | 6 | 12, 24 | \$\$\$\$ | | |
| LACP2 | Compact Slide | Lead Screw | 125 | 20 | 6, 12, 24, 36 | \$\$ | | |
| LAVL2 | Value Slide | Lead Screw | 110 | 15 | 6, 12, 18, 24 | \$ | | |



Available Multi-Axis Configurations

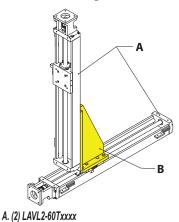
X-Y Axis Configurations



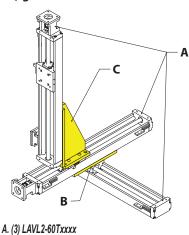


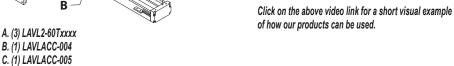
X-Z Axis Configuration

X-Y-Z Axis Configuration



B. (1) LAVLACC-005





Linear Motion - U Can Do It