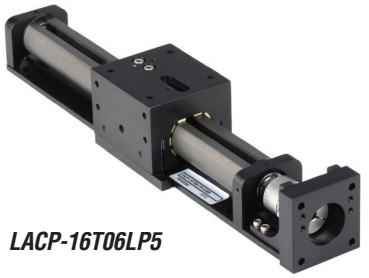
Linear Motion Products

Compact Slide Actuators



LACP-16T06LP5

Description

Self-contained linear actuator designed for light loads in harsh or wet conditions in a very small package. A stainless steel lead screw is embedded in a hard-coated aluminum shaft specially machined to match sliding elements.

Features

- Compact design
- Replacement components available
- Ready for NEMA 17 motor
- End-of-travel switch mounts
- AISI 6061-T6 Aluminum Alloy, Hard Anodized Slide Shaft. Hard Anodizing Depth 0.0005 to 0.0015"
- AISI 303 Stainless Steel Lead Screw

Applications

- Space-limiting applications
- Harsh or wet environments
- Light loads
- Speeds up to 20 inches per second

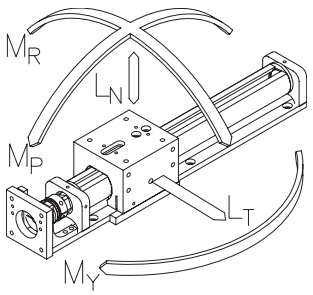
Compact Slide Actuator Specifications

Part Number	Price	Drive Type	Drive Pitch	Drive Screw Efficiency (%)	Payload Inertia Factor (in^2)	Constant System Inertia (lb_m-in^2)	Travel	Weight (lb)	Fits Motor
LACP-16T06LP5	9.00	Lead screw	0.5 in	52	0.0063	0.018	6in	1.8	NEMA 17
LACP-16T12LP5	9.00					0.020	12in	2.3	
LACP-16T24LP5	9.00					0.023	24in	3.5	
LACP-16T36LP5	9.00					0.026	36in	4.5	
LACP-16T06L1	9.00		1in	44	0.025	0.032	6in	1.8	
LACP-16T12L1	9.00					0.034	12in	2.3	
LACP-16T24L1	9.00					0.037	24in	3.5	
LACP-16T36L1	9.00					0.040	36in	4.5	

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

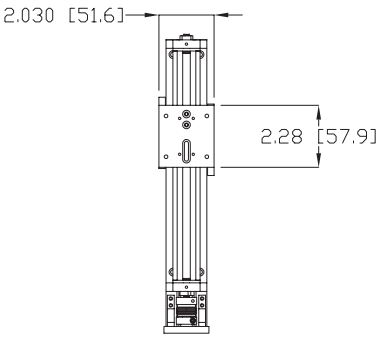
Compact Slide Actuator Load/Moment Ratings

Part Number	Load (lb)*				Moment (lb·in)**		
	Actuator Thrust	Normal – L_N		Transverse	Roll	Pitch	Yaw
		Down	Up	L_T	M_R	M_P	M_Y
LACP-16TxxLP5	51	125	60	125	12	15	33
LACP-16TxxL1	28	125	60	125	12	15	33

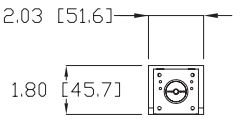
** 30lb is the recommended maximum load capacity if the carriage is not externally supported against rolling. The higher load capacities are possible if the carriage is externally supported.*

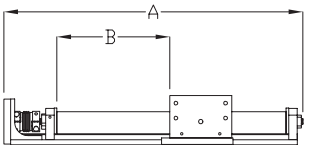
*** It is recommended that offset loads be located 5 inches or less from the center of the carriage. When the loads are offset at greater distances, the carriage can vibrate during travel.*

Dimensions (in [mm])



PART NUMBER	A	B (TRAVEL)
LACP–16T06LP5	11.20 [284.5]	6.20 [157.5]
LACP–16T12LP5	17.20 [436.9]	12.20 [309.9]
LACP–16T24LP5	29.20 [741.7]	24.20 [614.7]
LACP–16T36LP5	41.20 [1046.5]	36.20 [919.5]
LACP–16T06L1	11.20 [284.5]	6.20 [157.5]
LACP–16T12L1	17.20 [436.9]	12.20 [309.9]
LACP–16T24L1	29.20 [741.7]	24.20 [614.7]
LACP–16T36L1	41.20 [1046.5]	36.20 [919.5]



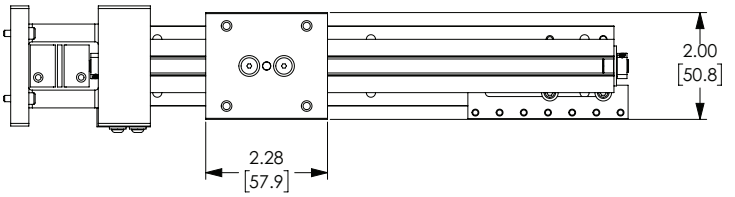


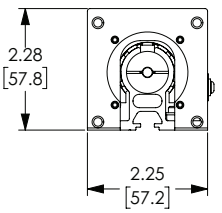
LACP-16TxxLxx

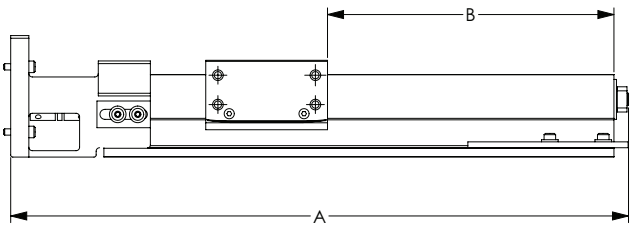
See our website _____ for complete Engineering drawings.

Dimensions (in [mm])

PART NUMBER	A	B (TRAVEL)
LACP2-16T06LP5	11.57 [293.8]	6.40 [162.6]
LACP2-16T12LP5	17.57 [446.2]	12.40 [315.0]
LACP2-16T24LP5	29.57 [751.0]	24.40 [619.8]
LACP2-16T36LP5	41.57 [1055.8]	36.40 [924.6]
LACP2-16T06L1	11.57 [293.8]	6.40 [162.6]
LACP2-16T12L1	17.57 [446.2]	12.40 [315.0]
LACP2-16T24L1	29.57 [751.0]	24.40 [619.8]
LACP2-16T36L1	41.57 [1055.8]	36.40 [924.6]







LACP2-16TxxLxx

See our website _____ for complete Engineering drawings.

Accessories

Compact Slide Actuator Accessories			
Part Number	***Price***	***Description***	***Weight (lb)***
LACPACC-001		SureMotion motor adapter, NEMA 23 frame. For use with LACP(2)-16 series actuators. 1/4 inch x 4mm coupler included.	0.5
LACPACC-002*		SureMotion repair kit, for use with LACP-16TxxLP5 actuators. Nut, bushings, end bearings and oil syringe included.	0.5
LACPACC-003*		SureMotion repair kit, for use with LACP-16TxxL1 actuators. Nut, bushings, end bearings and oil syringe included.	0.5
LACPACC-004		SureMotion mounting plate, XY type. For use with LACP(2)-16 series actuators.	0.5
LACPACC-005		SureMotion mounting plate, XY type. For use with LACP(2)-16 and LARSB1 series actuators.	0.5
LACPACC-006*		SureMotion repair kit, for use with LACP2-16TxxLP5 actuators. Nut, bushings, end bearings and oil syringe included.	1.0
LACPACC-007*		SureMotion repair kit, for use with LACP2-16TxxL1 actuators. Nut, bushings, end bearings and oil syringe included.	1.0
**** Repair kits contain replacement components that are the same as the original components in the actuator assemblies.***			

LACPACC-001

LACPACC-002(003)

LACPACC-004(005)

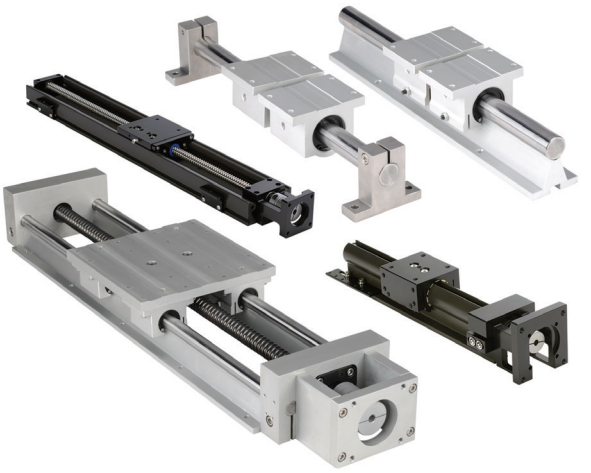
Some accessories not shown see _____ for additional product photos.

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.

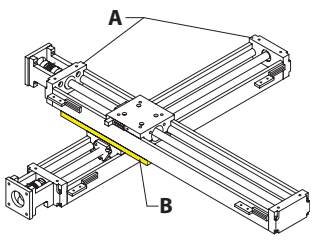


Linear Slide Actuator Comparisons

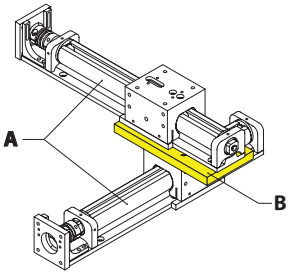
Actuator Series Comparisons						
Actuator Series	***Actuator Type***	***Drive Type***	***Max Load Capacity (lb)***	***Max Speed (in/s)***	***Travel (in)***	***Relative Price***
LARSD2	Twin Round Shaft	Ball Screw	920	6	12, 24	$$$$
LACP(2)	Compact Slide	Lead Screw	125	20	6, 12, 24, 36	$$
LAVL(2)	Value Slide	Lead Screw	110	15	6, 12, 18, 24	$

Available Multi-Axis Configurations

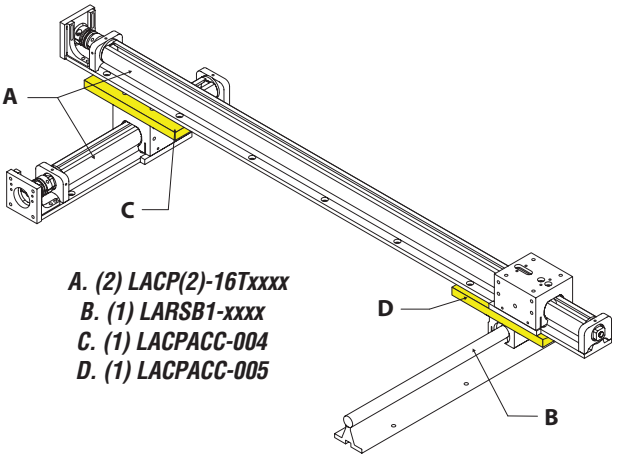
X-Y Axis Configurations



A. (2) LAVL(2)-60Txxxx
B. (1) LAVLACC-004

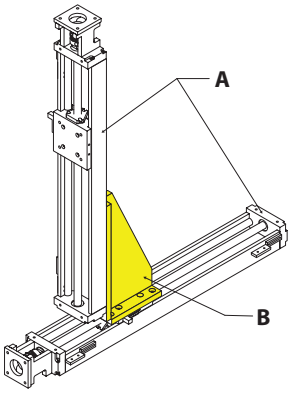


A. (2) LACP(2)-16Txxxx
B. (1) LACPACC-004



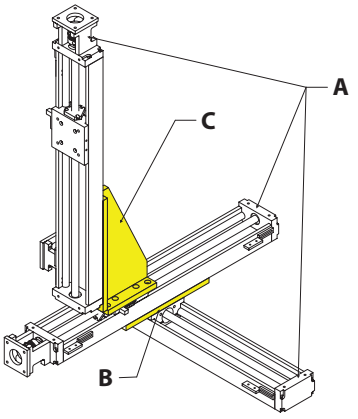
A. (2) LACP(2)-16Txxxx
B. (1) LARSB1-xxxx
C. (1) LACPACC-004
D. (1) LACPACC-005

X-Z Axis Configuration

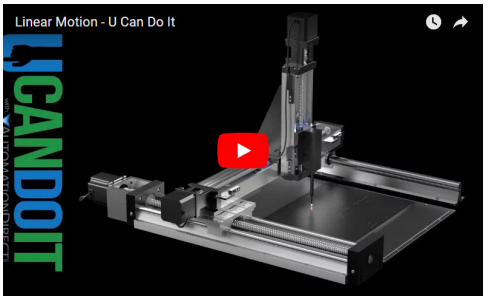


A. (2) LAVL(2)-60Txxxx
B. (1) LAVLACC-005

X-Y-Z Axis Configuration



A. (3) LAVL(2)-60Txxxx
B. (1) LAVLACC-004
C. (1) LAVLACC-005



Click on the above video link for a short visual example of how our products can be used.