



SureMotion[®] XYZ Gantries

SureMotion[®] XYZ Gantry Features

The SureMotion[®] XYZ Gantry offers high-performance linear positioning at an economical price. This system uses recirculating ball linear guides which offer smooth motion and high load capacity. A ball screw version is available for higher speeds and duty cycles.

- Rigid linear bearings
- Lightweight precision aluminum base
- Stackable and easy to assemble
- High-Precision
- Customizable
- Lead or ball screw options
- Wide base available for maximum stiffness
- Up to 910mm stroke
- Anti-backlash leadscrew nut
- Proximity or photoelectric sensor kits available
- Motor mounts available for SureServo[®] servo motors and SureStep[®] stepper motors





SureMotion[®] XYZ Gantries

LAHP-25 Series Linear Actuators									
Part Number	Price	Stroke	Type	Efficiency	Pitch	Max Linear Speed	Linear Position Accuracy	Linear Position Repeatability	Drawing Links
LAHP-25TM52B3M	\$1,302.00	52mm	ball screw	90%	3mm	0.150 m/s	±0.039 mm	±0.05 mm	PDF
LAHP-25TM52LP25	\$1,050.00	52mm	lead screw	60%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-25TM102B3M	\$1,416.00	102mm	ball screw	90%	3mm	0.150 m/s	±0.0765 mm	±0.05 mm	PDF
LAHP-25TM102LP25	\$1,164.00	102mm	lead screw	60%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-25TM152B3M	\$1,485.00	152mm	ball screw	90%	3mm	0.150 m/s	±0.114 mm	±0.05 mm	PDF
LAHP-25TM152LP25	\$1,235.00	152mm	lead screw	60%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-25TM220B3M	\$1,524.00	220mm	ball screw	90%	3mm	0.150 m/s	±0.165 mm	±0.05 mm	PDF
LAHP-25TM220LP25	\$1,273.00	220mm	lead screw	60%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-25TM304B3M	\$1,622.00	304mm	ball screw	90%	3mm	0.140 m/s	±0.228 mm	±0.05 mm	PDF
LAHP-25TM304LP25	\$1,374.00	304mm	lead screw	60%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-25TM404B3M	\$1,914.00	404mm	ball screw	90%	3mm	0.085 m/s	±0.303 mm	±0.05 mm	PDF
LAHP-25TM404LP25	\$1,665.00	404mm	lead screw	60%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-25TM504B3M	\$2,041.00	504mm	ball screw	90%	3mm	0.060 m/s	±0.378 mm	±0.05 mm	PDF
LAHP-25TM504LP25	\$1,789.00	504mm	lead screw	60%	0.25in	0.085 m/s		±0.013 mm	PDF

LAHP 25 Series Linear Slides				
Part Number	Price	Stroke	Max Linear Speed	Drawing Links
LAHP-25TM52SF	\$652.00	52mm	1.5 m/s	PDF
LAHP-25TM102SF	\$756.00	102mm		PDF
LAHP-25TM152SF	\$802.00	152mm		PDF
LAHP-25TM220SF	\$816.00	220mm		PDF
LAHP-25TM304SF	\$895.00	304mm		PDF
LAHP-25TM404SF	\$1,146.00	404mm		PDF
LAHP-25TM504SF	\$1,239.00	504mm		PDF

LAHP 25 Series Linear Actuators Specifications		
Max Lateral Load, L_T	480N	108 lbf
Max Axial Load, L_A	350N	78.7 lbf
Roll Moment Rating, M_R	36N-m	26.6 lb-ft
Pitch Moment Rating, M_P	48N-m	35.4 lb-ft
Yaw Moment Rating, M_Y	20N-m	14.6 lb-ft
Static Radial Load Rating, C_0	5060N	1138 lbf
Reverse Static Radial Load Rating, $-C_0$	5060N	1138 lbf
Dynamic Load Rating, C	3420N	769 lbf

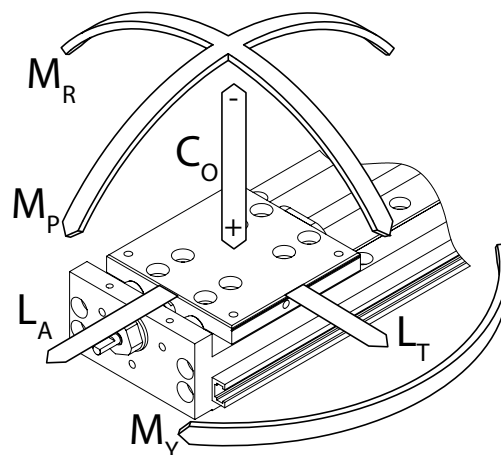


Linear Actuator
LAHP-25TM52B3M



Linear Slide
LAHP-25TM52SF

*Same mechanical design as Linear Actuator, not driven





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LAHP 33 Series Linear Actuators									
Part Number	Price	Stroke	Type	Efficiency	Pitch	Max Linear Speed	Linear Position Accuracy	Linear Position Repeatability	Drawing Links
LAHP-33TM210B10M	\$1,607.00	210mm	ball screw	90%	10mm	0.500 m/s	±0.158 mm	±0.05 mm	PDF
LAHP-33TM210LP25	\$1,427.00	210mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33TM310B10M	\$1,815.00	310mm	ball screw	90%	10mm	0.500 m/s	±0.233 mm	±0.05 mm	PDF
LAHP-33TM310LP25	\$1,634.00	310mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33TM410B10M	\$2,049.00	410mm	ball screw	90%	10mm	0.467 m/s	±0.308 mm	±0.05 mm	PDF
LAHP-33TM410LP25	\$1,869.00	410mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33TM510B10M	\$2,297.00	510mm	ball screw	90%	10mm	0.333 m/s	±0.383 mm	±0.05 mm	PDF
LAHP-33TM510LP25	\$2,116.00	510mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33TM610B10M	\$2,726.00	610mm	ball screw	90%	10mm	0.250 m/s	±0.458 mm	±0.05 mm	PDF
LAHP-33TM610LP25	\$2,547.00	610mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33TM810B10M	\$3,154.00	810mm	ball screw	90%	10mm	0.133 m/s	±0.608 mm	±0.05 mm	PDF
LAHP-33TM810LP25	\$2,974.00	810mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33TM910B10M	\$3,403.00	910mm	ball screw	90%	10mm	0.122 m/s	±0.683 mm	±0.05 mm	PDF
LAHP-33TM910LP25	\$3,224.00	910mm	lead screw	58%	0.25in	0.077 m/s		±0.013 mm	PDF

LAHP 33 Series Linear Slides				
Part Number	Price	Stroke	Max Linear Speed	Drawing Links
LAHP-33TM210SF	\$979.00	210mm	1.5 m/s	PDF
LAHP-33TM310SF	\$1,159.00	310mm		PDF
LAHP-33TM410SF	\$1,359.00	410mm		PDF
LAHP-33TM510SF	\$1,588.00	510mm		PDF
LAHP-33TM610SF	\$1,987.00	610mm		PDF
LAHP-33TM810SF	\$2,366.00	810mm		PDF
LAHP-33TM910SF	\$2,567.00	910mm		PDF

LAHP 33 Series Linear Actuators Specifications		
Max Lateral Load, L_T	480N	108 lbf
Max Axial Load, L_A	890N	200 lbf
Roll Moment Rating, M_R	109N-m	80.4 lb-ft
Pitch Moment Rating, M_P	133N-m	98.1 lb-ft
Yaw Moment Rating, M_Y	25N-m	18.4 lb-ft
Static Radial Load Rating, C_0	6760N	1520 lbf
Reverse Static Radial Load Rating, $-C_0$	6760N	1520 lbf
Dynamic Load Rating, C	5120N	1151 lbf

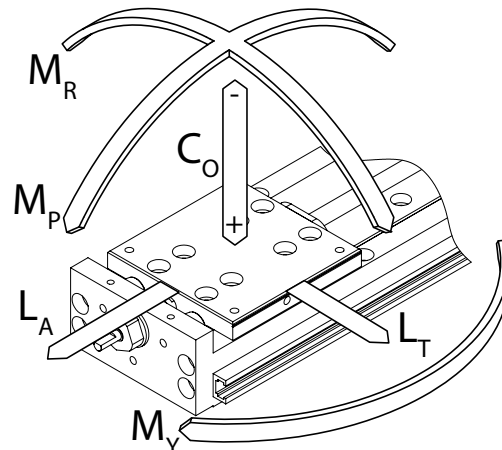


Linear Actuator
[LAHP-33TM210B10M](#)



Linear Slide*
[LAHP-33TM210SF](#)

*Same mechanical design as Linear Actuator, not driven

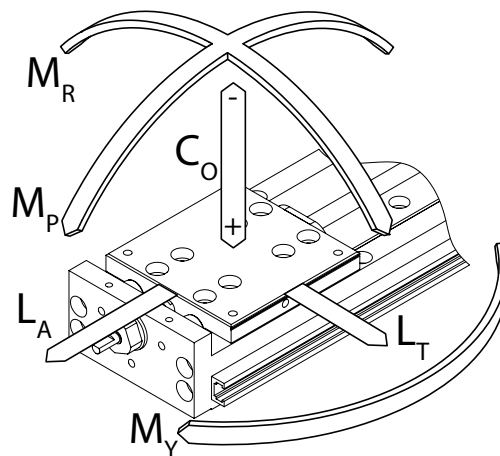




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LAHP 33W (Wide) Series Linear Actuators									
Part Number	Price	Stroke	Type	Efficiency	Pitch	Max Linear Speed	Linear Position Accuracy	Linear Position Repeatability	Drawing Links
LAHP-33WTM210B10M	\$1,843.00	210mm	ball screw	90%	10mm	0.500 m/s	±0.158 mm	±0.05 mm	PDF
LAHP-33WTM210LP25	\$1,664.00	210mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33WTM310B10M	\$2,072.00	310mm	ball screw	90%	10mm	0.500 m/s	±0.233 mm	±0.05 mm	PDF
LAHP-33WTM310LP25	\$1,893.00	310mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33WTM410B10M	\$2,261.00	410mm	ball screw	90%	10mm	0.467 m/s	±0.308 mm	±0.05 mm	PDF
LAHP-33WTM410LP25	\$2,081.00	410mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33WTM510B10M	\$2,795.00	510mm	ball screw	90%	10mm	0.333 m/s	±0.383 mm	±0.05 mm	PDF
LAHP-33WTM510LP25	\$2,616.00	510mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33WTM610B10M	\$2,985.00	610mm	ball screw	90%	10mm	0.250 m/s	±0.458 mm	±0.05 mm	PDF
LAHP-33WTM610LP25	\$2,805.00	610mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33WTM810B10M	\$3,567.00	810mm	ball screw	90%	10mm	0.133 m/s	±0.608 mm	±0.05 mm	PDF
LAHP-33WTM810LP25	\$3,389.00	810mm	lead screw	58%	0.25in	0.085 m/s		±0.013 mm	PDF
LAHP-33WTM910B10M	\$3,835.00	910mm	ball screw	90%	10mm	0.122 m/s	±0.683 mm	±0.05 mm	PDF
LAHP-33WTM910LP25	\$3,655.00	910mm	lead screw	58%	0.25in	0.077 m/s		±0.013 mm	PDF

LAHP 33W Series Linear Actuators Specifications		
Max Lateral Load, L_T	480N	108 lbf
Max Axial Load, L_A	890N	200 lbf
Roll Moment Rating, M_R	218N-m	160.8 lb-ft
Pitch Moment Rating, M_P	133N-m	98.1 lb-ft
Yaw Moment Rating, M_Y	25N-m	18.4 lb-ft
Static Radial Load Rating, C_0	6760N	1520 lbf
Reverse Static Radial Load Rating, $-C_0$	6760N	1520 lbf
Dynamic Load Rating, C	5120N	1151 lbf



Linear Actuator (Wide)
[LAHP-33WTM210B10M](#)



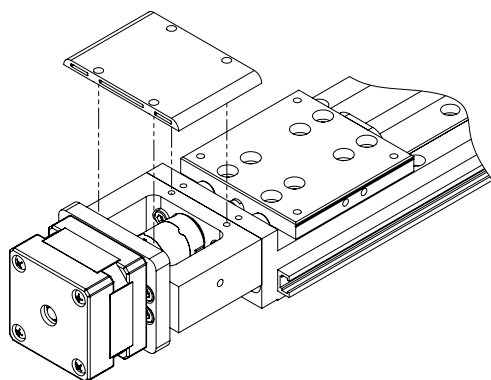
Lead Screw Actuator (Wide)
[LAHP-33WTM210LP25](#)

LHP Series Motor Brackets					
Part Number	Price	Bracket Type	Actuator Compatibility	Motor Compatibility	Drawing Links
LAHP-201-25MTRBKT	\$286.00	axial	LAHP-25	SureServo [®] SV2L-201B and SV2L-201N	PDF
LAHP-201-33MTRBKT	\$287.00	axial	LAHP-33/33W	SureServo [®] SV2L-201B and SV2L-201N	PDF
LAHP-202-33MTRBKT	\$339.00	axial	LAHP-33/33W	SureServo [®] SV2L-202B , SV2L-202N , SV2L-204B , and SV2L-204N	PDF
LAHP-N14-25MTRBKT	\$216.00	axial	LAHP-25	SureStep [®] NEMA 14 stepper motors	PDF
LAHP-N14-25WRPBKT	\$233.00	parallel	LAHP-25	SureStep [®] NEMA 14 stepper motors	PDF
LAHP-N17-25MTRBKT	\$218.00	axial	LAHP-25	SureStep [®] NEMA 17 stepper motors	PDF
LAHP-N17-25WRPBKT	\$310.00	parallel	LAHP-25	SureStep [®] NEMA 17 stepper motors	PDF
LAHP-N17-33MTRBKT	\$244.00	axial	LAHP-33/33W	SureStep [®] NEMA 17 stepper motors	PDF
LAHP-N17-33WRPBKT	\$188.00	parallel	LAHP-33/33W	SureStep [®] NEMA 17 stepper motors	PDF
LAHP-N23-33MTRBKT	\$244.00	axial	LAHP-33/33W	SureStep [®] NEMA 23 stepper motors	PDF
LAHP-N23-33WRPBKT	\$248.00	parallel	LAHP-33/33W	SureStep [®] NEMA 23 stepper motors	PDF

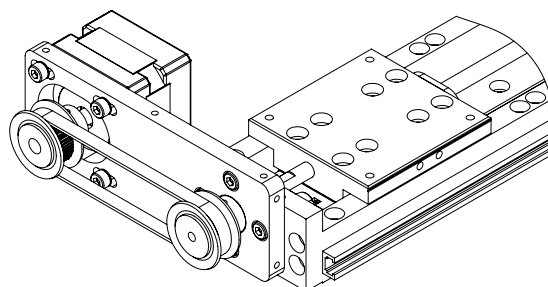


NEMA 14 Axial Motor Bracket*
[LAHP-N14-25MTRBKT](#)

*Coupling Sold Separately



NEMA 14 Parallel Motor Bracket
[LAHP-N14-25WRPBKT](#)





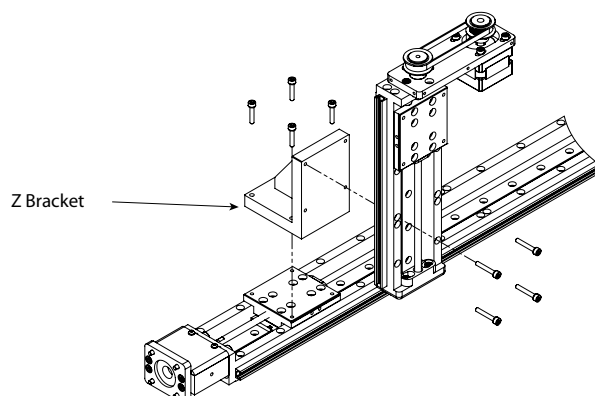
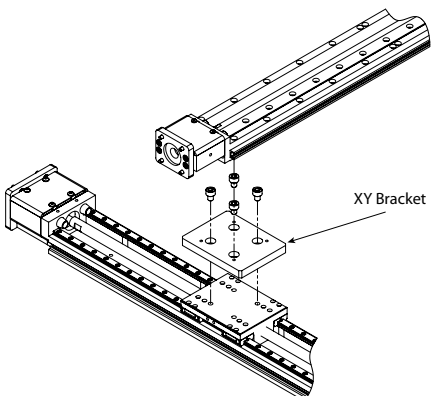
SureMotion[®] XYZ Gantries

LHP Series Drive Couplings						
Part Number	Price	Actuator Side Bore	Motor Side Bore	Actuator Compatibility	Motor Compatibility	Drawing Links
LAHP-25-CPL-201	\$44.50	3mm	8mm	LAHP-25	SureServo [®] SV2L-201B and SV2L-201N	PDF
LAHP-25-CPL-N1417	\$62.00	3mm	5mm	LAHP-25	SureStep [®] NEMA 14/17	PDF
LAHP-33-CPL-201	\$89.00	5mm	8mm	LAHP-33/33W	SureServo [®] SV2L-201B and SV2L-201N	PDF
LAHP-33-CPL-202	\$66.00	5mm	14mm	LAHP-33/33W	SureServo [®] SV2L-202B, SV2L-202N, SV2L-204B, and SV2L-204N	PDF
LAHP-33-CPL-N17	\$67.00	5mm	5mm	LAHP-33/33W	SureStep [®] NEMA 17	PDF
LAHP-33CPL-N23	\$89.00	5mm	1/4in	LAHP-33/33W	SureStep [®] NEMA 23	PDF



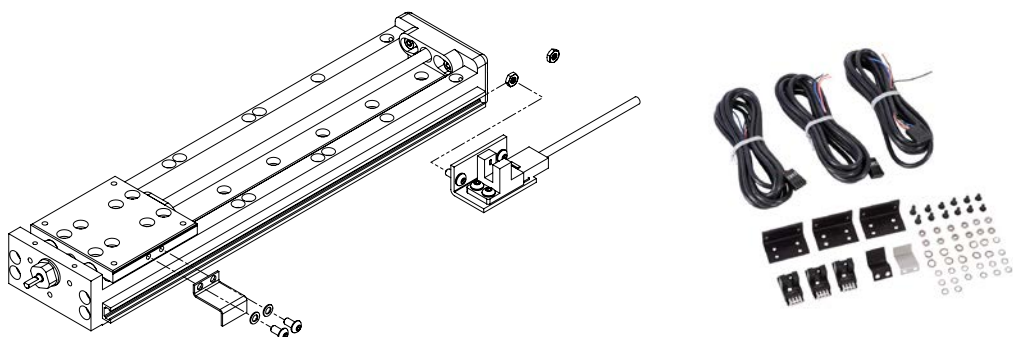
Stepper Motor Coupling (NEMA 14 & 17)
[LAHP-25-CPL-N1417](#)

LHP Series XY and Z Brackets				
Part Number	Price	Bracket Type	Description	Drawing Links
LAHP-XYB-25-33	\$108.00	XY bracket	SureMotion [®] mounting bracket, anodized aluminum, XY bracket. For use with LAHP-25 to LAHP-33 series actuators.	PDF
LAHP-XYB-25-33W	\$125.00	XY bracket	SureMotion [®] mounting bracket, anodized aluminum, XY bracket. For use with LAHP-25 to LAHP-33W series actuators.	PDF
LAHP-XYB-33-33W	\$125.00	XY bracket	SureMotion [®] mounting bracket, anodized aluminum, XY bracket. For use with LAHP-33 to LAHP-33W series actuators.	PDF
LAHP-ZB-25-25	\$436.00	Z bracket	SureMotion [®] mounting bracket, anodized aluminum, Z bracket. For use with LAHP-25 to LAHP-25 series actuators.	PDF
LAHP-ZB-25-33	\$436.00	Z bracket	SureMotion [®] mounting bracket, anodized aluminum, Z bracket. For use with LAHP-25 to LAHP-33 series actuators.	PDF
LAHP-ZB-25-33W	\$433.00	Z bracket	SureMotion [®] mounting bracket, anodized aluminum, Z bracket. For use with LAHP-25 to LAHP-33W series actuators.	PDF
LAHP-ZB-33-33	\$491.00	Z bracket	SureMotion [®] mounting bracket, anodized aluminum, Z bracket. For use with LAHP-33 to LAHP-33 series actuators.	PDF
LAHP-ZB-33-33W	\$510.00	Z bracket	SureMotion [®] mounting bracket, anodized aluminum, Z bracket. For use with LAHP-33 to LAHP-33W series actuators.	PDF

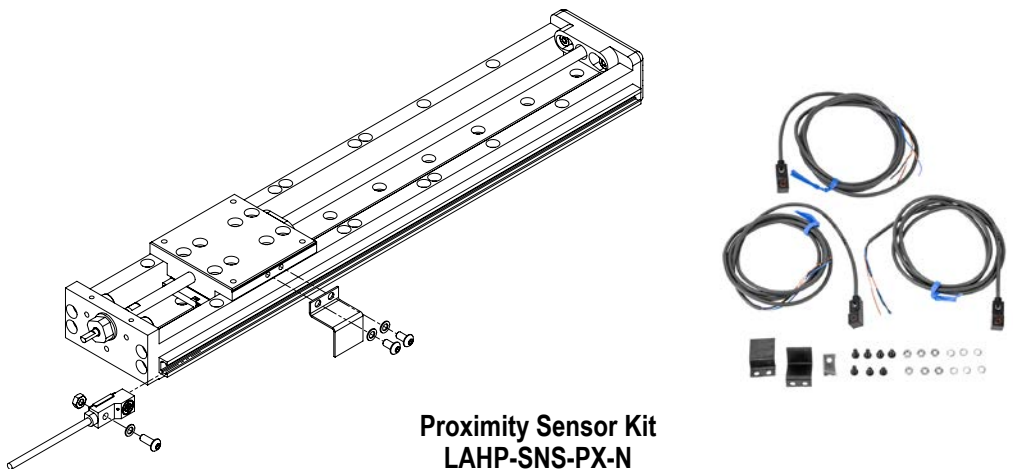


LAHP Series Sensors				
Part Number	Price	Sensor Type	Output	Drawing Links
<u>LAHP-SNS-PH-N</u>	\$351.00	photoelectric sensor	NPN	<u>PDF</u>
<u>LAHP-SNS-PH-P</u>	\$351.00	photoelectric sensor	PNP	<u>PDF</u>
<u>LAHP-SNS-PX-N</u>	\$401.00	proximity sensor	NPN	<u>PDF</u>
<u>LAHP-SNS-PX-P</u>	\$401.00	proximity sensor	PNP	<u>PDF</u>

NOTE: 3 Sensors included in each kit



Photoelectric Sensor Kit
[LAHP-SNS-PH-N](#)



Proximity Sensor Kit
[LAHP-SNS-PX-N](#)

LAHP Lead Nut Replacement Kit		
Part Number	Price	Description
<u>LAHP-25-NUT-LP25</u>	\$150.00	SureMotion [®] lead nut, replacement, 0.25in pitch. For use with LAHP-25 series actuators.
<u>LAHP-33-NUT-LP25</u>	\$167.00	SureMotion [®] lead nut, replacement, 0.25in pitch. For use with LAHP-33 series actuators.