

XY Series Datasheet



- 13 mm up to 1000 mm travel per axis
- Built-in controllers
- Several units daisy-chain to a single serial port
- Machinist's Square (SQ3) included free with all XY and XYZ systems
- Available in various speed / resolution options
- Custom versions available

Overview

We offer motorized stages that can be assembled into many different configurations; for example, XY stages, XYZ stages and XYZ/rotation stages. We list a few common XY stage combinations here, but you can select your own combination of family, travel and lead screw pitch in each axis to build the stage you need. We ship multiple stages un-assembled to avoid damage to the moving parts. Our families of linear stages are listed below. Please refer to the individual product family web page for specifications.

X-LRQ-E Linear Stages: 75 to 600 mm travel
Up to 100 kg max payload
Up to 840 mm/s and up to 100 N thrust
Inline and parallel drive configurations
Requires AB164 angle bracket for Z axis (vertical) mounting
Requires AP165 adaptor plate for XY systems outfitted with parallel mount drives
Can be combined directly with other Zaber stages
Comes with motor encoders

X-LSQ Linear Stages: 75 to 600 mm travel
20 kg max payload
Up to 1 m/s speed and 100 N max thrust (vertical axis payload)
Mounts directly in XY and XYZ
Can be combined directly with T-LS stages
Available with motor encoders

X-LRM-E Linear Stages: 25 to 200 mm travel
Up to 50 kg max payload
Hardened steel construction and integrated recirculating ball bearing guide provide exceptional stiffness and thermal stability
Up to 8 μ m accuracy and 50 nm resolution
Mounts directly in XY
Can be combined directly with other Zaber stages
Comes with motor encoders

X-LSM Miniature Linear Stages: 25 to 200 mm travel
10 kg load capacity
25 N max thrust (vertical axis payload)
Mounts directly in XY and XYZ
Our most compact motorized stage with built-in controllers
Available with motor encoders

X-LRT-C High-load Linear Stages: 100, 250, 500, 750, 1000 mm travel
500 kg load capacity
High cantilever stiffness
Requires AB151 angle bracket for Z axis (vertical) mounting
Includes stainless steel dust covers
Can be combined directly with other Zaber stages
Available with motor encoders

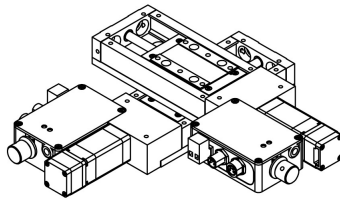
T-LSR Linear Slides: 75 to 450 mm travel
Up to 80 mm/s speed and up to 20 kg payload
100 N max thrust (vertical axis payload)
Mounts directly in XY and XYZ
Can be combined directly with T-LS stages

T-LS Linear Stages: 13 and 28 mm travel
10 kg max payload
15 N max thrust (vertical axis payload)
Mounts directly in XY
Requires AB90 angle bracket for Z axis (vertical) mounting
Can be combined directly with T-LSR stages
See the Product Comparison page to compare the different series.

Drawings

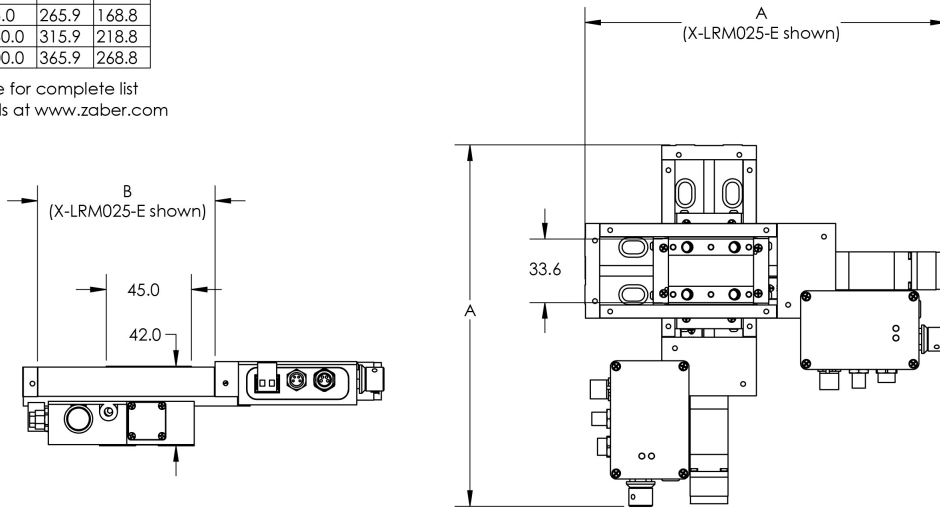
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X-XY-LRM-E Motorized Stage
With Built-in Controller and Motor Encoder
 dimensions in mm



Model Number*	Travel	A	B
X-XY-LRM025-E	25.0	190.9	93.8
X-XY-LRM050-E	50.0	215.9	118.8
X-XY-LRM075-E	75.0	265.9	168.8
X-XY-LRM150-E	150.0	315.9	218.8
X-XY-LRM200-E	200.0	365.9	268.8

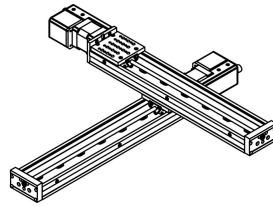
*See product page for complete list of available models at www.zaber.com



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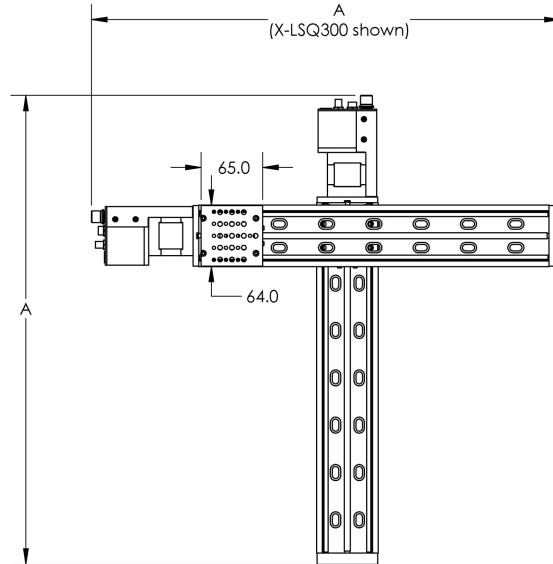
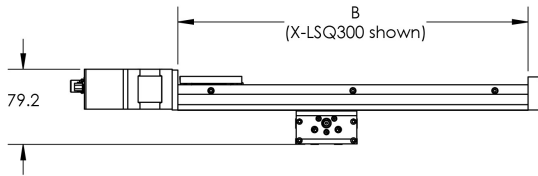
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X-XY-LSQ Motorized Stage
 dimensions in mm



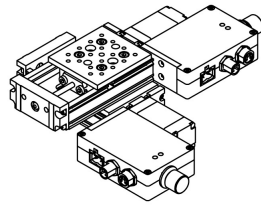
Model Number*	Travel	A	B
X-XY-LSQ075	75.0	270.3	145.0
X-XY-LSQ150	150.0	345.3	220.0
X-XY-LSQ300	300.0	495.3	370.0

*See product page for complete list of available models at www.zaber.com



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X-XY-LSM Stage With Built-in Controller
 dimensions in mm

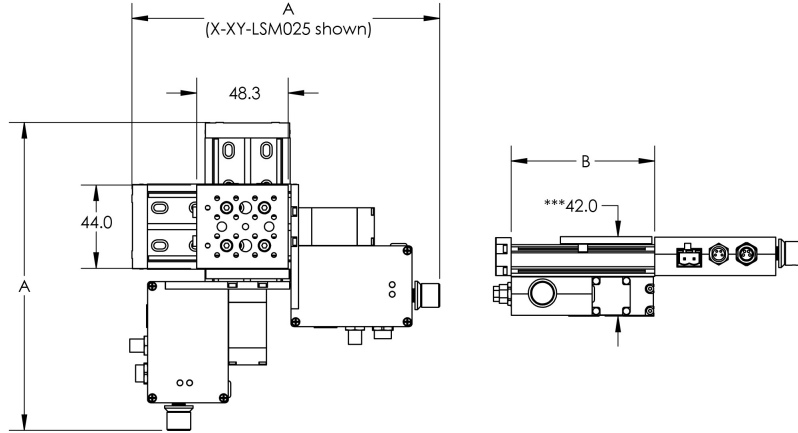


Model Number*	Travel	A**	B
X-XY-LSM025	25.0	162.6	75.8
X-XY-LSM050	50.0	188.0	101.2
X-XY-LSM100	100.0	238.8	152.0
X-XY-LSM150	150.0	289.6	202.8
X-XY-LSM200	200.0	340.4	253.6

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**Subtract 13.1 mm knob length from 'A' for -S versions without manual control

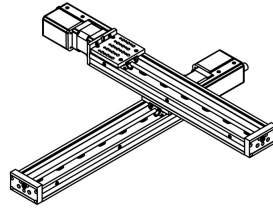
***Height dimension can be reduced by 3.7mm by removing top plate on the X-axis



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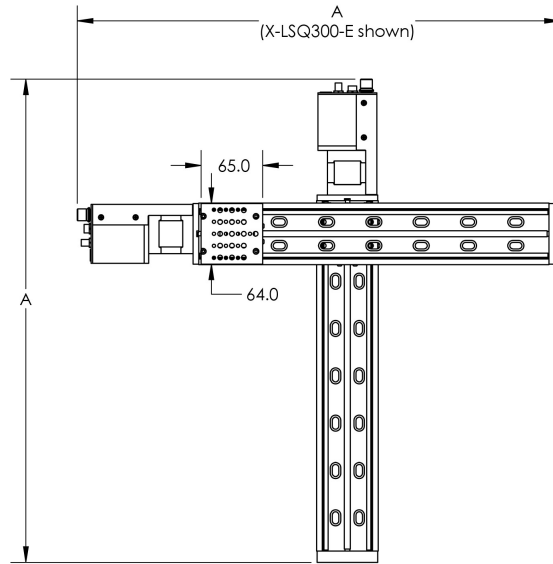
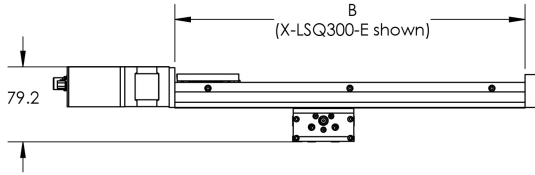
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X-XY-LSQ-E Motorized Stage
 dimensions in mm



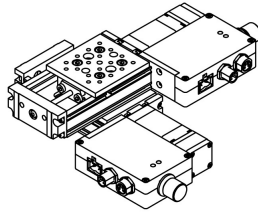
Model Number*	Travel	A	B
X-XY-LSQ075-E	75.0	285.5	145.0
X-XY-LSQ150-E	150.0	360.5	220.0
X-XY-LSQ300-E	300.0	510.5	370.0

*See product page for complete list of available models at www.zaber.com



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X-XY-LSM-E Stage With Built-in Controller
 dimensions in mm

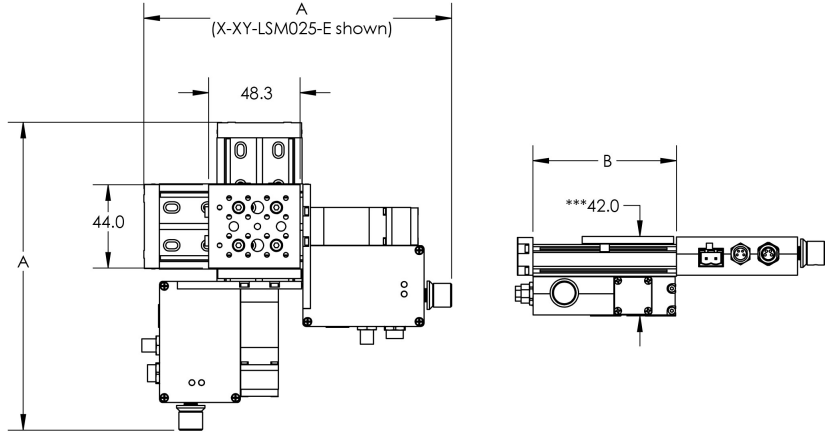


Model Number*	Travel	A**	B
X-XY-LSM025-E	25.0	162.6	75.8
X-XY-LSM050-E	50.0	188.0	101.2
X-XY-LSM100-E	100.0	238.8	152.0
X-XY-LSM150-E	150.0	289.6	202.8
X-XY-LSM200-E	200.0	340.4	253.6

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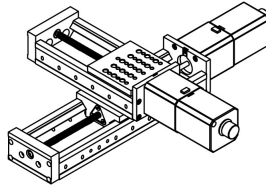
**Subtract 13.1 mm knob length from 'A' for -S versions without manual control

***Height dimension can be reduced by 3.7mm by removing top plate on the X-axis



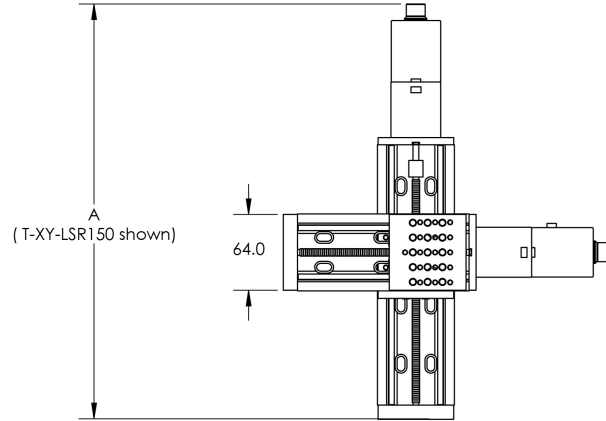
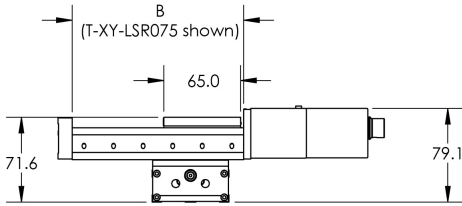
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T-XY-LSR Motorized Translation Stage
 dimensions in mm



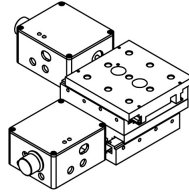
Model Number*	Travel	A	B
T-XY-LSR075	75.0	276.0	145.0
T-XY-LSR150	150.0	351.0	220.0
T-XY-LSR300	300.0	501.0	370.0
T-XY-LSR450	450.0	701.0	520.0

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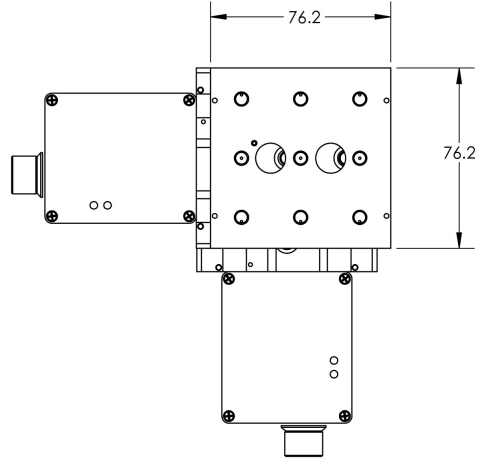
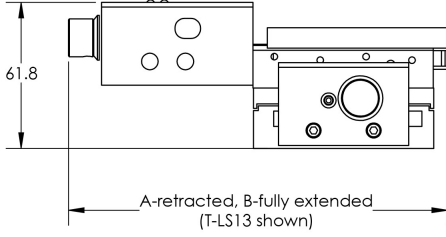


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T-XY-LS Motorized Translation Stage
dimensions in mm



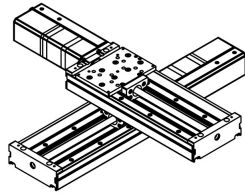
Model Number*	Travel	A	B
T-XY-LS13	13.0	157.0	170.0
T-XY-LS28	28.0	173.2	201.2



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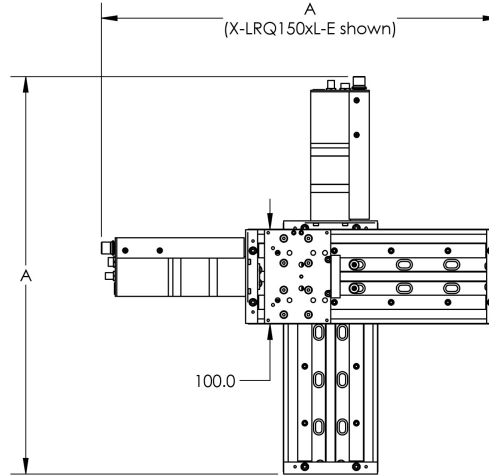
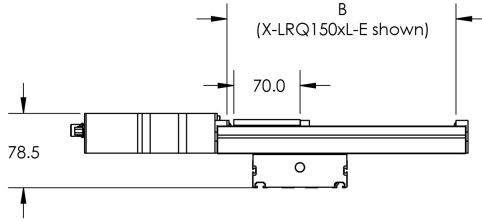
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X-XY-LRQxL-E Motorized Stage
With Built-in Controller and Motor Encoder
 dimensions in mm



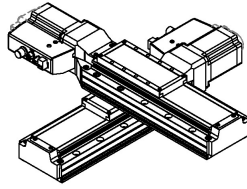
Model Number*	Travel	A	B
X-XY-LRQ075xL-E	75.0	344.9	167.0
X-XY-LRQ150xL-E	150.0	419.9	242.0
X-XY-LRQ300xL-E	300.0	569.9	392.0
X-XY-LRQ450xL-E	450.0	719.9	542.0
X-XY-LRQ600xL-E	600.0	869.9	692.0

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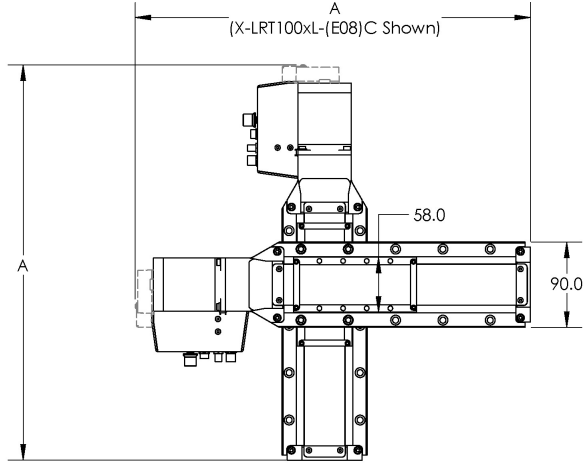
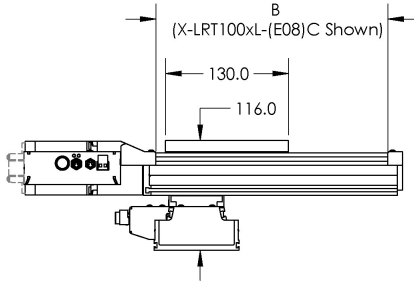
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X-XY-LRT-C, X-XY-LRT-EC Motorized Stage
With Built-in Controller and Motor Encoder
 dimensions in mm



Model Number*	Travel	A	B
X-LRT0100xL-(E08)C	100	417.6	245
X-LRT0250xL-(E08)C	250	567.6	395
X-LRT0500xL-(E08)C	500	817.6	645
X-LRT0750xL-(E08)C	750	1067.6	895
X-LRT1000xL-(E08)C	1000	1317.6	1145

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Specifications