



- 50 mm up to 305 mm travel per axis
- Easily adjustable non-contact hall sensor limit switches
- Up to 12  $\mu\text{m}$  accuracy; 2  $\mu\text{m}$  repeatability; 85 mm/s speed
- Supported by  $\mu\text{Manager}$  and MetaMorph® Microscopy Automation & Image Analysis Software

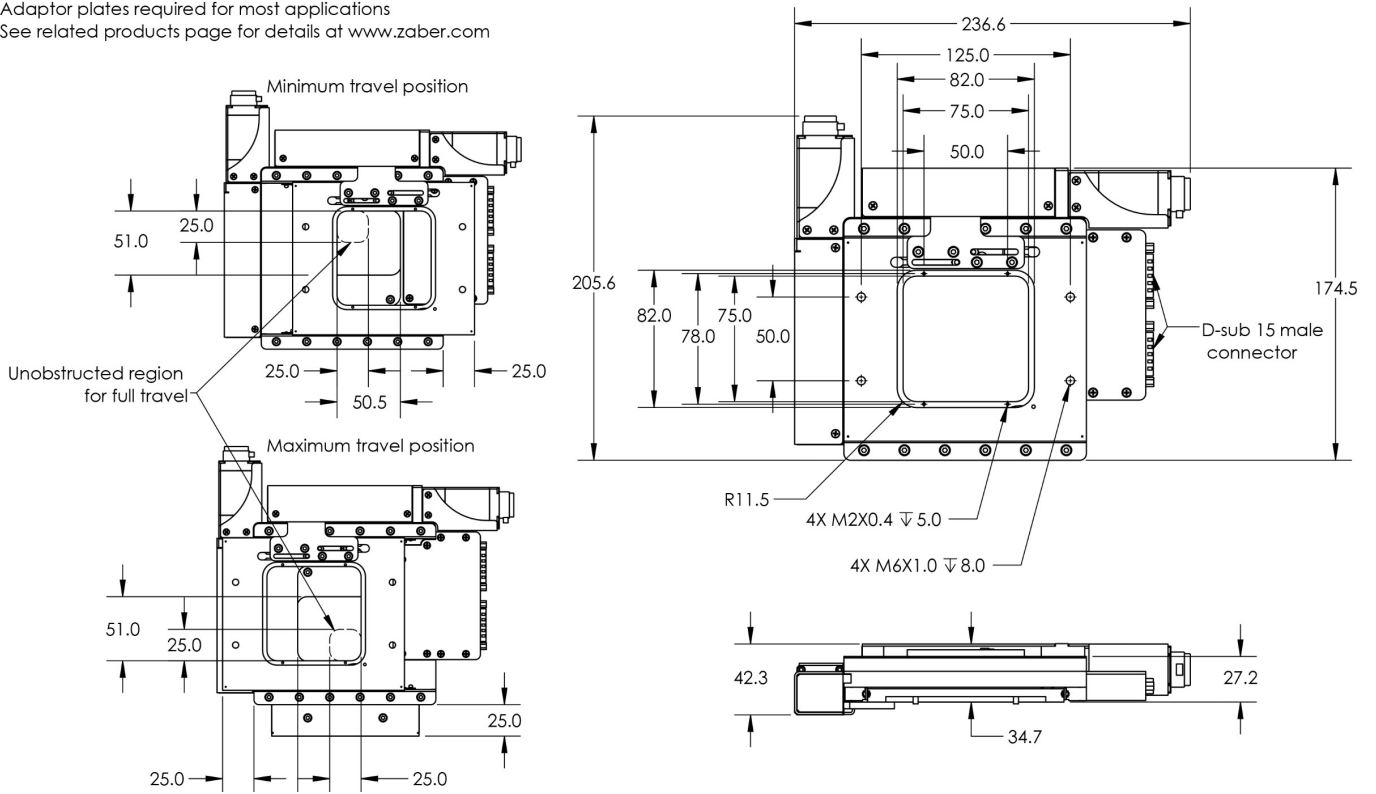
## Product Description

Zaber's ASR series microscope stages combined with our X-MCB2 series two-axis controllers are designed as replacements for manual stages on upright and inverted microscopes or for stand-alone operation as scanning stages.

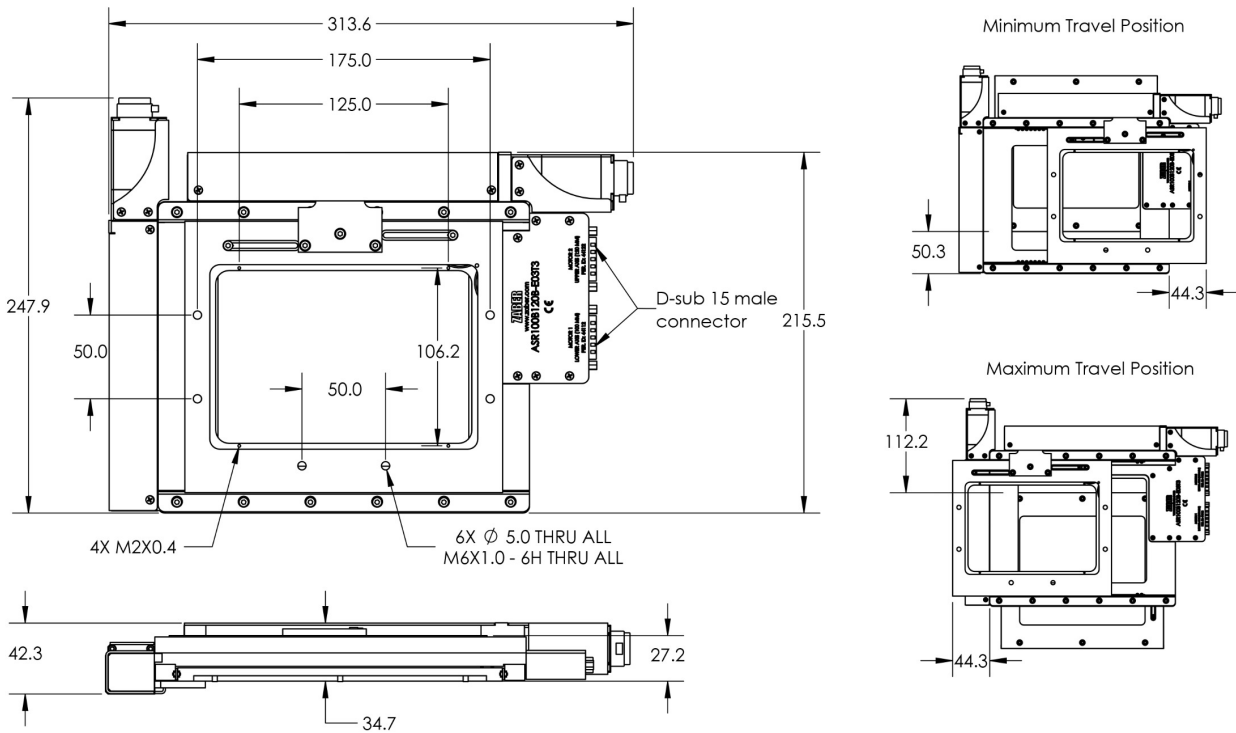
Mounting adaptors are available for breadboards and most common microscopes. Custom adaptors and plates are available upon request.

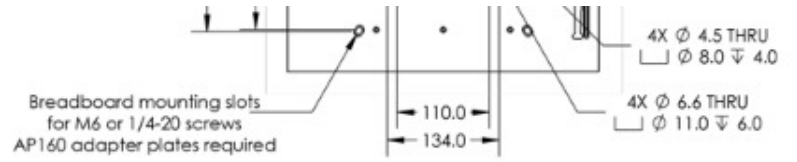
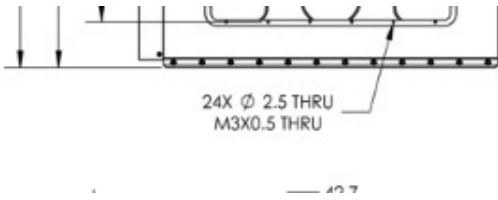
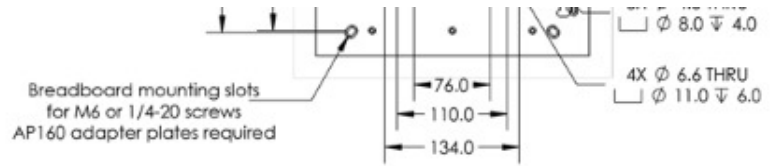
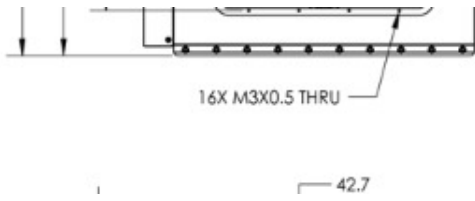
## Dimension Drawings

Adaptor plates required for most applications  
See related products page for details at [www.zaber.com](http://www.zaber.com)



Adaptor plates required for mounting in most applications.  
See related products page for details at [www.zaber.com](http://www.zaber.com).





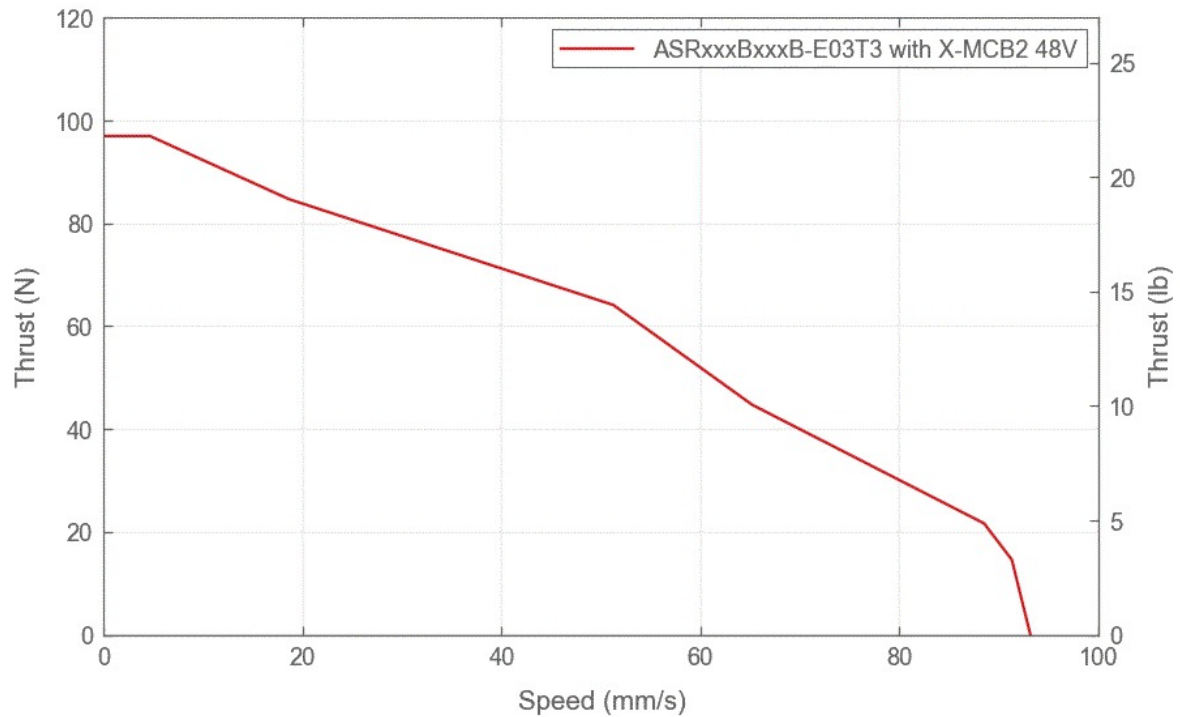
## Product Specifications

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.15625 $\mu\text{m}$	
Built-in Controller	No	
Recommended Controller	X-MCB2 (48 V) Recommended	
Accuracy (unidirectional)	12 $\mu\text{m}$	0.000472 "
Repeatability	< 2 $\mu\text{m}$	< 0.000079 "
Backlash	< 4 $\mu\text{m}$	< 0.000157 "
Flatness	8 $\mu\text{m}$	0.0003 "
Orthogonality	TBD	
Maximum Speed	85 mm/s	3.346 "/s
Minimum Speed	0.000095 mm/s	0.000004 "/s
Speed Resolution	0.000095 mm/s	0.000004 "/s
Encoder Type	Motor mounted rotary quadrature encoder	
Peak Thrust	95 N	21.3 lb
Maximum Continuous Thrust	95 N	21.3 lb
Guide Type	Crossed roller bearing	
Pitch	0.02°	0.349 mrad
Roll	0.02°	0.349 mrad
Yaw	0.005°	0.087 mrad
Linear Motion Per Motor Rev	2.00 mm	0.079 "
Motor Steps Per Rev	200	
Motor Type	Stepper (2 phase)	
Motor Rated Current	670 mA/phase	
Motor Winding Resistance	9.2 ohms/phase	
Inductance	5.6 mH/phase	
Motor Rated Power	4.2 Watts	
Motor Connection	D-sub 15	
Mechanical Drive System	Precision lead screw	
Limit or Home Sensing	Magnetic, adjustable home and away sensors	
Axes of Motion	2	
Mounting Interface	Separate mounting adaptors available	
Operating Temperature Range	0 to 50 °C	
RoHS Compliant	Yes	

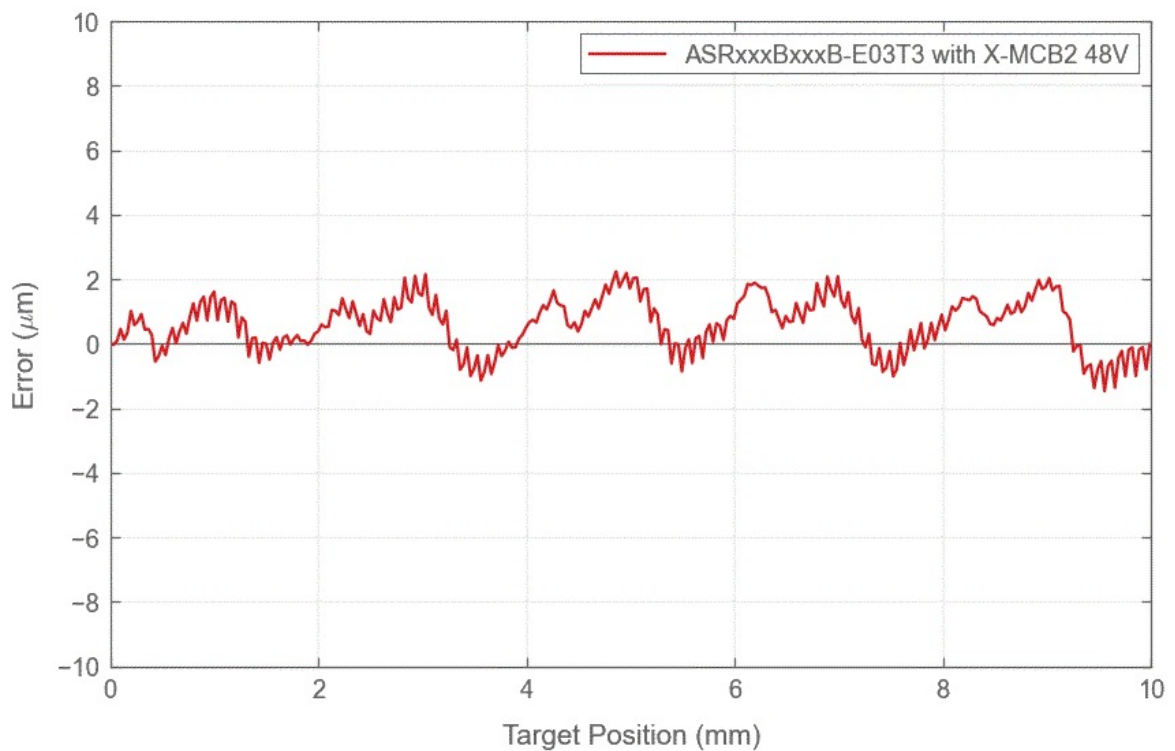
Specification	Value	Alternate Unit
CE Compliant	Yes	
X Travel Range	50 mm	1.969 "
Y Travel Range	50 mm	1.969 "
Weight	1.82 kg	4.012 lb

## Specification Charts

### Thrust Speed Performance



### Typical Accuracy



### Typical Microstepping Accuracy

