

# Translation Stages

Linear Motorized

Crossed Roller Stages

CE Certified

The 100cri and 100cri-A motorized crossed roller bearing translation stages offer exceptionally smooth linear travel. The time-tested design has been improved with the addition of more bearing area than similar stages. The increased bearing surface reduces non-linear motion when changing directions. 100cri and 100cri-A are the integration of 100cr and 100cr-A translation stages with our 841 actuators. By combining actuator and stage we have effectively created a smaller package. Our **e** series and MC2010 controllers drive these stages through a closed loop interface between the controller and motor encoder. The closed loop connection ensures 0.2  $\mu\text{m}$  and 0.1  $\mu\text{m}$  resolution, respectively. The encoder coupling also enables the use of the DR1000 digital readout for repeated or relative positioning requirements. The aperture stage version, 100cri-A is ideal for laser and microscopy applications where a light path through the stage is necessary. There is a quick reference scale on both the top and bottom of the drive housing. They are available in either right or left hand versions. Multiple 100cri units are stackable for XY positioning requirements and are compatible with our MX-AB for Z axis applications. High-speed versions available upon request.



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### Product Features

- 1.7 mm/second rapid positioning
- Limit switch soft stops
- Visual quick reference scale
- Vacuum compatible versions available

### Performance Specifications

Maximum horizontal axis load	30 lbs
Maximum vertical axis load	10 lbs
Travel	
100cri	1.0 inch (25 mm)
200cri	2.0 inch (50 mm)
Backlash	$\leq 5 \mu\text{m}$
Point-to-point accuracy	$\pm 2 \mu\text{m}$

### Related Products

model <b>e</b> motion controllers	beginning 22
MC2010 computer interface	27
DR1000 digital readout	31
manual version	beginning 52

### Order Information

crossed roller stage, closed loop, 1.0 inch travel, rh	100cri-R
crossed roller stage, closed loop, 1.0 inch travel, lh	100cri-L
crossed roller stage, closed loop, 1.0" travel with 2.0" aperture, rh drive	100cri-AR
crossed roller stage, closed loop, 1.0" travel with 2.0" aperture, lh drive	100cri-AL
crossed roller stage, closed loop, 2.0 inch travel, rh	200cri-R
crossed roller stage, closed loop, 2.0 inch travel, lh	200cri-L
adapter, block	MX-AB
adapter, mounting base	MX-AB2

**Metric Option** — for metric assembly features on this product, add ‘M’ after model number.

### Adapter Block and Mounting Base / MX-AB and MX-AB2

Note that dimensions in parentheses (mm) reflect metric assembly features.

