

# Move the microscope, not the experiment.



## Manual & Motorized Microscope Translator

MXMS-100cr series microscope translators are designed to be stable XY translators for fixed stages experiments. MXMS-100cr series translators have a full 25 mm of XY translation and have full crossed roller bearing stages in all three locations.

MXMS crossed roller translators are available in motorized and manual versions. Motorized versions can be controlled with any e series and MC2000 controllers. Controllers drive the stage through a closed loop interface between the controller and the 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. All cables are shielded to ensure noise-free operation during sensitive electrophysiology experiments. Manual versions can be fitted with either 20, 40, 80, or 100 TPI adjustment screws with resolution from 20  $\mu\text{m}$  down to 5  $\mu\text{m}$ , respectively.

MXMS-100cr series stages can be sized to fit most microscopes. Please include the manufacturer name and model of your microscope when ordering. A clamp kit appropriate for your microscope will be included.

## Features

- 20-, 40-, 80-, or 100-pitch drive screws
- Compatible with fixed stage microscopes
- Full crossed roller stage support

## Performance Specifications

- Maximum load 200 lbs, centered
- Travel / axis 1.0 inch (25 mm)
- Minimum controllable motion:
  - Manual
    - 20 TPI 10  $\mu\text{m}$
    - 40 TPI 5  $\mu\text{m}$
    - 80 TPI submicron
    - 100 TPI submicron
  - Motorized
    - Backlash  $\leq$  5  $\mu\text{m}$
    - Point to point accuracy  $\pm$  2  $\mu\text{m}$

## Economy Translator

- MXMS-100 series translators have a full 25 mm of XY translation and use ball transfer pads in the back two bearing locations instead of full crossed rollers.

