

Translation Stages

Linear Motorized

Ball Bearing Stages

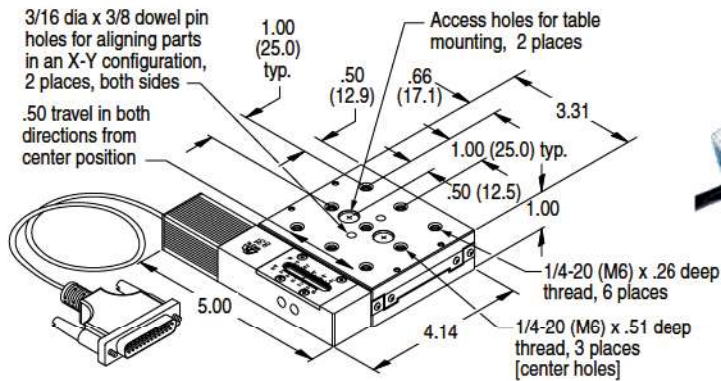
CE Certified



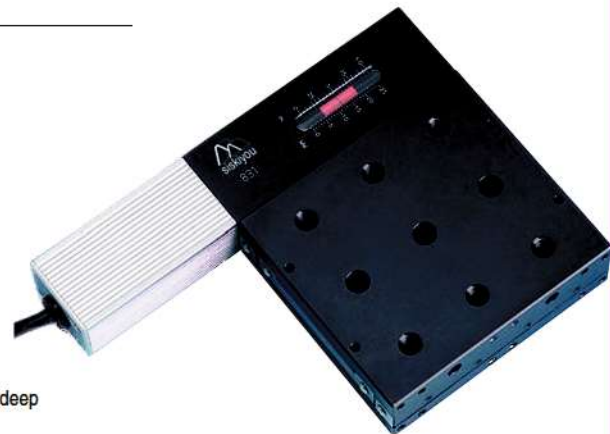
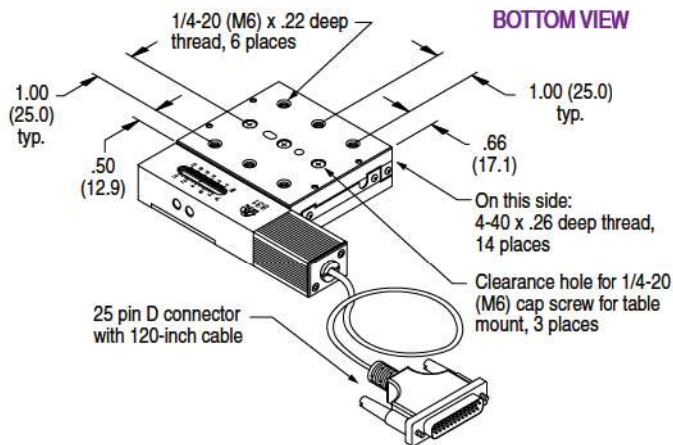
1 inch Travel / 831

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

TOP VIEW



BOTTOM VIEW



Model 831

CE

Motorized Translation Stage

The 831 motorized precision ball bearing translation stage offers 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, and maximizes linearity towards the end of travel.

831 stages are an integration of our 331 translation stage and our 841 actuators. By combining the actuator and the stage we have created a smaller package. Our *e* series and MC2010 controllers drive the stage through a closed loop interface between the controller and the motor encoder. The closed loop connection ensures 0.2 μm and 0.1 μm resolution, respectively. The encoder coupling also enables the use of the DR1000 digital readout for repeated or relative positioning requirements.

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. 831s are stackable for XY positioning requirements and are compatible with our MX-AB for Z-axis applications. High-speed versions available upon request.

Product Features

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

Performance Specifications

Maximum horizontal axis load	15 lbs
Maximum vertical axis load	3 lbs
Travel	1.0 inch (25 mm)
Backlash	$\leq 5 \mu\text{m}$
Point-to-point accuracy	$\pm 2 \mu\text{m}$

Related Products

model <i>e</i> motion controllers	beginning 22
MC2010 computer interface	27
DR1000 digital readout	31
MX-AB adapter block	120
manual version	46

Order Information

ball bearing stage, closed loop, 1.0 inch travel, rh	831R
ball bearing stage, closed loop, 1.0 inch travel, lh	831L

Metric Option — for metric assembly features on this product, add '-M' after model number.