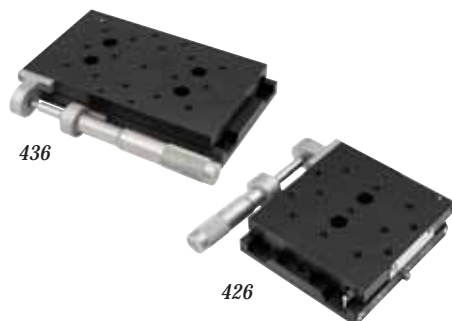


426/436 Series High-Performance Low-Profile Crossed-Roller Bearing Linear Stages



- Crossed-roller bearing design for precision movement and larger load capacity
- All models lockable
- Extensive interferometric quality testing
- Reversible for left- or right-hand applications
- Compatible with Newport manual and motorized actuators
- Stackable for low profile multi-axis positioning

Order actuators separately. 426 shown with SM-25 and 436 shown with SM-50.

Model 426 and 436 Series High-Performance Low-Profile Crossed-Roller Bearing Linear Stages feature crossed-roller bearings running on ground steel V-ways to provide an attractive combination of high-resolution movement, low runout, and large load capacity. For stability, repeatability, and exceptionally smooth motion, actuators bear upon a hardened carbide insert. Springs provide preload against the actuator tip to eliminate backlash. To ensure consistently dependable performance, these stages are extensively tested in Newport's Interferometric Quality Assurance Facility.

A highly stable and rigid stainless steel actuator mounting system allows your choice of Newport's manual or motorized actuators to be attached to the stage in either a left- or right-hand configuration. A non-influencing lock (also reversible for left handed configurations) similar to those used on our top of the line ULTRAlign™ Series provides positive stable positioning and guards against inadvertent adjustments.

Solid platform and aperture platform versions are offered. Each features a convenient array of 1/4-20 or Metric M6 tapped holes. The 2 in. diameter apertures of Models 426A and 436A are unobscured over 0.625 in. (16 mm) of travel. The stages are easily stacked for XY applications, and may be combined with our Model 360-90 Angle Bracket for XYZ configurations.

Specifications

Model (Metric)	426 (M-426) Series	436 (M-436) Series
Maximum Stage Travel [in. (mm)]	1 (25)	2 (50)
Angular Deviation (μrad)		<150
Max Centered Load [lb (N)]	73 (325)	125 (556)
Load Capacity, Vertical [lb (N)]		15 (67)

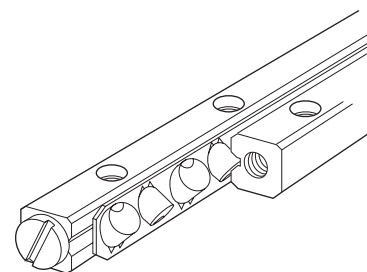
Ordering Information

Stages

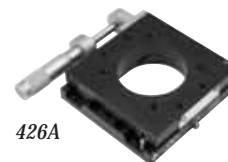
Model (Metric)	Description	Actuators Required*
426 (M-426)	Solid Platform	1
436 (M-436)	Solid Platform	1
426A (M-426A)	Apertured Platform	1
436A (M-436A)	Apertured Platform	1

* Actuators must be ordered separately

CAD See our website
for CAD files



Preloaded crossed-roller bearings provide repeatable, zero stick-slip linear motion with negligible side-play. The roller strips hold cylindrical rollers alternately inclined 90° to assure constant linear contact with the hardened and ground ways.



Order actuators separately. 426A is shown with SM-25.



SM Series Micrometers (see page 923)



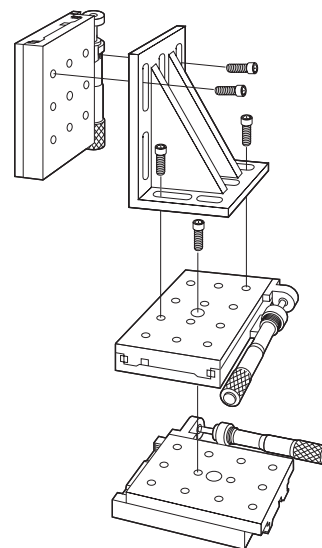
DM-13 Differential Micrometer (see page 928)

Recommended Actuators

Manual Drives	Description	426 (M-426)	436 (M-436)	Travel (mm)	Sensitivity (µm)
AJS Series (page 921)	Fine Adjustment Screw	•	•	13-50	0.6-0.6 - 0.75
SM-13 (page 923)	Micrometer	•		13	1
SM-25 (page 923)	Micrometer	•	•	25	1
SM-50 (page 923)	Micrometer		•	50	1
HR-13 (page 925)	High-Resolution Micrometer	•		13	0.5
DM-13 (page 928)	Differential Micrometer	•		13	0.1
DM-13L (page 926)	Differential Micrometer	•		13	0.1
DM-25L (page 926)	Differential Micrometer	•	•	25	0.1
Motorized Drives					
CMA Series (page 839)	Motorized Actuator	•	•	12.5-25	0.2-0.5
LTA-HS (page 836)	Motorized Actuator	•	•	50	0.1
PZA12 Actuator (page 834)	NanoPZ actuator, 12.5 mm travel	•	•	12.5	0.03

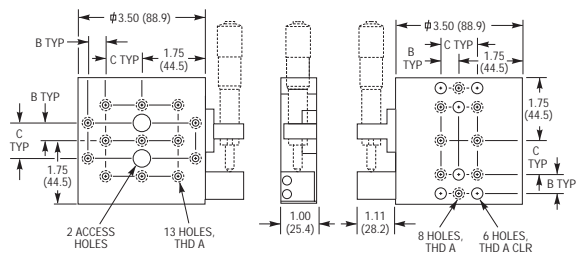


Use an angle bracket to create multi-axis assemblies.

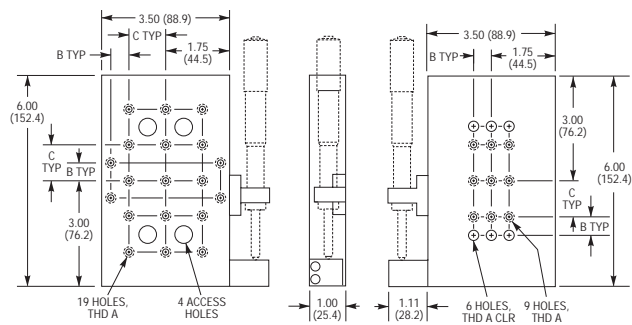


Models 360-90 and 360-30 can be used to make long-travel XYZ stages using linear stages like our Models 423, 433, 443, 426, or 436.

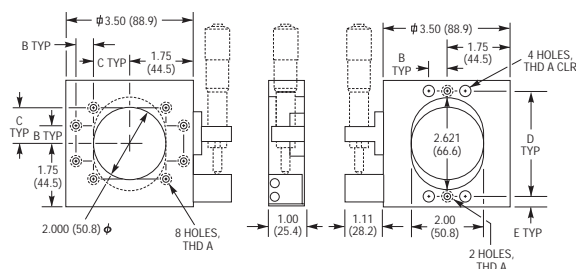
Model 426 w/SM-25



Model 436 w/SM-50



Model 426A w/SM-25



Model (Metric)	Thread			Dimensions [in. (mm)]		
	A	B	C			
426 (M-426)	1/4-20 (M6)	0.500 (12.5)	1.000 (25.0)			
436 (M-436)	1/4-20 (M6)	0.500 (12.5)	1.000 (25.0)			

Model (Metric)	Thread					Dimensions [in. (mm)]				
	A	B	C	D	E					
426A (M-426A)	1/4-20 (M6)	0.500 (12.5)	1.000 (25.0)	3.000 (75.0)	0.25 (7.0)					
436A (M-436A)	1/4-20 (M6)	0.500 (12.5)	1.000 (25.0)	3.000 (75.0)	1.00 (26.2)					

Model 436A w/SM-50

