

## ULTIMA® Series Actuators

### Our popular AJS Series

**Adjustment Screws** provide exceptionally smooth, repeatable adjustment for ULTIMA® optical mounts. High precision 100 or 127 TPI rolled stainless steel threads are mated with an aluminum-bronze collet. This combination of materials is a superior match for stictionless movement and long life.

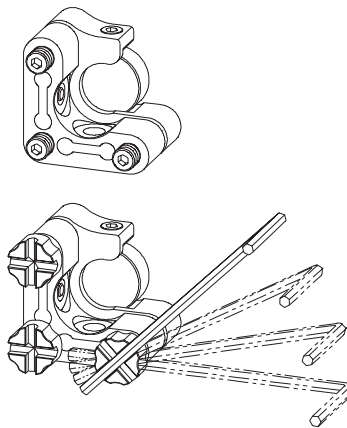


100 TPI Adjustment Screws for Optical Mounts



### Our patented thread pitch lock

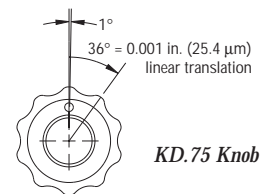
securely locks the adjustment screw with just a simple turn of a set screw, without influencing the position of the front plate of the mount. Two versions are available, one with the set screw on the end next to the drive screw and a second with the set screw on the side for easier access when used with a knob or in an optical system.



KD.37 knobs can be added to a hex-head AJS screw. The KD.37 has two slots for an Allen wrench to increase the adjustment sensitivity.

### Position Sensitivity

*Smallest difference in movement that can be discriminated. Typically your fingertips are sensitive enough to distinguish 0.5°–1° rotations of an adjustment screw—in some cases much less. Therefore, when you see the term sensitivity it is the angular change of an optic associated with a 1° turn of the screw.*



Model U200-A with NewStep Motorized Actuators



## Ordering Information

### Actuators

						Angle/Translation <sup>(1)</sup>		
Model	Adjustment Screw Thread	Drive	Lock	Travel [in. (mm)]	Sensitivity <sup>(2)</sup> (μm)	U100-A/P [in. (mm)]	U200-A/P [in. (mm)]	U300-A/P [in. (mm)]
High Precision Adjustments Screws								
AJS100-0.5K-NL	100 TPI	KD.75 Knob	No Lock	0.5 (12.7)	0.75	14°/0.38 (9.7)	9°/0.38 (9.7)	7°/0.38 (9.7)
AJS100-0.5K	100 TPI	KD.75 Knob	Side Lock	0.5 (12.7)	0.75	14°/0.38 (9.7)	9°/0.38 (9.7)	7°/0.38 (9.7)
AJS100-0.5H-NL	100 TPI	Hex	No Lock	0.5 (12.7)	0.75	14°/0.38 (9.7)	9°/0.38 (9.7)	7°/0.38 (9.7)
AJS100-0.5H	100 TPI	Hex	End Lock	0.5 (12.7)	0.75	14°/0.38 (9.7)	9°/0.38 (9.7)	7°/0.38 (9.7)
AJS100-0.5	100 TPI	Knob	Side Lock	0.5 (12.7)	0.75	14°/0.38 (9.7)	9°/0.38 (9.7)	7°/0.38 (9.7)
AJS100-02H	100 TPI	Hex	End Lock	0.25 (6.35)	0.75	5°/0.15 (3.8)	4°/0.15 (3.8)	2.7°/0.15 (3.8)
AJS127-0.5	127 TPI	Knob	Side Lock	0.5 (12.7)	0.6	14°/0.40 (10.2)	10°/0.40 (10.2)	7.8°/0.40 (10.2)
AJS127-02H	127 TPI	Hex	End Lock	0.25 (6.35)	0.6	5°/0.15 (3.8)	4°/0.15 (3.8)	2.7°/0.15 (3.8)
Micrometers								
SM-06	Micrometer	Knob		0.25 (6)	1	9°/0.25 (6.4)	6°/0.25 (6.4)	4.8°/0.25 (6.4)
HR-6	High-Resolution Micrometer	Knob	Side Lock	0.25 (6)	0.5	9°/0.25 (6.4)	6°/0.25 (6.4)	4.8°/0.25 (6.4)
DM-6L	Differential Micrometer	Knob	Side Lock	0.25 (6)	0.1/1	9°/0.25 (6.4)	6°/0.25 (6.4)	4.8°/0.25 (6.4)
SM-13	Micrometer	Knob		0.5 (13)	1	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
HR-13	High-Resolution Micrometer	Knob	Side Lock	0.5 (13)	0.5	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
DM-13L	Differential Micrometer	Knob	Side Lock	0.5 (13)	0.1/1	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
Motorized Actuators								
NSA12	Miniature Motorized Actuator			0.5 (12)	0.3	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
LTA Series	Motorized Actuator			25	0.05	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
CMA Series	Motorized Actuator			0.5 (12.5)	0.2–0.5	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
PM500-1A Series	Motorized Actuator			1 (25)	0.05–0.1	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
AD Series	Electrostrictive Actuator			0.5 (13)	0.04–0.06	14°/0.37 (9.4)	10°/0.37 (9.4)	7°/0.37 (9.4)
Accessories								
KD.75	Large Knob							
KD.37	Small Knob							

1) Angle applies to two actuator versions with pivot bushing at the correct location. Translation applies to three actuator versions. Additional angular range can be achieved by backing the pivot bushing or third actuator out to a minimum position.

2) Sensitivity assumes a 1° rotation of the actuator screw (for manual actuators).

U.S. Patent 6,016,230



HR-6



HR-13

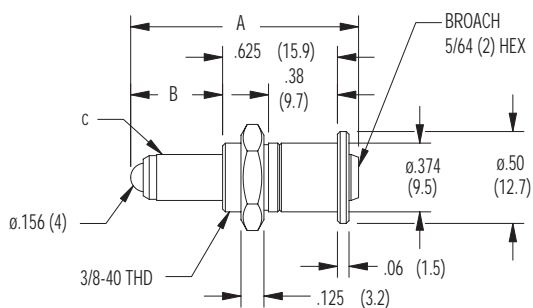


DM-6L

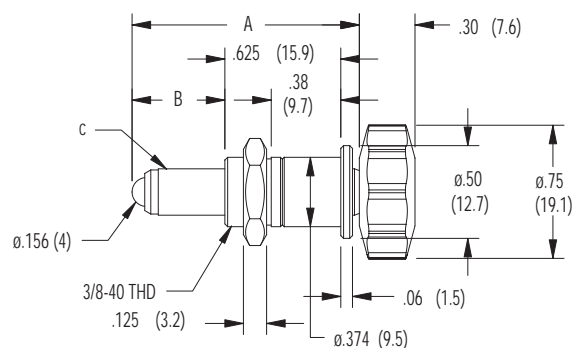


DM-13L

### Model AJS100-0.5H-NL



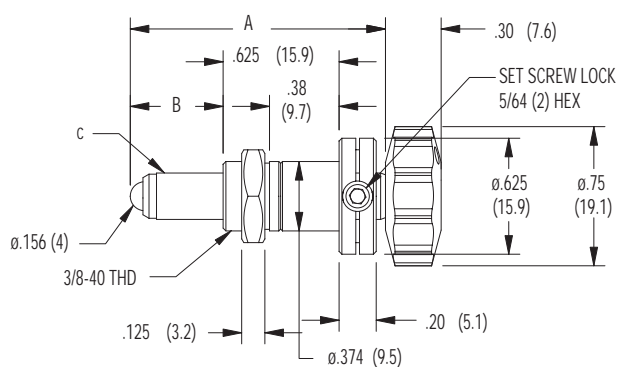
### Model AJS100-0.5K-NL



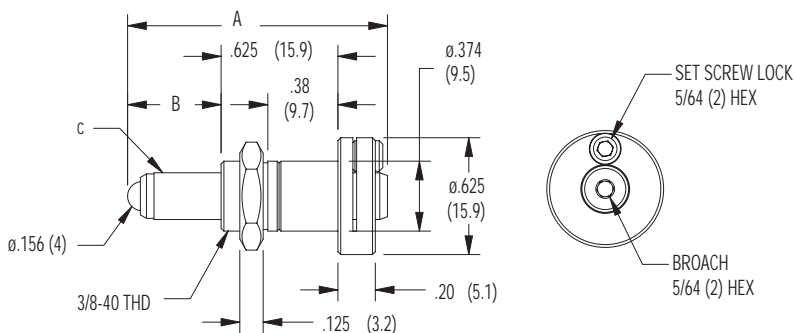
## Related Drawings

	Page
AJS100-0.5	890
AJS127-0.5	890
AJS127-02H	890
SM-06	894
HR-6	897
DM-6L	900
SM-13	894
HR-13	897
DM-13L	900
NSA12	1012
LTA Series	1010
CMA Series	1016
PM500-1A Series	1003
AD Series	1007

### Model AJS100-0.5K



### Model AJS100-0.5H



**CAD** See our website  
for CAD files