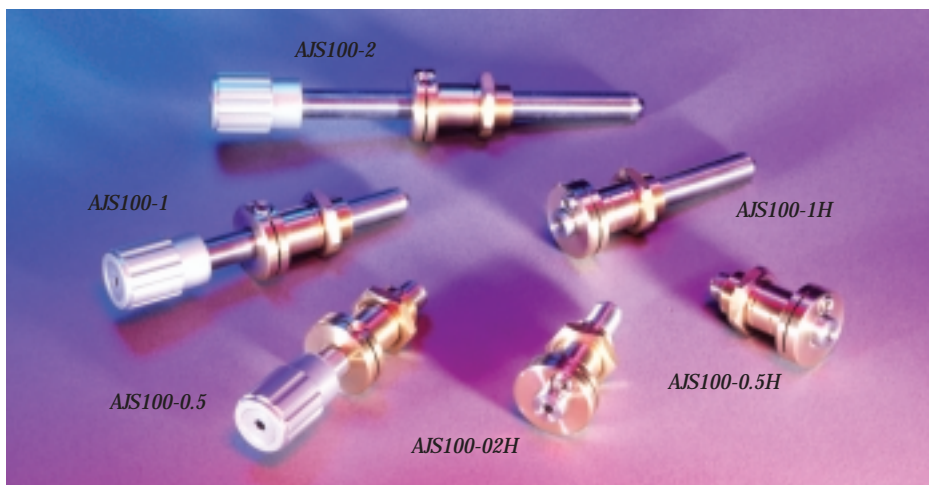


AJS Series

High-Precision Adjustment Screws

Key Features

- Sub-micron sensitivity
- New higher-resolution 100 TPI screws, plus 127 and 20 TPI
- New patented lock that won't influence the screw position—a Newport exclusive
- New knobs with an integral hex hole for increased sensitivity
- 0.25, 0.5, 1, and 2 in. (6.35, 12.7, 25.4, and 50.8 mm) travel
- Please call us regarding custom OEM designs



100 TPI Adjustment Screws

AJS Series Adjustment Screws have precision rolled threads for exceptionally smooth adjustment and higher sensitivity than standard micrometers. They are ideal for use with Newport optical mounts, stages, and most micrometer-compatible components. With sub-micron sensitivity, they are a cost-effective alternative to micrometers where position readout is not required.

We've redesigned these adjustment screws adding a number of performance enhancing features. Our most popular screws have been upgraded to 100 TPI for even higher resolution. Engaging or disengaging our patented thread-pitch lock, now standard, won't influence the screw position. New knobs feature an integral hex hole for increased adjustment sensitivity.

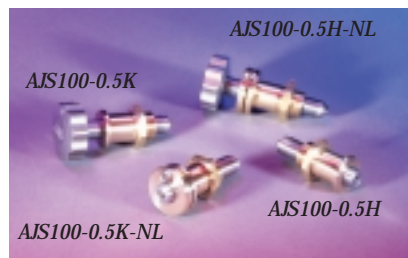
High-precision 127, 100, or 20 TPI, rolled stainless steel threads are mated with an aluminum-bronze collet and proprietary lubricant for stictionless movement. The standard 0.375 in. (9.5 mm) diameter collet is threaded with a nut for mounting to optical mounts and stages. Our miniature series adjustment screws are ideal for OEM and custom mount applications. 20 TPI coarse adjustment screws are useful for quick travel adjustment where high resolution is not required.

Our patented thread-pitch lock secures the adjustment screw from turning by simply tightening a set screw. Versions with knobs have the lock screw on the side, while hex versions have the lock screw conveniently located on the end next to the drive screw. A single wrench is used for both adjustment and locking. Non-locking, 0.5 in. (12.7 mm) travel versions are also available for use in optical mounts.

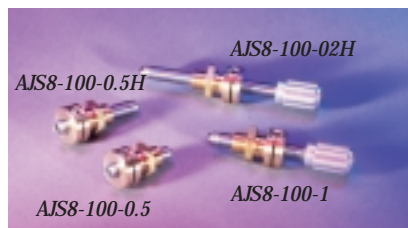
We offer these screws in **0.25, 0.5, 1, and 2 in. (6.35, 12.7, 25.4, and 50.8 mm) travel**, with a knob or with hex adjustment. KD.37 and KD.75 stainless steel knobs are available as an accessory for use with the hex versions.



127 TPI Adjustment Screws



100 TPI Adjustment Screws for Optical Mounts



100 TPI Miniature Adjustment Screws

Ordering Information

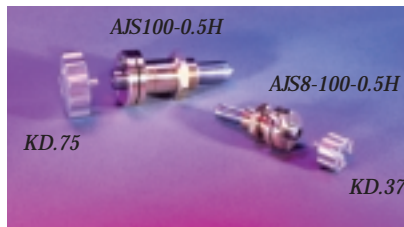
Model	Thread	Drive	Lock	Travel [in. (mm)]	Sensitivity* (µm)	Load Capacity [lb (N)]
127 TPI Adjustment Screws						
AJS127-02H	1/4-127 (127 TPI)	Hex	End Lock	0.25 (6.35)	0.6	20 (90)
AJS127-0.5H	1/4-127 (127 TPI)	Hex	End Lock	0.5 (12.7)	0.6	20 (90)
AJS127-0.5	1/4-127 (127 TPI)	Knob	Side Lock	0.5 (12.7)	0.6	20 (90)
100 TPI Adjustment Screws						
AJS100-02H	1/4-100 (100 TPI)	Hex	End Lock	0.25 (6.35)	0.75	20 (90)
AJS100-0.5H-NL	1/4-100 (100 TPI)	Hex	No Lock	0.5 (12.7)	0.75	20 (90)
AJS100-0.5H	1/4-100 (100 TPI)	Hex	End Lock	0.5 (12.7)	0.75	20 (90)
AJS100-0.5K-NL	1/4-100 (100 TPI)	KD.75 Knob	No Lock	0.5 (12.7)	0.75	20 (90)
AJS100-0.5K	1/4-100 (100 TPI)	KD.75 Knob	Side Lock	0.5 (12.7)	0.75	20 (90)
AJS100-0.5	1/4-100 (100 TPI)	Knob	Side Lock	0.5 (12.7)	0.75	20 (90)
AJS100-1H	1/4-100 (100 TPI)	Hex	End Lock	1.0 (25.4)	0.75	20 (90)
AJS100-1	1/4-100 (100 TPI)	Knob	Side Lock	1.0 (25.4)	0.75	20 (90)
AJS100-2	1/4-100 (100 TPI)	Knob	Side Lock	2.0 (50.8)	0.75	20 (90)
Miniature 100 TPI Adjustment Screws						
AJS8-100-02H	8-100 (100 TPI)	Hex	Side Lock	0.25 (6.35)	0.75	10 (45)
AJS8-100-0.5H	8-100 (100 TPI)	Hex	Side Lock	0.5 (12.7)	0.75	10 (45)
AJS8-100-0.5	8-100 (100 TPI)	Knob	Side Lock	0.5 (12.7)	0.75	10 (45)
AJS8-100-1	8-100 (100 TPI)	Knob	Side Lock	1.0 (25.4)	0.75	10 (45)
20 TPI Adjustment Screws						
AJS20-0.5	1/4-20 (20 TPI)	Knob	Side Lock	0.5 (12.7)	4	20 (90)
AJS20-1	1/4-20 (20 TPI)	Knob	Side Lock	1.0 (25.4)	4	20 (90)
AJS20-2	1/4-20 (20 TPI)	Knob	Side Lock	2.0 (50.8)	4	20 (90)
Accessories						
KD.37	Small Knob					
KD.75	Large Knob					

* Sensitivity based on a 1° rotation of the adjustment screw

U.S. Patent 6,016,230

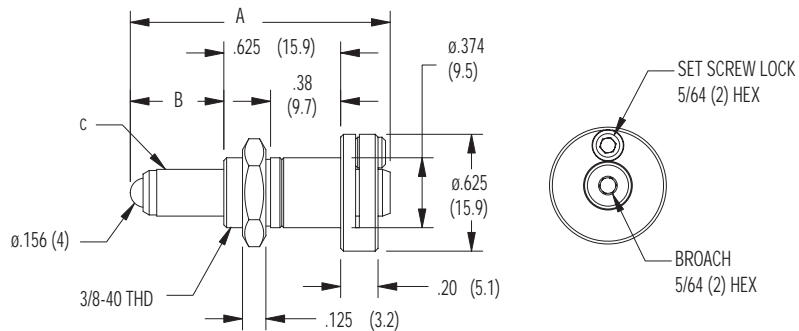


20 TPI Adjustment Screws

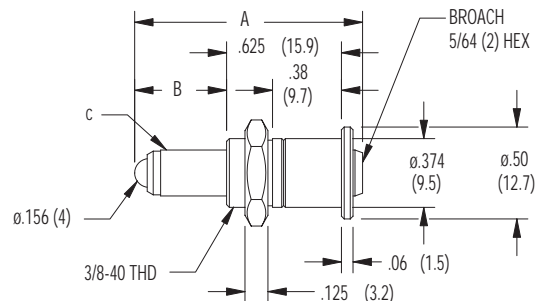


Knobs can be added to hex adjustment screws

Model AJS100-02H, -0.5H, -1H; AJS127-0.5H

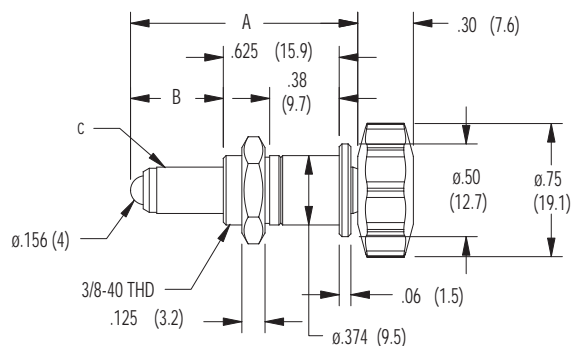


Model AJS100-0.5H-NL

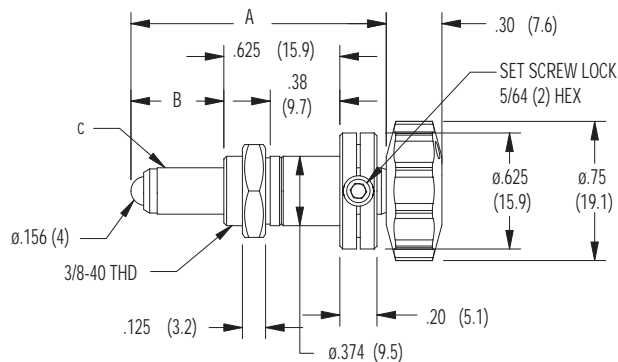


MANUAL LINEAR
TRANSLATION STAGES

Model AJS100-0.5K-NL

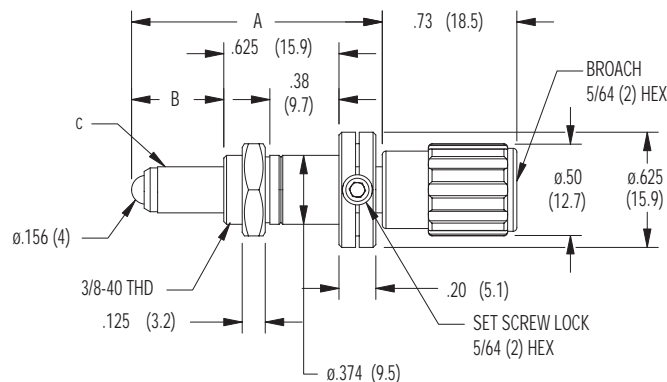


Model AJS100-0.5K

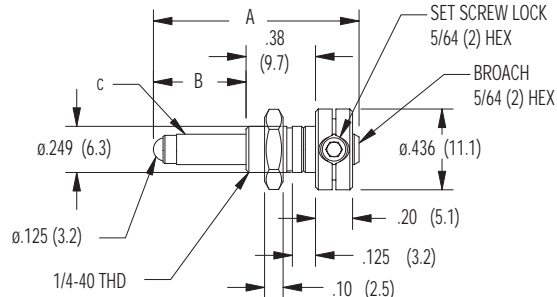


MANUAL ROTATION
STAGES

Model AJS100-0.5, -1, -2; AJS127-0.5; AJS20-0.5, -1, -2



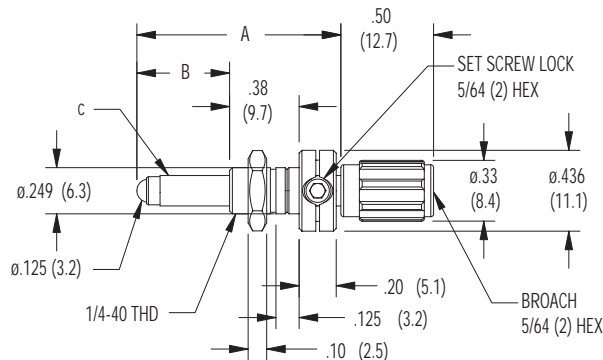
Model AJS8-100-02H, -0.5H



MANUAL ACTUATORS

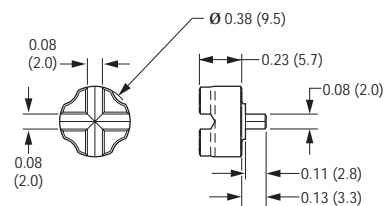
MOTORIZED LINEAR
TRANSLATION STAGES

Model AJS8-100-0.5, -1

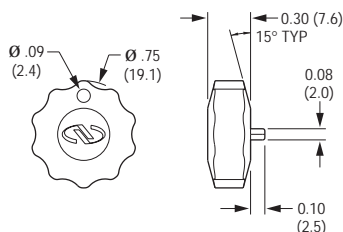


MOTORIZED ROTATION
STAGES

Model KD.37



Model KD.75



MOTORIZED ACTUATORS

CONTROLLERS &
AMPLIFIERS

Model	Dimension [in. (mm)]		Thread
	A	B	
AJS127-02H	1.23 (31.2)	0.25 (6.4)	1/4-127 (127 TPI)
AJS127-0.5H	1.43 (36.3)	0.50 (12.7)	1/4-127 (127 TPI)
AJS127-0.5	1.41 (35.8)	0.50 (12.7)	1/4-127 (127 TPI)
AJS100-02H	1.23 (31.2)	0.25 (6.4)	1/4-100 (100 TPI)
AJS100-0.5H-NL	1.29 (32.8)	0.5 (12.7)	1/4-100 (100 TPI)
AJS100-0.5H	1.43 (36.3)	0.50 (12.7)	1/4-100 (100 TPI)
AJS100-0.5K-NL	1.27 (32.3)	0.50 (12.7)	1/4-100 (100 TPI)
AJS100-0.5K	1.41 (35.8)	0.50 (12.7)	1/4-100 (100 TPI)
AJS100-0.5	1.41 (35.8)	0.50 (12.7)	1/4-100 (100 TPI)
AJS100-1H	2.10 (53.3)	1.00 (25.4)	1/4-100 (100 TPI)
AJS100-1	2.10 (53.3)	1.00 (25.4)	1/4-100 (100 TPI)
AJS100-2	2.97 (75.4)	2.00 (50.8)	1/4-100 (100 TPI)
AJS8-100-02H	0.88 (22.4)	0.25 (6.4)	8-100 (100 TPI)
AJS8-100-0.5H	1.16 (29.5)	0.50 (12.7)	8-100 (100 TPI)
AJS8-100-0.5	1.16 (29.5)	0.50 (12.7)	8-100 (100 TPI)
AJS8-100-1	1.85 (47.0)	1.00 (25.4)	8-100 (100 TPI)
AJS20-0.5	1.41 (35.8)	0.50 (12.7)	1/4-20 (20 TPI)
AJS20-1	2.10 (53.3)	1.00 (25.4)	1/4-20 (20 TPI)
AJS20-2	2.97 (75.4)	2.00 (50.8)	1/4-20 (20 TPI)

CAD See our website for CAD files

TECHNICAL REFERENCE