Mounting Rods

Technical Considerations

- Rigid damped support for optical components and lasers
 - Hollow mounting rod design
 - · Industry standard 38.1 mm (1.5 inch) diameter

Ealing's High Stability Mounting Rods Precision ground over their full length,

The behavior of damped and undamped hollow rods is illustrated in the performance charts below,

demonstrating their superior performance characteristics when compared to similar solid mounting rod systems. The Damped Mounting Rod is designed for use where rapid attenuation of vibration is vital, and is especially suited to critical applications such as interferometry and holography.

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are 38.1 mm (1 1/2 inch) diameter thick-walled steel tubes, offering exceptional rigidity and strength. they exhibit high surface quality and roundness with a hard, corrosionresistant finish.

Specifications

Material: Thick walled steel tubes, precision ground

Rack System: Optional nylon toothed rack **Damping:** Proprietary internal damping provides excellent de-coupling from external vibrations



Solid Rod High Stability Hollow Rod High Stability Damped Rod

10

20

40

Time Response to a Common Force Input (msec)

50

80

90

60

Mounting Rods

- Smooth height adjustment using rack and pinion drive
- Locks down firmly to any of our LaserTop™ tables
- · Wide range of carriers available
- Industry standard 38.1 mm (1.5 inch) diameter
- · Ideal mount for He-Ne Lasers



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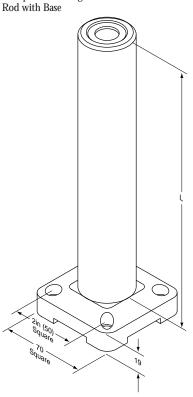
Mirrors, Beamsplitters & Windows

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53-1244Damped Mounting



High Stability Mounting Rods are available in two lengths – 203 mm and 355 mm (8 and 14 inches) – the longer rods are also available with a built-in damping system to minimize the effects of vibration and acoustic interference.

High Stability Mounting Rods may be obtained with a rack-drive system which allows the corresponding mounting blocks with pinions to be positioned and locked anywhere along their length. The nylon rack is securely anchored within a channel machined along the length of the rod and, combined with a brass pinion in the carrier body, provides a

high-resolution positioning system with smooth, 'step-free' operation.

Undamped Rods are supplied with an M6 or ½-20 stud and locknut for direct attachment to an optical table or micropositioner. Damped Rods feature a wide cast aluminum base, giving the column a larger footprint for attachment to any 25 mm or 1 inch spaced hole pattern.

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Mounting Rods

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Catalog Number	Description	Base Thread	L	Rack	Base	Damping	Price US
53-1228	High Stability Mounting Rod, Short Metric	M6	203 mm				\$72.00
61-1228	High Stability Mounting Rod, Short Inch	1/4-20	8 inch				\$72.00
53-1236	High Stability Mounting Rod, Metric	M6	355 mm				\$95.00
61-1236	High Stability Mounting Rod, Inch	1/4-20	14 inch				\$95.00
53-1251	High Stability Mounting Rod with Rack, Metric	M6	355 mm	Yes			\$152.00
61-1251	High Stability Mounting Rod with Rack, Inch	1/4-20	14 inch	Yes			\$152.00
53-1244	High Stability Damped Mounting Rod with Base, Universal		355 mm		Yes	Yes	\$152.00
53-1269	High Stability Damped Mounting Rod with Base and Rack, Un	iversal	355 mm	Yes	Yes	Yes	\$236.00

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Rod Carriers

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 Standard M6 on 25 mm hole patterns (or ¹/₄-20 on 1 inch)

 Smooth vertical adjustment of components

- · Lockable in any position
- Double bored to produce a true kinematic mount



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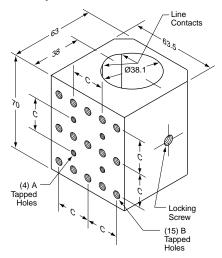
Laser Measurement

Diode Laser Modules The Economy Rod Carrier is the simplest means of mounting positioners or optical component mounts on a High Stability Rod. The carrier features a metric or inch hole pattern on one vertical face only, and clamping is provided by the plastic-tipped locking screw. The Economy Carrier is ideal for positioning components such as lasers and mirrors, which may remain in fixed positions for relatively long periods of time.

The Pinion Driven Rod Carrier is designed for use with High Stability Mounting Rods which are supplied with racks. They may also be used on plain columns and locked in position using the locking screw provided. The brass driving pinion permits fine height adjustment over the full length of the rod using the large control knob. The position of the control knob may be locked with the spindle clamping screw, to prevent accidental movement. Locking against the rod itself is also available using the plastic-tipped locking screw. The vertical mounting surface of the carrier is available with patterns of metric or inch holes, and each horizontal surface will accept a Rod Mounting Platform or Rotatable Angle Bracket.

53-1509/61-1509

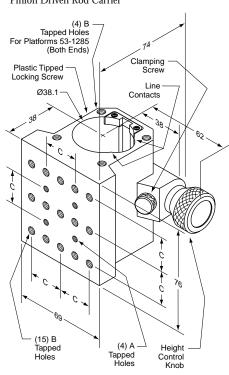
Economy Rod Carrier



All Rod Carriers will accept the full range of Ealing positioners as well as the component mounts shown elsewhere in this catalog. The Pinion Driven Rod Carrier is particularly valuable as an adjustable mounting surface for the 53-1483 Laser Mount.

53-1327/61-1327

Pinion Driven Rod Carrier



Rod System Carriers

Catalog Number	Description	Α	В	С	Price US
53-1509	Economy Rod Carrier, Metric	М3	M6	25 mm	\$49.35
61-1509	Economy Rod Carrier, Inch	8-32	1/4-20	1 inch	\$49.35
53-1327	Pinion Driven Rod Carrier, Metric	М3	M6	25 mm	\$92.40
61-1327	Pinion Driven Rod Carrier, Inch	8-32	1/4-20	1 inch	\$92.40

Rod Mounting Platforms

- · Fixed or rotatable platforms
- Inch or Metric hole patterns
- · Can be locked in position
- · For use with Pinion Driven Rod Carrier or Economy Rod Carrier



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The Rod Mounting Platforms will attach to either end of the Pinion Driven Rod Carriers and can be used on rods with or without racks. They form a sturdy rightangle bracket with a useful array of holes for holding components, other component mounts or micro-positioning stages. Available with standard metric or inch hole patterns, they are fitted to carriers with the screws supplied.

The Rotatable Angle Brackets attach to the vertical face of any Rod Carrier. They may be fixed in the horizontal or vertical planes. Using alternative screw holes, they can provide 360 degree mounting in four continuous 90 degree movements. Other component mounts such as mirror mounts or micropositioners can be mounted on either inside or outside faces of the Bracket. Available with metric or inch hole patterns, they are fitted to rod carriers with the screws provided.

53-1285/61-1285 Rod Mounting Platform

(4) A Clearance Holes on 38 Square Pattern Tapped Holes (12) A Clearance Holes

53-1376/61-1376

Square Pattern

Rotatable Angle Bracket 1/4-20 (M6) Clearance Slot on C Radius (3) B Clearance (8) B Tapped Holes on C Square Pattern (4) B Tapped Tapped Holes on C

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Rod System Platforms

Catalog Number	Description	Α	В	С	D	Price US
53-1285	Rod Mounting Platform, Metric	M6	25 mm	50 mm		\$46.20
61-1285	Rod Mounting Platform, Inch	1/4-20	1 inch	2 inch		\$46.20
53-1376	Rotatable Angle Bracket, Metric	МЗ	M6	25 mm	50 mm	\$71.40
61-1376	Rotatable Angle Bracket, Inch	8-32	1/4-20	1 inch	2 inch	\$68.00

Lasers & Accessories

Beam Delivery

Laser Measurement

Diode Laser