

56 Sparta Avenue • Newton, New Jersey 07860 (973) 300-3000 Sales • (973) 300-3600 Fax www.thorlabs.com



### CV1526 - December 15, 2015

Item # CV1526 was discontinued on December 15, 2015. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

#### Ø1.5" POST CONSTRUCTION ACCESSORIES



#### Hide Overview

#### OVERVIEW

These post mounting adapters provide direct compatibility between virtually all of our Optomechanics and our Ø1.5" posts.

#### Compact Post Clamp

The C1510(/M) Compact Post Clamp allows optic mounts with 8-32 (M4) tapped mounting holes to be attached to a  $\emptyset$ 1.5" post. The angle of the optic mount can be adjusted easily using the knurled knob.

Ø1.5" Post Accessories
Construction Accessories
V-Mounts
Mounting Plates
Brackets / Platforms
Mirror Mounts



Click to Enlarge C15QR Quick-Release Handle on the C1510 Compact Post Clamp

#### Slip-On Post Clamps

Our slip-on post clamps can be used for mounting 1/4"-20 (M6) components to our Ø1.5" posts. When the SD1 counterbore adapter ring is being used, 8-32 (M4) components can also be mounted.

#### Cage Clamp Mounts

Our CH1530(/M), CH1560(/M), and CV1526(/M) Cage Clamp Mounts allow 30 mm or 60 mm cage assemblies to be securely attached in a horizontal or vertical direction to our Ø1.5" posts using a quick-connect mechanism.

#### Post Mounting Adapters

Our post mounting adapters function as mounting platforms for Ø1.5" posts. They offer an array of 1/4"-20 (M6) and 8-32 (M4) tapped hole and counterbore combinations.

#### Quick-Release Handle

A quick-release handle is also available that allows for a simple and reliable way of securing these clamps to a post. It is easily installed by replacing the 1/4"-

#### Thorlabs.com - Ø1.5" Post Construction Accessories

20 or M6 locking screw in the post clamp. The 2.03" (51.4 mm) long handle contains a 1/4"-20 (M6) threaded stud that engages the part by simply rotating the handle. It is compatible with all of the items below except for the C1498(/M) Slip-on Clamp and the post mounting adapters.

#### Adjustable Height Collar

The PSHA Adjustable Height Collar allows for fine height adjustment of post-mounted components. It is compatible with our Ø1.5" posts and offers up to 0.42" of vertical adjustment.

#### Hide Compact Post Clamp

#### **Compact Post Clamp**



- Attach Optics Mounts with 8-32 (M4) Taps to Ø1.5" P-Series Posts
  - Knurled Knob for Coarse Angle Adjustment
- Four Holes on the Knob for Extra Tightening (Click on the Image to the Right for Details)
- Includes Quick-Release Handle for Easy Mounting to Ø1.5" Posts



Click for Details LMR1 Lens Mount Mounted to Ø1.5" Post Using C1510 Compact Clamp

Click to Enlarge

The C1510(/M) Compact Post Clamp allows optic mounts with 8-32 (M4) tapped holes to be attached to a Ø1.5"

post. Each compact post clamp includes a C15QR (/M) Quick-Release Handle for mounting to a Ø1.5" post; replacement quick-release handles can be purchased separately below. For low-profile applications, the handle can be removed and replaced with a 1/4"-20 (M6) cap screw at least 1/2" (12 mm) long.

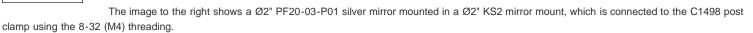
Clicking on the image to the right displays a sequence of three images illustrating the mounting procedure using an LMR1 lens mount. The angle of the optic mount can be set in place (see image 1) while the knurled knob is used to thread the device onto the C1510 (see image 2). For final tightening, a 5/64 (2 mm) hex key or ball driver can be inserted into the four holes provided on the knob (see image 3). This enables the user to exert additional torque in the final tightening stage.

Part Number	Description	Price	Availability
C1510/M	Compact Ø1.5" Post Mounting Clamp, Included Quick-Release Handle, Metric	\$68.00	Today
C1510	Compact Ø1.5" Post Mounting Clamp, Included Quick-Release Handle	\$68.00	Today

#### Hide Ø1.5" Slip-On Post Clamps

## Ø1.5" Slip-On Post Clamps

- Mount 1/4"-20 (M6) or 8-32 (M4) Components Onto our Ø1.5" P-Series Posts
- Lock to Post with Non-Marring Brass Locking Screw
- Two 8-32 (M4) Tapped Holes are Provided for Optic Mounts with #8 (M4) Counterbored Holes
- SD1 Adapter used with 1/4" (M6) Counterbored Hole for Optic Mounts with 8-32 (M4) Threading



Part Number	Description	Price	Availability
C1498/M	Ø1.5" Slip-On Post Clamps, Metric	\$30.50	Today
SD1	1/4" (M6) Counterbore Adapter Ring for 8-32 (M4) Screws, 10 per Pack	\$7.56	Today
C1498	Ø1.5" Slip-On Post Clamps	\$30.50	Today

#### Hide Ø1.5" Horizontal Post-Mounting Cage System Clamps

Ø1 5" Horizont	al Post-Mounting Cage System Clamps	
	<ul> <li>Securely Mount 30 mm or 60 mm Cage Systems to our Ø1.5" Posts</li> <li>Quick-Connect Mechanism for Fast Drop-In/Drop-Out of Cage Assemblies using Ø6 mm Cage Rods</li> </ul>	
CH1530	<ul> <li>Cage Clamping Mechanism Activated by 3/16" (5 mm) Hex Cap Screw</li> <li>Includes Quick Balances Handle for Easy Mounting to Q1 5" Doets</li> </ul>	

Click to Enlarge

Includes Quick-Release Handle for Easy Mounting to Ø1.5" Posts

#### Thorlabs.com - Ø1.5" Post Construction Accessories

The CH1530(/M) and CH1560(/M) Cage Clamps allow 30 mm or 60 mm cage systems, respectively, to be mounted horizontally to our Ø1.5" Posts. The quick-connect mechanism allows for drop-in/drop-out mounting of a cage

30 mm Cage System Mounted on a Ø1.5" Post Using a CH1530 Clamp

segment; to secure the cage segment, tighten the hex cap screw on the cage clamping mechanism using a 9/64" (3 mm) hex key or balldriver. Each cage clamp includes a C15QR(/M) Quick-Release Handle for mounting to a Ø1.5" post; additional quick-release handles can be purchased separately below. For low-profile applications, the handle can be removed and replaced with a 1/4"-20 (M6) cap screw at least 1/2" (12 mm) long.

The application to the right shows the CH1530 supporting a cage system composed of 4 ER6 cage rods, an SM1Z Z-Axis Translation Mount, and a CP02T cage plate. This system can be used as a telescope to expand or contract the beam diameter using lenses of appropriate focal length placed in the Z-axis mount and cage plate.

Part Number	Description	Price	Availability
CH1530/M	30 mm Cage Clamp for Ø1.5" Posts, Included Quick-Release Handle, Metric	\$74.50	Today
CH1560/M	60 mm Cage Clamp for Ø1.5" Posts, Included Quick-Release Handle, Metric	\$83.00	Today
CH1530	30 mm Cage Clamp for Ø1.5" Posts, Included Quick-Release Handle	\$74.50	Today
CH1560	60 mm Cage Clamp for Ø1.5" Posts, Included Quick-Release Handle	\$83.00	Today

#### Hide Ø1.5" Vertical Post-Mounting Cage System Clamps

#### Ø1.5" Vertical Post-Mounting Cage System Clamps



- Mount 30 mm Cage Systems Vertically to Our Ø1.5" Posts
- Quick-Connect Mechanism for Fast Drop-In/Drop-Out of Cage Assemblies
- 15 lb (6.8 kg) Load Capacity

The application to the right shows the CV1526 mount supporting a 30 mm cage system in a vertical orientation. The assembly is composed of four ER4 cage rods, an SM1Z Z-Axis Translation Mount, and a

CP02T cage plate. This configuration can be used in a variety of applications including the inspection station shown to the right, which consists of a CMOS Camera, a Camera Lens, and a Microscope Objective.

Custom CV1526(/M) Clamp Mounts can be ordered for 16 and 60 mm cage system compatibility. Please contact Tech Support for more information.

61 0
9 

Click to Enlarge 30 mm Cage System Vertically Mounted on a Ø1.5" Post Using a CV1526 Clamp

Part Number	Description	Price	Availability
CV1526/M	Customer Inspired!30 mm Vertical Cage Clamp for Ø1.5" Posts, Metric	\$179.00	Today
CV1526	Customer Inspired!30 mm Vertical Cage Clamp for Ø1.5" Posts	\$179.00	Lead Time

#### Hide Ø1.5" Post Mounting Adapters

#### Ø1.5" Post Mounting Adapters

- Can be used as a Mounting Platform to Connect a Wide Range of our Optic Mounts and Translation Stages to our Ø1.5" P-Series Posts
- Offers an Array of 1/4"-20 (M6) and 8-32 (M4) Tapped Hole and Counterbore Combinations



The application to the right shows a Ø1" POLARIS-K1 ultra-stable mirror mount attached to an MA4 Post Mounting Click to Enlarge Adapter using 8-32 (M4) threading. The 1/4" clearance on the MA4 adapter is used to connect to the 1/4"-20 threading of the Ø1.5" post.

Part Number	Description	Price	Availability
MA1/M	Ø1.5" Post Mounting Adapter, M6 Tapped / M4 Clearance	\$16.80	Today
MA2/M	Ø1.5" Post Mounting Adapter, M6 Clearance / M4 Clearance	\$16.80	Today
MA3/M	Ø1.5" Post Mounting Adapter, M6 Tapped / M4 Tapped	\$16.80	Today
MA4/M	Ø1.5" Post Mounting Adapter, M6 Clearence / M4 Tapped	\$16.80	Today
MA1	Ø1.5" Post Mounting Adapter, 1/4"-20 Tapped / #8 Clearance	\$16.80	Today
MA2	Ø1.5" Post Mounting Adapter, 1/4" Clearance / #8 Clearance	\$16.80	Today
MA3	Ø1.5" Post Mounting Adapter, 1/4"-20 Tapped / 8-32 Tapped	\$16.80	Today

MA4

Ø1.5" Post Mounting Adapter, 1/4" Clearance / 8-32 Tapped

#### Hide Quick-Release Handle

#### Quick-Release Handle



- Quick-Release Handle for Fast and Repeated Positioning of Post Clamps
  - Compatible with Ø1" (Ø25.0 mm) or Ø1.5" Post Clamps that Incorporate a 1/4"-20 (M6) Clamping Screw
  - Provides More Control and Feel when Locking and Unlocking a Clamp
  - Handle can be Rotated Without Actuating the Locking Screw
  - 1/4"-20 (M6) Threads

The C15QR(/M) Quick-Release Handle provides a simple and reliable way of securing a flexure-based Ø1" (Ø25.0 mm) or Ø1.5" post clamp. In many cases a cap screw is used to lock a flexure-based clamp in place on a post, which requires a balldriver for adjustments. Depending on the mounted load, using a balldriver can be difficult, or even unsafe. This quick-release handle mitigates this problem by allowing the clamp to be hand-



Click for Details Left: Handle Being Attached to the Previously Sold C1501 Post Mounting Clamp Right: Pull Back to Rotate the Position of the Handle

tightened, ensuring better control over the amount of torque applied to tighten or loosen the clamp. This also decreases the amount of time needed for basic setup and alignment by eliminating the need for additional balldrivers and allowing for a quick way to secure a clamp.

Easily installed by replacing the 1/4"-20 (M6) locking screw in a post clamp, the 2.03" (51.4 mm) long handle contains a 1/4"-20 (M6) threaded stud that engages a part by rotating the handle. Once the handle is tightened to secure a clamp to a post, the internal ratchet-type mechanism allows for the handle's rotational position to be adjusted without actuating the mounting stud. Simply pull the handle outwards to disengage it from the mounting stud, as shown in the image to the right, then rotate it to a more convenient position. This feature ensures that the handle will always be accessible to the user.

Part Number	Description	Price	Availability
C15QR/M	Quick Release Handle for Ø25.0 mm or Ø1.5" Post Clamps, M6 Threads	\$9.50	3-5 Days
C15QR	Quick-Release Handle for Ø1" or Ø1.5" Post Clamps, 1/4"-20 Threads	\$9.50	Today

#### Hide Ø1.5" Adjustable Height Collar

# 

0.025" (0.64 mm) Travel per Revolution

0.32" (8.2 mm) Vertical Adjustment Range

The PSHA Adjustable Height Ø1.5" Post Collar offers a convenient height adjustment for post mounted hardware. An easy-to-access actuator ring allows fine height adjustment at 0.025" (0.64 mm) per revolution. This collar also allows components to be freely rotated without changing height.



Click to Enlarge PSHA on a Ø1.5" Post Below the C1515 Mounting Post Bracket

Part Number	Description	Price	Availability
PSHA	Adjustable Height Collar	\$62.70	Today

Visit the Ø1.5" Post Construction Accessories page for pricing and availability information: https://www.thorlabs.com/newgrouppage9.cfm?objectgroup\_id=1308