

## PH50ET/M - NOV 19, 2018

Item # PH50ET/H was discontinued on NOV 19, 2018. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

### Ø1/2" SPECIALTY POST HOLDERS

- ▶ Two-Line Contact with Mounting Post for Stability
- ▶ Close-Approach Post Holders Allow Two Ø1/2" Posts to Touch
- ▶ Translating Post Holders Provide Non-Rotating Height Adjustment



## OVERVIEW

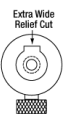
### Features

- Close Approach Post Holders Allow Two Ø1/2" Posts to be Mounted in Contact with Each Other
- Translating Post Holders Provide 0.025" (0.635 mm) Translation per Actuator Ring Rotation
- Mounting Options to Secure Post Holders to an Optical Table or Breadboard
- Custom Options Available; Contact Tech Support for Details

Thorlabs' selection of specialty post holders provide mounting solutions for unique circumstances. For applications where space is limited, consider our Close-Approach Post Holders that have a minimal profile, which enables two posts to be in contact with each other. Alternatively, if your application could benefit from post holders that offer fine adjustment, our Translating Post Holders provide up to 0.65" (16.51 mm) of height adjustment with 0.025" (0.635 mm) of adjustment per revolution of the actuator ring.

These Ø1/2" post holders feature an extra wide square relief cut machined vertically along the length of the part, as shown in the drawing to the right. This channel provides a highly-stable two-line contact between the post and post holder. Other post holder designs that do not have a relief cut provide less holding power, which leads to a downward drift in the post's position with time.

Table clamps and a swivel base allow the close-approach and translating post holders to be mounted to an optical table or breadboard, respectively. We also offer replacement spring-loaded, hex locking thumbscrews to secure the post in the holder.



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Close-Approach Post Holders

- ▶ Mount Two Ø1/2" Posts in Contact with Each Other
- ▶ Cutaway Design with Two Lines of Contact
- ▶ Post can Pass Through Base, Enabling Minimum Beam Height
- ▶ Secure to the Optical Table with a CL8 Clamp



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Close-Approach Post Holders can Mount Ø1/2" Posts in Contact, while Posts Mounted in Standard Post Holders are Separated by a Minimum of 0.48" (12.2 mm)

Close-Approach Post Holders are designed for use on congested optical tables or when multiple components need to be placed in close proximity to each other. These post holders feature a cutaway design that provides two lines of contact for stable mounting, enables the same height adjustment of a standard post holder, and allows two Ø1/2" posts to be positioned very closely, or even in direct contact with each other, as shown in the image to right. They can be secured to the table using CL8 table clamps (sold below) and are compatible with all Ø12 mm, Ø12.7 mm, and Ø1/2" optical posts. Each imperial (metric) post holder comes with a TS25H 3/16" (TS6H/M 5 mm) hex spring-loaded thumbscrew.

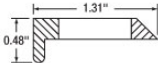
In addition to the cutaway feature, the wall thickness on our close-approach post holders is 0.063" (1.6 mm) less than that found on our traditional post holders. Consequently, these post holders also allow closer positioning of three or more post holders than our standard post holders.

Part Number	Description	Price	Availability
PH50ET/M	Ø12.7 mm Close-Approach Post Holder, 50 mm Tall	\$25.76	Lead Time
PH2ET	Ø1/2" Close-Approach Post Holder, 2" Tall	\$25.76	Today

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Table Clamp

The CL8 table clamp allows the close-approach posts (sold above) to be secured to a optical table or breadboard. It features a V-shaped tip that provides two-point contact with the perimeter of the post and a rounded edge that increases the contact area along the optical table or breadboard.



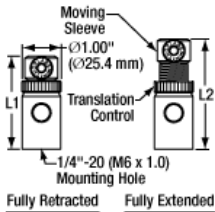
Click to Enlarge  
CL8 Cross-Sectional View

Part Number	Description	Price	Availability
CL8	Ø1" and Ø1.5" Pedestal Post Table Clamp	\$8.06	Today

Ø1/2" Translating Post Holders

- ▶ Two Sizes and Adjustment Ranges Available
- ▶ Non-Rotating Height Control: 0.65" (16.5 mm) for PH3T, 0.45" (11.3 mm) for PH2T
- ▶ 0.025" (0.635 mm) of Translation per Revolution of Adjustment Ring

Our Translating Post Holders provide lockable, non-rotating height adjustment with convenient one-handed operation. An aluminum thumbscrew with a spring-loaded plunger provides holding force while the wide, square relief cut within the Ø1/2" post bore offers stable two-line contact. A knurled adjustment ring actuates the non-rotating height adjustment, which offers 0.025" (0.635 mm) of translational adjustment per revolution. Once the desired position is achieved, the entire mechanism can be locked using the lower thumbscrew and the locking hex socket on the upper thumbscrew. These post holders can be used with the Swivel Base Adapter featured below.



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Part Number	Description	Price	Availability
PH2T/M	Ø12.7 mm Translating Post Holder, Min Height L1=60.5 mm, Max Height L2=71.9 mm	\$57.89	Today
PH3T/M	Ø12.7 mm Translating Post Holder, Min Height L1=75.2 mm, Max Height L2=91.6 mm	\$60.18	Today
PH2T	Ø1/2" Translating Post Holder, Min Height L1=2.38", Max Height L2=2.83"	\$57.89	Today
PH3T	Ø1/2" Translating Post Holder, Min Height L1=2.96", Max Height L2=3.61"	\$60.18	Today

Swivel Base Adapter

- ▶ Convert Your Existing Post Holders into UPH-Style Mounts
- ▶ 360° Swiveling Base Fastens to Existing PH-Series Post Holders via a 1/4"-20 (M6) Cap Screw
- ▶ Magnets in Base Provide Holding Force Prior to Fastening to an Optical Table
- ▶ Also Available in Packs of Five

Our 360° swivel base adapter is compatible with the translating post holders (sold above) and minimizes the amount of time it takes to assemble an optical system. In addition, the swivel design is ideal for applications that require a large number of components to be packed into a small area. When our translating posts (featured directly above) are used with the UPHA adapter, the combination is nearly that of our very popular, non-translating UPH Series of Post Holders, which have an attached swivel base; however, unlike with the UPH series post holders, the adapter would prevent the translating post from touching the table. For ease of ordering, these base adapters are also available in packs of five.

Part Number	Description	Price	Availability
UPHA	Swivel Base Adapter	\$20.71	Today
UPHA-P5	Swivel Base Adapter, 5 Pack	\$101.49	Today

Spring-Loaded 1/4"-20 and M6 x 1.0 Thumbscrews for Post Holders

These hex-locking, anodized aluminum thumbscrews have spring-loaded, completely retractable Delrin® tips that provide sufficient force on a post to hold it in place as final positional adjustments are being made. They can then be locked into place using a 3/16" (for the TS25H) or 5 mm (for the TS6H/M) balldriver to prevent any further movement of the post. The hex size is also engraved on the face of the thumbscrew, thereby enabling easy identification in the lab.

The TS25H has 1/4"-20 threads while the TS6H/M has M6 x 1.0 threads for compatibility with our imperial and metric Ø1/2" post holders, respectively. The recommended maximum torque is 28 in·lbs (3.2 N·m). Please note that we do not recommend using an L wrench to tighten the thumbscrew, as this may break off the screw head.

If a thumbscrew without a spring-loaded tip is preferred, we recommend our vacuum-compatible thumbscrews. Alternatively, the tips can be removed from these thumbscrews by unthreading the setscrew in the front of the thumbscrew with a 1/16" (1.5 mm) balldriver. The spring and tip can then be removed from the thumbscrew, in the order shown in the image to the right. However, the resulting contact face of the thumbscrew will have a center hole, unlike the contact face of our vacuum-compatible thumbscrews.

For ease of ordering, these thumbscrews are available individually or in packages of five.

Specification	
Maximum Torque <sup>a</sup>	28 in·lbs (3.2 N·m)

- Please note that we do not recommend using an L wrench to tighten the thumbscrew, as this may break off the screw head.



Part Number	Description	Price	Availability
TS6H/M	Spring-Loaded 5 mm Hex-Locking Thumbscrew, M6 x 1.0 Thread	\$2.50	Today
TS6H/M-P5	Spring-Loaded 5 mm Hex-Locking Thumbscrew, M6 x 1.0 Thread, 5 Pack	\$12.50	Today
TS25H	Spring-Loaded 3/16" Hex-Locking Thumbscrew, 1/4"-20 Thread	\$2.50	Today
TS25H-P5	Spring-Loaded 3/16" Hex-Locking Thumbscrew, 1/4"-20 Thread, 5 Pack	\$12.50	Today