

**VA100C/M - January 31, 2022**

Item # VA100C/M was discontinued on January 31, 2022. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

**30 mm CAGE SYSTEM ADJUSTABLE MECHANICAL SLITS**

- ▶ **Through Holes for 30 mm Cage System**
- ▶ **Fine Micrometer Adjustment of Slit Width**
- ▶ **Central SM05-Threaded Bore**

**Application Idea**

VA100CP Variable Slit with Attached SM05 Lens Tube in a 30 mm Cage System



Back View  
Slit Open



Front View  
Slit Nearly Closed



Back View  
Slit Closed



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**OVERVIEW**

**Features**

- 30 mm Cage System Compatible in Vertical or Horizontal Orientation
- 1-to-1 Micrometer-to-Slit Width Adjustment
- Slit Centered in SM05-Threaded (0.535"-40) Through Hole
- Slit Width: 0 to 0.24" (0 to 6 mm)
- Post Mountable in Vertical Orientation

Item #	VA100CP	VA100C/M
<b>Micrometer Graduation</b>	0.001" per Division	10 µm per Division
<b>Slit Width Adjustment per Rev</b>	0.025"	0.5 mm
<b>Slit Centering Tolerance</b>	±0.003"	±0.08 mm
<b>Mounting Hole Tap</b>	8-32	M4

The VA100CP and VA100C/M Mechanical Slits for 30 mm Cage Systems provide precise micrometer adjustment of the width of a slit formed by two A2 tool steel blades. This slit is mounted in a housing with four through holes for 30 mm cage system rods; each rod can be locked in place with a setscrew using a hex key or balldriver (5/64" hex for Item # VA100CP and 1.3 mm hex for Item # VA100C/M). When mounted within a cage system, these through holes allow the slit to be oriented either vertically or horizontally.

The slit itself is centered about an SM05-threaded through hole, and its width can be adjusted with a built-in micrometer. The unique design of this mechanism provides a 1-to-1 correlation between the adjustment of the precision micrometer drive and the subsequent change in slit width to within 0.001" (20 µm for the metric micrometer). The actual slit width ranges from fully closed to 0.24" (6.0 mm) wide with 0.025" (0.5 mm for the metric micrometer) of



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 The VA100CP Variable Slit and the CFH2-V Variable Shutter in a 30 mm Cage System

adjustment per revolution of the micrometer. In the fully closed position, the two blades are touching. However, imperfections in the blades and the degree to which the blades are parallel can cause gaps as large as 0.001" (25  $\mu$ m) in width. The slit opening remains centered on the SM05-threaded (0.535"-40) aperture as the slit width is varied.

The slim profile of the mount makes it ideal for use with compact optical assemblies, and the black finish of the housing and the blades limits unwanted reflections. The bottom-located mounting hole is compatible with our standard  $\text{\O}1/2$ " posts, allowing the slit to be mounted on a post in a vertical orientation. The through hole is SM05 threaded for compatibility with a variety of Thorlabs' products, including our  $\text{\O}1/2$ " lens tubes. We also offer standard Adjustable Mechanical Slits that are not compatible with our cage systems.

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Part Number	Description	Price	Availability
VA100C/M	Customer Inspired!&nbsp;30 mm Cage System Adjustable Slit, M4 Tap, Metric Micrometer	\$309.79	Today
VA100CP	NEW! 30 mm Cage System Adjustable Slit, 8-32 Tap, Imperial Micrometer	\$309.79	Lead Time

