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VA100C - November 11, 2022

Item # VA100C was discontinued on November 11, 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
VA100C Variable Slit with Attached SM05
Lens Tube in a 30 mm Cage System



[Hide Overview](#)

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

The VA100C(/M) Mechanical Slit for 30 mm Cage Systems provides 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 setscrews using a 0.05" (1.3 mm) hex key or balldriver. 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 VA100C 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 µm) 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 Ø1/2" 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 Ø1/2" lens tubes. We also offer standard Adjustable Mechanical Slits that are not compatible with our cage systems.

[Hide Part Numbers](#)

Part Number	Description	Price	Availability
VA100C/M	Customer Inspired! 30 mm Cage System Adjustable Slit, M4 Tap, Metric Micrometer	\$295.04	7-10 Days
VA100C	Customer Inspired! 30 mm Cage System Adjustable Slit, 8-32 Tap, Imperial Micrometer	\$295.04	Today

Imperial Product List

Item #	Qty	Description
CFH2	1	30 mm Cage Plate with Removable Filter Holder for Ø1" Optics, 8-32 Tap
CFH2-V	1	Variable Attenuator Insert for use with CFH2R(/M) and Fiber Optic Filter Mounts
ER2-P4	1	Cage Assembly Rod, 2" Long, Ø6 mm, 4 Pack
TR3	1	Ø1/2" Optical Post, SS, 8-32 Setscrew, 1/4"-20 Tap, L = 3"
PH2	1	Ø1/2" Post Holder, Spring-Loaded Hex-Locking Thumbscrew, L = 2"
VA100CP	1	

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Metric Product List

Item #	Qty	Description
CFH2/M	1	30 mm Cage Plate with Removable Filter Holder for Ø1" Optics, M4 Tap
CFH2-V	1	Variable Attenuator Insert for use with CFH2R(/M) and Fiber Optic Filter Mounts
ER2-P4	1	Cage Assembly Rod, 2" Long, Ø6 mm, 4 Pack
TR75/M	1	Ø12.7 mm Optical Post, SS, M4 Setscrew, M6 Tap, L = 75 mm
PH50/M	1	Ø12.7 mm Post Holder, Spring-Loaded Hex-Locking Thumbscrew, L=50 mm
VA100CP/M	1	

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