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Ring-Actuated SM-Threaded Iris Diaphragms

- ▶ Compatible with SM05-, SM1-, or SM2-Threaded Components
- ▶ Graduated and Zero Aperture Options
- ▶ Design Eliminates Actuating Arm, Significantly Reducing Clearance Requirements



SM2D25D
SM2-Threaded
Ring-Actuated Iris



SM05D5D
SM05-Threaded
Ring-Actuated Iris



SM1D12C
SM1-Threaded
Graduated Ring-Actuated Iris



SM1D12D
SM1-Threaded
Ring-Actuated
Iris in a 30 mm
Cage System

Related Items

Irises and Apertures



Pinholes



Alignment Tools



Single-Blade Beam Shutters


[Overview](#)
[Drawings](#)
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Features

- Ring-Actuated Design is Ideal for Cage Systems
- Versions with a Laser Engraved Scale to Indicate Aperture Size
- Zero Aperture Option Blocks All Incoming Light in Closed Position
- Lockable via Setscrew on the Side of the Housing

Our ring-actuated irises are perfect for tight spaces where the lever on our [Standard Lever-Actuated Irises](#) or [Threaded Lever-Actuated Irises](#) doesn't easily fit. Ring-actuated irises are especially beneficial within our cage assemblies, preventing interference between a lever actuator and the surrounding cage rods. The ring actuator provides an intuitive, smooth feel; the aperture size can be locked via a setscrew, see the *Drawings* tab for details. All of the irises on this page contain black spring steel leaves. For dimensional comparison of the irises on this page, please see the *Drawings* tab.

Iris Selection Guide

[Post-Mounted Irises](#)
[Unmounted Irises](#)
[SM-Threaded Lever-Actuated Irises](#)

SM-Threaded Ring-Actuated Irises

[Cage System Irises](#)

Item #	SM05D5D	SM1D12D	SM2D25D	SM1D12C	SM1D12CZ
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Item #	SM05D5D	SM1D12D	SM2D25D	SM1D12C	SM1D12CZ
Thread Standard	SM05 (0.535"-40)	SM1 (1.035"-40)	SM2 (2.035"-40)	SM1 (1.035"-40)	SM1 (1.035"-40)
Aperture (Min)	Ø0.7 mm (Ø0.03")	Ø0.8 mm (Ø0.03")	Ø1 mm (Ø0.04")	Ø1 mm (Ø0.04")	Zero
Aperture (Max)	Ø5 mm (Ø0.20")	Ø12.0 mm (Ø0.47")	Ø25 mm (Ø0.98")	Ø12 mm (Ø0.47")	Ø12 mm (Ø0.47")







Ring-Actuated Iris Diaphragms



 [Zoom](#)

These ring-actuated irises are threaded with our SM05, SM1, or SM2 thread standard, for compatibility with Thorlabs' line of [lens tubes](#), [cage systems](#), and other threaded accessories. One side of the iris is externally threaded, while the other is internally threaded. This allows for easy insertion into existing systems using standard lens tube components.

Based on your currency / country selection, your order will ship from Newton, New Jersey

+1	Qty	Docs	Part Number - Universal	Price	Available / Ships	
	<input type="text"/>		SM05D5D Customer Inspired! Ring-Actuated SM05 Iris Diaphragm	\$79.75	✓	Today
	<input type="text"/>		SM1D12D Ring-Actuated SM1 Iris Diaphragm	\$65.75	✓	Today
	<input type="text"/>		SM2D25D Ring-Actuated SM2 Iris Diaphragm	\$82.75	✓	Today

Add To Cart

Graduated Ring-Actuated Iris Diaphragm



 [Zoom](#)

The SM1D12C graduated iris uses the same convenient ring-actuated design as the irises above, but offers an additional laser-engraved scale, which indicates the actual diameter of the iris in millimeters to within ± 0.5 mm. In applications where the iris cannot be easily viewed, such as the lens tube configuration shown at right, this engraved scale greatly simplifies the process of optimizing the iris diameter.



This graduated iris is SM1 (1.035"-40) threaded, making it compatible with our popular [Ø1" lens tubes](#), [30 mm cage plates](#), and related accessories.



[Click to Enlarge](#)

SM1D12C Shown Between 2 SM1 Lens Tubes

Based on your currency / country selection, your order will ship from Newton, New Jersey

+1	Qty	Docs	Part Number - Universal	Price	Available / Ships
	<input type="text"/>		SM1D12C Graduated Ring-Actuated SM1 Iris Diaphragm	\$101.00	✓ Today
<div>Add To Cart</div>					

Graduated Ring-Actuated Zero Aperture Iris Diaphragm



SM1D12CZ



 [Zoom](#)

The SM1D12CZ zero-aperture graduated iris provides the added benefit of being able to close completely. Our zero-aperture design achieves a completely closed aperture by utilizing two sets of steel leaves mounted in two adjacent planes. When the ring is in the closed position, the iris aperture is completely closed (zero aperture), unlike a standard iris, which has a non-zero diameter aperture when in the minimum position. Please note that as the aperture gets smaller, it also becomes slightly elliptical due to the design of the iris.

The SM1D12CZ uses the convenient graduated ring-actuated design as the iris above with a laser-engraved scale, which indicates the actual diameter of the iris in millimeters to within ± 0.5 mm. In applications where the iris cannot be easily viewed, this engraved scale greatly simplifies the process of optimizing the iris diameter.

This iris is SM1 (1.035"-40) threaded, making it compatible with our popular [Ø1" lens tubes](#), [30 mm cage plates](#), and related accessories.

Based on your currency / country selection, your order will ship from Newton, New Jersey

+1	Qty	Docs	Part Number - Universal	Price	Available / Ships
	<input type="text"/>		SM1D12CZ Graduated Ring-Actuated Zero Aperture Iris Diaphragm	\$115.00	✓ 3-5 Days
<div>Add To Cart</div>					

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