

Off-Axis Replicated Parabolic Mirrors

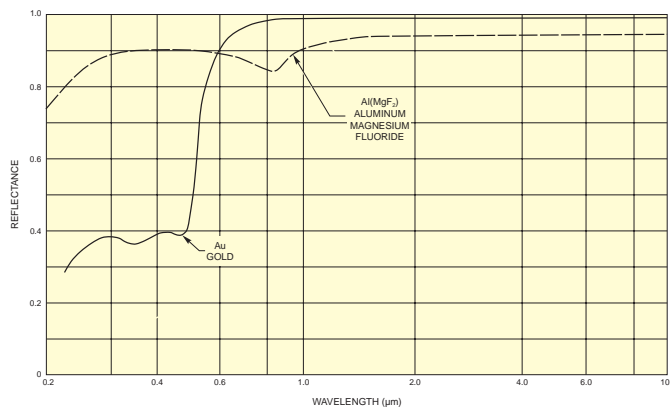


- Low scatter for UV applications
- Integral mount
- Achromatic focusing and collimation
- Light-weight
- UV-IR and NIR-IR coating options

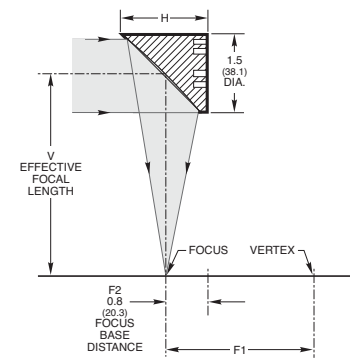
Our standard off-axis parabolic mirrors are circular segments from one side of a full paraboloid. The focal point is displaced from the mechanical axis, giving full access to the reflector focus area. There will be no shadowing when placing either a detector or source at the focus. The mirrors are achromatic and are offered in a wide range of working distances. Two coating options are available; protected Aluminum for UV and visible applications and bare Gold for infrared applications. The models listed are catalog versions of common OEM mirror designs.

Specifications

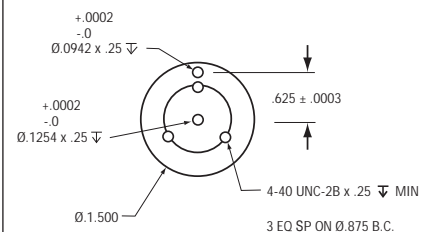
Material	Aluminum
Active Area	≥90% of diameter
Focus Base Distance	0.800 in.
Surface Quality	E/E (60/40) per MIL-F-48616
Surface Roughness	25 Å (typical)
Wavefront Distortion	≤2λ @ 633 nm (typical)
Coating Adhesion	MIL-F-48616
Humidity Resistance	MIL-F-48616
Operating Temperature Range	-80°F to 160°F
Reflectance	≥85% average



Typical reflectance curves of metallic reflective coatings.



Dimensional Diagram



Mounting Configuration

Ordering Information

Model	Effective Focal Length (in.)	Focal Length (in.)	Height (in.)	Coating	Coating Hardness
50328AL	0.800	0.400	1.600	Protected Aluminum	MIL-F-48616 modified to 0.5lb
50328AU	0.800	0.400	1.600	Bare Gold	N/A
50329AL	2.000	1.000	1.691	Protected Aluminum	MIL-F-48616 modified to 0.5lb
50329AU	2.000	1.000	1.691	Bare Gold	N/A
50338AL	4.000	2.000	1.620	Protected Aluminum	MIL-F-48616 modified to 0.5lb
50338AU	4.000	2.000	1.620	Bare Gold	N/A
50331AL	6.000	3.000	1.597	Protected Aluminum	MIL-F-48616 modified to 0.5lb
50331AU	6.000	3.000	1.597	Bare Gold	N/A
50332AL	8.000	4.000	1.585	Protected Aluminum	MIL-F-48616 modified to 0.5lb
50332AU	8.000	4.000	1.585	Bare Gold	N/A