

OBJECTIVES

IMAGING/FOCUSING OBJECTIVES

These infinity-corrected, imaging, visible microscope objectives provide 4X, 10X, 20X, or 40X magnification. With their high numerical apertures (NA) and large magnifications, they are suitable for focusing or collimating laser light. These objectives are ideal for imaging applications due to their diffraction-limited performance across the entire visible spectrum. Alternatively, they can be used to focus light to a diffraction-limited spot, thus enabling efficient coupling of monochromatic or broadband light into a waveguide or fiber. Their designation as Plan Achromats indicates that they are flat field and aberration corrected at two different wavelengths in the visible spectrum, leading to better spherical and chromatic corrections and superb field flatness. These achromatic objectives have an ultra wide antireflection coating and standard RMS threading.

- Objectives for the Visible Portion of the Spectrum
- Allows for Conversion of Instrument to Microscope
- Ideal for Imaging or Focusing Laser Light
- Lenses are Infinity Corrected
- Plan Achromat Design



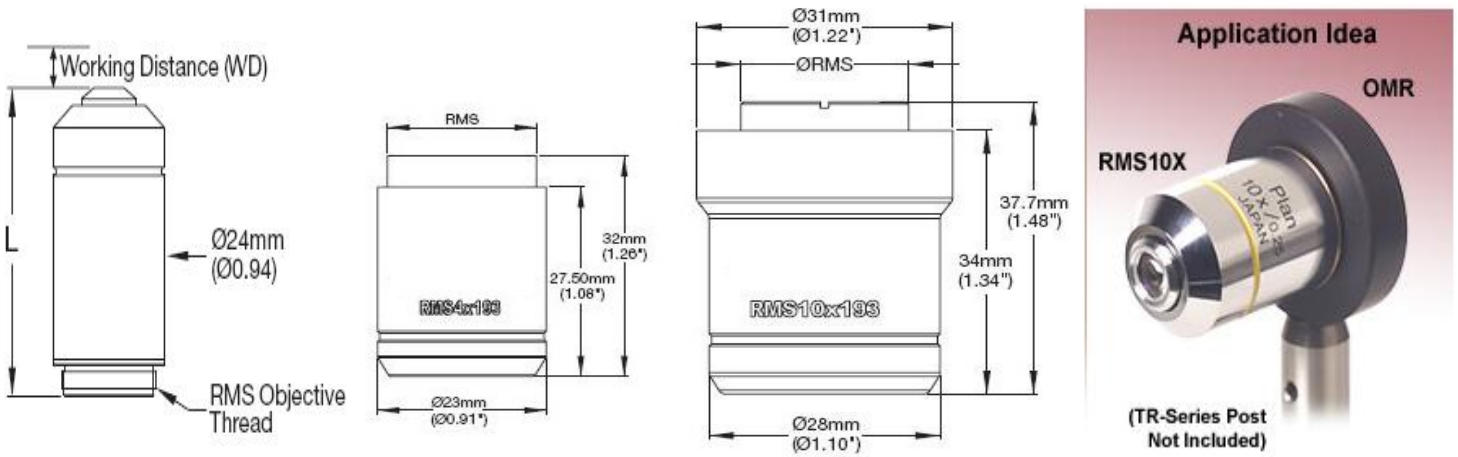
UV FOCUSING OBJECTIVES

These infinity-corrected, focusing, UV microscope objectives provide either 3.7X or 10X magnification and are optimized for diffraction-limited performance at 193 nm. The objectives are constructed from high-quality, certified Excimer-Grade fused silica, which provides >99.5%/cm transmission at the design wavelength. The optical elements in these UV focusing objectives are air-spaced, making them suitable for use with high-power UV lasers. In addition, these lenses have a large entrance aperture to ensure that the laser beam is not clipped and a long working distance so that ablated material is not deposited on the front lens surface.

- Fabricated from Excimer-Grade Fused Silica
- Lenses are Infinity Corrected
- Diffraction-Limited Performance at 193 nm
- Suitable for Cutting and Engraving



OPTICS



	RMS4X193 ⁽¹⁾	RMS10X193 ⁽²⁾	RMS4X	RMS10X	RMS20X	RMS40X
Diameter	23 mm	28 mm*	24 mm	24 mm	24 mm	24 mm
Length	32 mm	37.7 mm	30.89 mm	38.79 mm	48.49 mm	48.79 mm
Magnification	3.7X	10X	4X	10X	20X	40X
Numerical Aperture (NA)	0.11	0.24	0.10	0.25	0.40	0.65
Working Distance (WD)	24 mm	14.3 mm	18.5 mm	10.6 mm	1.2 mm	0.6 mm
Effective Focal Length (EFL)	42 mm	17.8 mm	45 mm	18 mm	9 mm	4.5 mm
Design Wavelength	193 nm	193 nm	Red & Blue			
Threading	RMS					

(1) Additional information for the RMS4X193 UV Microscope Objective:

- Clear Aperture: 11.2 mm (For Diffraction-Limited Performance, the Beam Cannot Exceed Ø10 mm)
- Damage Threshold: >500 MW/cm²

(2) Additional information for the RMS10X193 UV Microscope Objective:

- Clear Aperture: 9.8 mm (For Diffraction-Limited Performance, the Beam Cannot Exceed Ø9 mm)
- Damage Threshold: >500 MW/cm²