

Reflective Microscope Objectives Lenses

RMOL **RoHS**

These reflective Microscope objective lenses offer an optimized chromatic aberration over a bandwidth of 350nm to 7µm. They are mainly used in microscope-spectrometry and failure analysis in the semiconductor industry.

- Adjustable for use with various type of microscope tube with focal length range from 80mm to infinite
- The reflection mirror is strengthened with aluminium coating and MgF₂ protective layer.
- The M20.32 mounting thread conforms to JIS standard and is compatible with all major microscope tubes.
- The focus point and image size of visible, UV and IR wavelengths shows no difference and the precise matching of the images is possible.



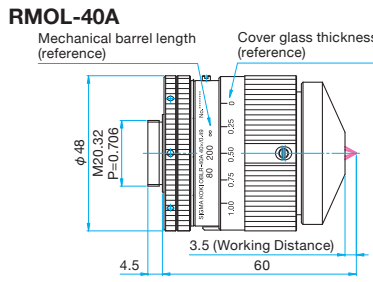
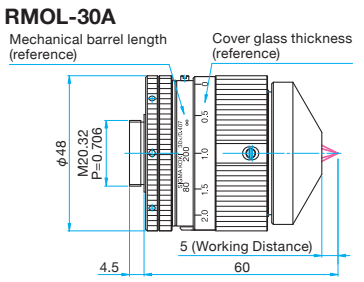
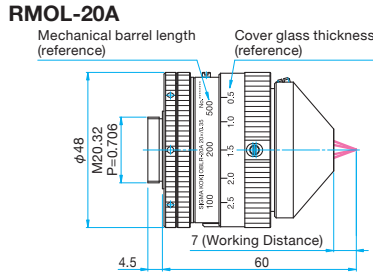
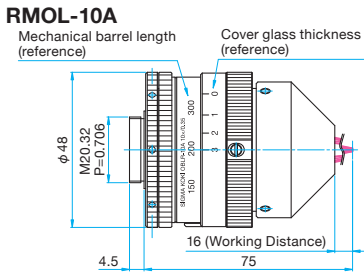
Guide

- ▶ There is no protective layer in aluminium coating for the vacuum ultra-violet spectrum and gold layer coating for near infrared is available as an option.
- ▶ An adapter for the objective lens turret is available (OBRLR-AMT). Check with our International Sales Division or your microscope manufacturer for compatibility and the use of reflective microscope objective lenses.
- ▶ Specific holder for microscope objective lenses (OLH-20.32) is available. [Reference](#) ▶ D033

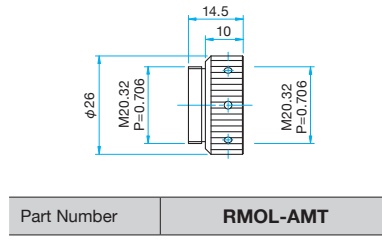
Attention

- ▶ These objectives are not to be used for laser processing due to light axis shielding of the reflective mirror.
- ▶ There are microscopes that cannot be used with a turret.
- ▶ The cover glass is not mobile. Use the adjustable correction collar to adjust the focal length and the cover glass thickness.
- ▶ The center reflective mirror shields the center of the light axis. For direct light experiments, a low intense light in the center is expected.
- ▶ The light intensity loss if expected to be around 45%. (The center mirror shielding 36% and the aluminum reflectivity 90%)

Outline Drawing (in mm)



Objective Lens Adapter



Specifications

Part Number	Magnification	Wavelength Range	Focal length f [mm]	Numerical aperture (NA)	Field of view [mm]	Working distance (WD) [mm]	Mechanical tube length [mm]	Shielding ratio [%]
RMOL-10A	10	350nm – 7µm	19.9	0.2	φ1.0	16	80 – ∞ (Variable)	about 36
RMOL-20A	20	350nm – 7µm	10.0	0.35	φ0.5	7	80 – ∞ (Variable)	about 36
RMOL-30A	30	350nm – 7µm	6.7	0.41	φ0.34	5	80 – ∞ (Variable)	about 36
RMOL-40A	40	350nm – 7µm	5.0	0.49	φ0.25	3.5	80 – ∞ (Variable)	about 36

Compatible Optic Mounts

OLH-20.32

- Application Systems
- Machine Vision
- Manual Positions
- Motion Control Products
- Optical & Mirror Holder**
- F A Parts
- Measurement & Control
- FA Electrical Parts
- Tool & Measure
- Cleanroom & AntiStatic
- Index
- Mirrors
- Beamsplitters
- Filters
- Polarizers
- Lenses
- Multi-Element Optics**
- Prisms
- Substrates & Windows
- Holder & Vibration isolator