

NEW High-NA chromatic and field corrected Endomicroscopic Imaging Objectives with reduced field curvature (MO-ACR-REDUCURV)

GRINTECH's new variant of high-NA Endomicroscopic Imaging Objectives with object Numerical Apertures of 0.5 are offered in a broad achromatic and field corrected version to significantly increase the usable field of view. A combination of four micro lenses achieves the same chromatic and off-axis performance as our MO-ACR-series with reduced field curvature which allows for acquisition of smaller image stacks and addressing more applications.

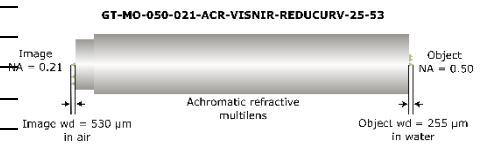
Applications:

In vivo endomicroscopy, single photon fluorescence microscopy, nonlinear optical imaging modalities (SHG, TPF), tissue imaging, flexible fluorescence microscopy, NA conversion, especially all applications that require less curvature

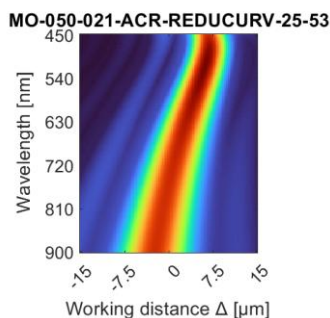
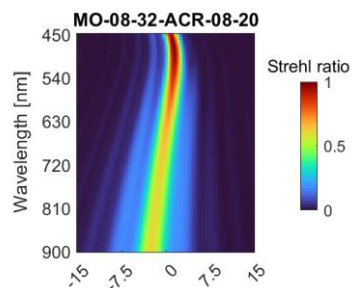
GT-MO-050-021-ACR-VISNIR-REDUCURV-xx-xx represents high resolution field and color corrected objectives with a magnification of 2.3. The image side NA is in this case 0.21. Color correction is achieved from 450 nm to 900 nm with an optimal performance from 488 nm to 900 nm. The objectives are assembled in stainless steel mounts.

The new micro objective type with reduced field curvature is offered so far as a version for usage without cover glass. Here you can compare with our MO-ACR series.

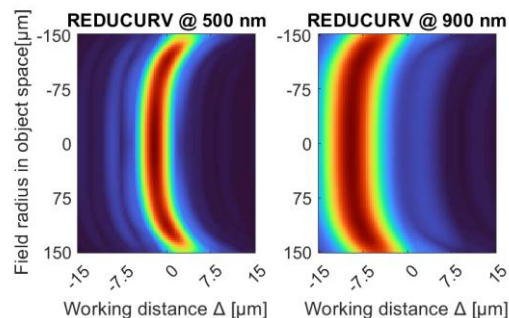
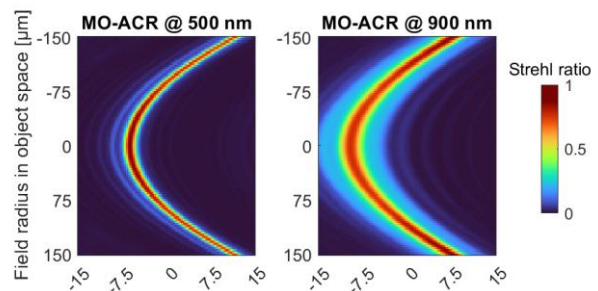
	GT-MO-050-021-ACR-VISNIR-REDUCURV-25-53	GT-MO-080-032-ACR-VISNIR-08-20
Object NA	0.50	0.79
Object WD in water [μm]	255	80
Designed for cover glass [μm]	none	none
Image NA	0.21	0.32
Image WD in air [μm]	530	200
Magnification	2.3	2.3
Field curvature radius [mm]	2	0.55
Dimensions Ø / L [mm]	1.2 / 5.0	1.3 / 4.7



Chromatic Aberration in Object Space



Field Dependent Strehl Ratio in Object Space



Variations due to modifications of the production process are possible. It is the user's responsibility to determine suitability for the user's purpose. For tolerances, handling and storage see page 2