

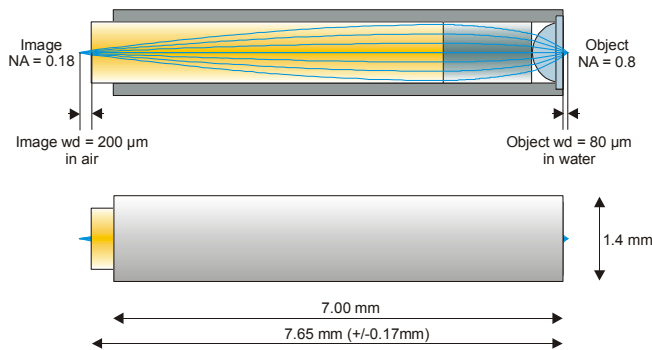
## High-NA Endomicroscopic Imaging Objective for Fluorescence Microscopy

GRINTECH's high-NA Endomicroscopic Imaging Objectives cascade the optical power of a plano-convex lens and a GRIN lens with aberration compensation to achieve an object NA of 0.8.

**Applications:** In vivo endomicroscopy, fluorescence microscopy, tissue imaging, flexible fluorescence microscopy, NA conversion

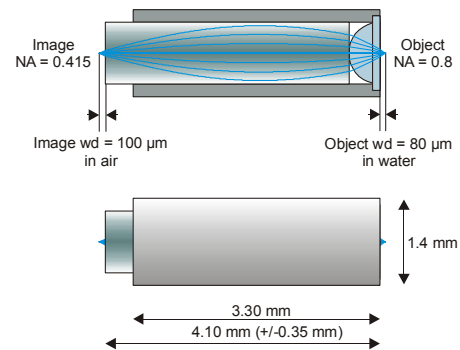
**Product Code:** GT-MO-080-018-488

- Features:**
- Object NA = 0.80
  - Object working distance 80  $\mu\text{m}$  (water)
  - Image NA = 0.18
  - Magnification 4.65 x
  - Recommended Excitation 488 nm
  - Mounted in stainless steel holder

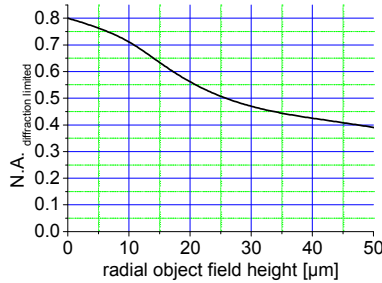


**Product Code:** GT-MO-080-0415-488

- Features:**
- Object NA = 0.80
  - Object working distance 80  $\mu\text{m}$  (water)
  - Image NA = 0.415
  - Magnification 1.92 x
  - Recommended Excitation 488 nm
  - Mounted in stainless steel holder

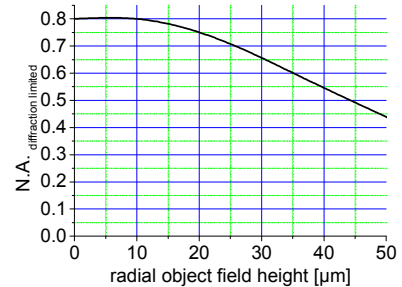


### Diffraction limited NA versus Field



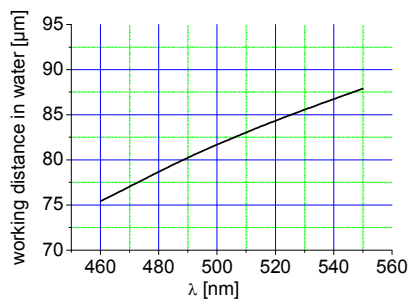
(from optical design simulation according to Marechal criterion @ 488 nm, wavefront RMS  $\leq 0.07 \lambda$ )

### Diffraction limited NA versus Field

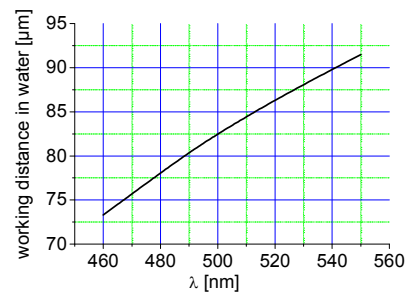


(from optical design simulation according to Marechal criterion @ 488 nm, wavefront RMS  $\leq 0.07 \lambda$ )

### Chromatic Aberration in Object Space



### Chromatic Aberration 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.

Pat. US 7,511,891

Revision 05/2011