

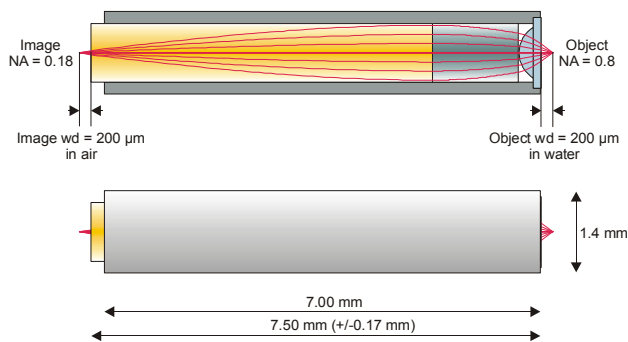
## High-NA Endoscopic Imaging Objective for 2-Photon Microscopy

GRINTECH's high-NA Endoscopic 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, 2-photon microscopy, deep brain and tissue imaging, flexible fluorescence microscopy, NA conversion

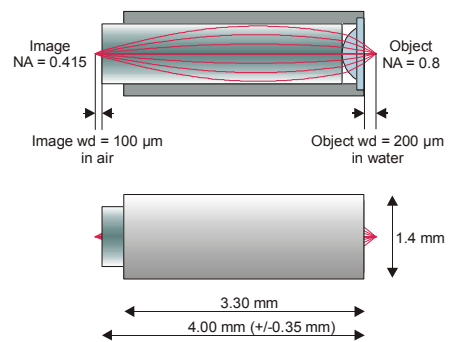
**Product Code:** GT-MO-080-018-810

- Features:**
- Object NA = 0.80
  - Object working distance 200  $\mu\text{m}$  (water)
  - Image NA = 0.18
  - Magnification 4.8 x
  - Recommended Excitation 800 – 900 nm
  - Mounted in stainless steel holder

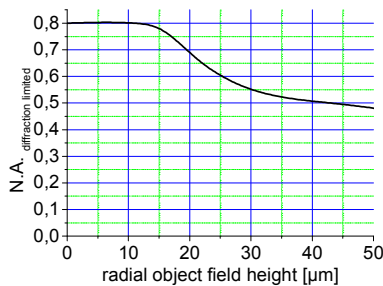


**Product Code:** GT-MO-080-0415-810

- Features:**
- Object NA = 0.80
  - Object working distance 200  $\mu\text{m}$  (water)
  - Image NA = 0.415
  - Magnification 1.92 x
  - Recommended Excitation 800 – 900 nm
  - Mounted in stainless steel holder

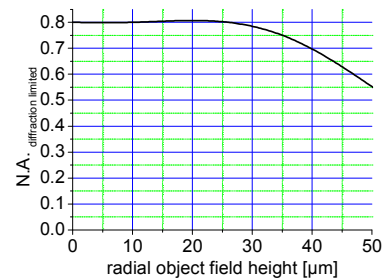


### Diffraction limited NA versus Field



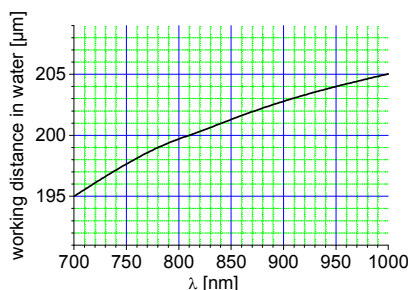
(from optical design simulation according to Marechal criterion @ 810 nm, wavefront RMS  $\leq 0.07 \lambda$ )

### Diffraction limited NA versus Field

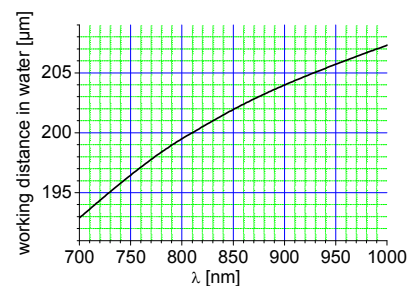


(from optical design simulation according to Marechal criterion @ 810 nm, wavefront RMS  $\leq 0.07 \lambda$ )

### 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.

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