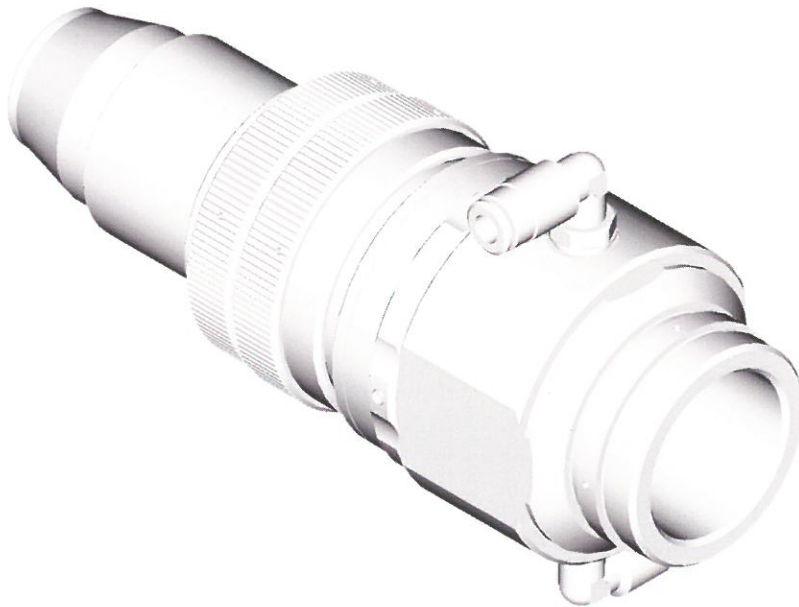




Collimators of patent-pending design to generate multiple focuses for multi-kW lasers



Applications:

- Cutting
- Welding

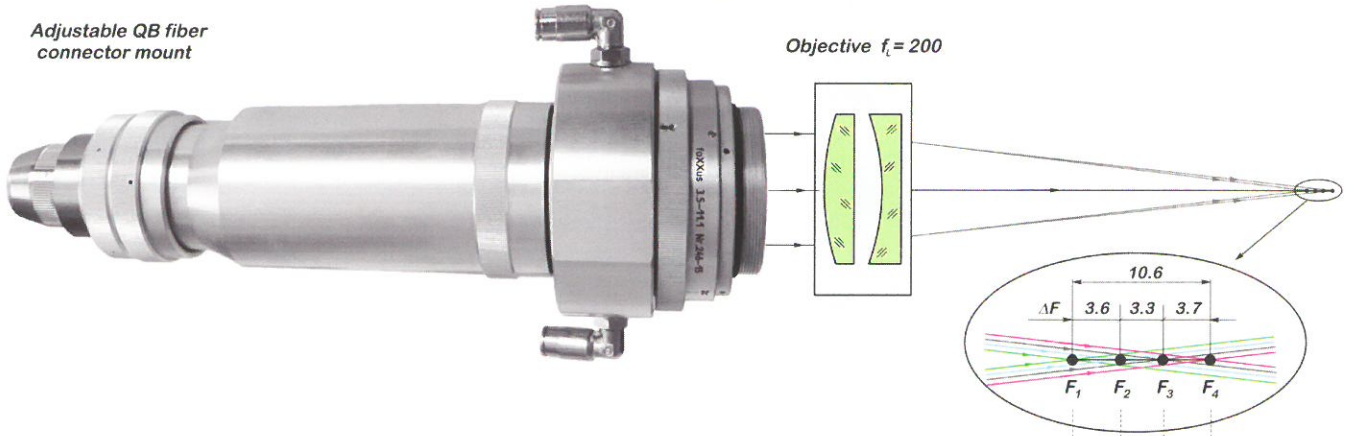
Features:

- High transmission
- Lossless multi-focal energy distribution
- Variable distances between foci
- CA 48 mm
- TEM00 and multimode lasers
- Multi kW lasers
- Reduced thermal focus shift
- Operation: Collimator / Focusing Lens

Specifications

Common for foXXus optics		
Description	<ul style="list-style-type: none"> • Collimators with multiple foci • Applied as a Collimator or as a Focusing Lens 	
Angular field of view	± 1°	
Spectral band, nm	920 - 1100	
Recommended max. power	6 kW	
Water cooling	by 6-1/8 fittings	
Features		
Model	foXXus_3.5-11.1_F200_NIR	foXXus_2-6_F100_NIR
Focal length, mm	~202 (197 - 208.5)	~101.5 (98 - 104.9)
ΔF in air, mm	2 foci: 3.5 or 11.1 4 foci: 3.8 - 3.5 - 3.8	2 foci: 2 or 6 4 foci: 2 - 2 - 2
Clear Aperture, mm	48	29
Mounting	<ul style="list-style-type: none"> • External thread M58x1 • Adaptor with QB fiber connector mount 	<ul style="list-style-type: none"> • External thread M47x0.75 • Adaptor with QB fiber connector mount
Diameter, mm	90	67
Length, mm	288 (with QB fiber connector mount)	178 (with QB fiber connector mount)

Adjustable QB fiber
connector mount

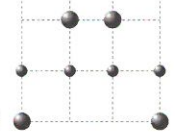


Objective $f_t = 200$

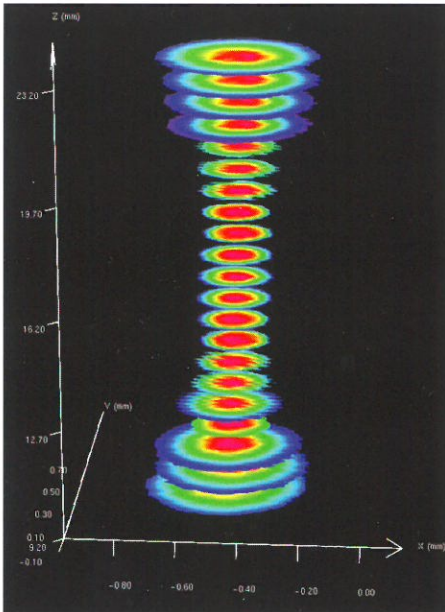
Foci combinations: 2-close-foci

4-foci

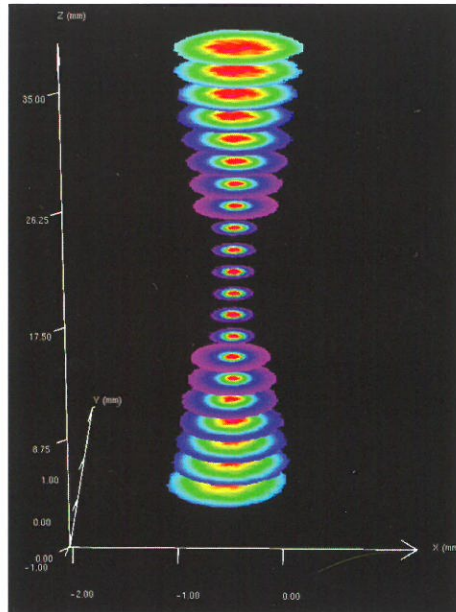
2-distant-foci



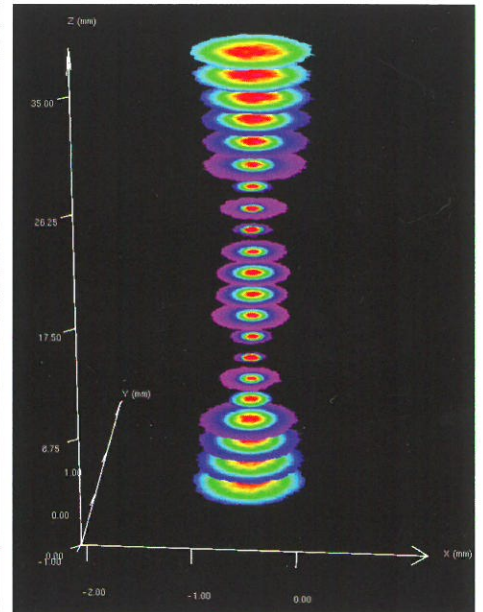
2-close-foci (enlarged view)



4-foci



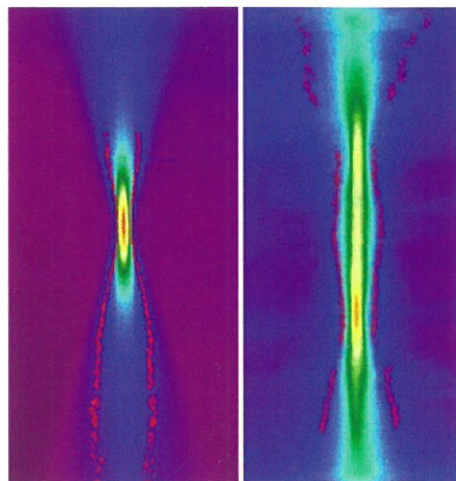
2-distant-foci



Comparison of DOF

Single focus

Caustic length is defined by
physical properties of a beam



4-foci

Caustic length is defined by
foXXus design