

trioFokus_50/80/150_1070

zoom collimator

Applications:

- cutting thin and thick metal sheets
- welding
- cladding
- hardening
- technologies with high-brightness fiber lasers as well as fiber-coupled solid-state and diode lasers

Features:

- sapphire optics
- focal lengths 50 – 150 mm
- high transmission
- CA 48 mm
- reduced thermal focus shift, due to high thermal conductivity of sapphire optics
- common position of fiber end for focal lengths 50, 80, 150 mm
- spectrum: 1020 - 1100 nm, other wavelengths by request
- compatibility with TEM₀₀, multi-mode and variable beam shape lasers



Specifications

Description	zoom collimator, the same focus position for 3 values of focal length
Focal length @ 1070 nm	<ul style="list-style-type: none">• total range 50 – 150 mm• fixed position of fiber end: 50, 80, 150 mm
Input beam	divergence: <ul style="list-style-type: none">• maximum full beam angle 0.3 rad• optimum 1/e² full angle 0.16 rad• minimum 1/e² full angle 0.1 rad mode: TEM ₀₀ , multi-mode, variable beam shape
Output clear aperture	48 mm
Spectral band	1020 – 1100 nm, other spectra available by request
Optical performance	<ul style="list-style-type: none">• diffraction limited in working spectral band• angular field of view ± 1°• allowed off-axis shift of the fiber end ± 0.5 mm
Water cooling	by 6-1/8 fittings
Mounting	<ul style="list-style-type: none">• External thread M58x1• QB (QBH, RQB) fiber connector mount, other mounts QD (LLK-D), Q5 (LLK-B) are available by request• correction of fiber end position along axis ± 2 mm
Diameter	< 120 mm
Length	360 mm (with QB fiber connector mount)
Weight	< 5 kg

Specifications are subject to change without notice