

FT SERIES

Fiber laser F-theta lenses



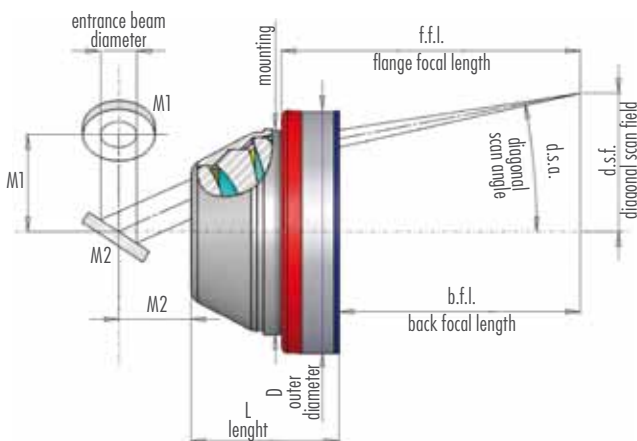
FT Series is a family of F-Thera scan-lenses specifically designed to fit fiber-laser sources. These lenses accept input beam diameters as large as 15 or 20 mm without any vignetting or focus decay over the entire scan area.

The optical system is achromatized over a wide wavelength range (60 nm) in order to keep the spot size minimum even if the laser source bandpass or peak wavelength could change.

The mirror distances are tailored to fit most standard scan-heads. Very small spot size, close-to-zero distortion and very wide scan angle make these lenses the state-of-the-art choice for any power laser application.

KEY ADVANTAGES

- 1 VERY LARGE APERTURE:** FT Series are suitable for even the largest beam diameters delivered by fiber-laser sources
- 2 ACHROMATIZATION:** FT Series maintain the focus quality even when the emission wavelength changes
- 3 VERY HIGH OPTICAL PERFORMANCES:** spot size, distortion, field flatness and scan angle are all set at maximum.



Part Number	Wavelength range (nm)	Focal Length f (mm)	Back Focal Length b.f.l. 2 (mm)	Flange Focal Length f.f.l. (mm)	Diagonal Scan Angle d.s.a. (degree)	Diagonal Scan Field d.s.f. (mm)	Maximum Scan Area A (mm ²)	Entrance Beam Diameter d (mm)	Mirrors Distance m1 (mm)	2nd mirror Distance m2 (mm)	1/e ² spot Radius p (micron)	Mounting Thread	Length L (mm)	Outer Diameter D (mm)	Protective Window
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1064 nm F-Theta Series

FT1064-0163	1064 (980..1080)	163	190,3	214,2	57	162,2	114,7 x 114,7	15	16	12,5	12	M85x1	61,3	100	Yes
FT1064-0250	1064 (980..1080)	250	292,2	355,9	57	248,7	175,9 x 175,9	20	24	15,5	15	M85x1	80,3	128	Yes

532 nm F-Theta Series

FT0532-0163	532 +/-30	163	186,3	209,0	57	162,2	114,7 x 114,7	15	16	12,3	10	M85x1	60,4	100	Yes
FT0532-0250	532 +/-30	250	290,0	355,6	57	248,7	175,9 x 175,9	20	24	15,7	10	M85x1	81,8	128	Yes

1 1064 lenses are optimized over the emission range of fiber lasers

2 Measured from the end of mechanics to the working plane