5AN-2-V-05

Anamorphic beam-shaping optics with form factor 0.5

FEATURES

Anamorphic optics transform a collimated laser beam with elliptical cross section into a circular beam or vice versa.

- Form factor 0.5
- Wavelength range: 600 - 1020 nm
- Integrated astigmatism correction
- No lateral beam shift or beam deviation as with anamorphic prism pairs
- Clear aperture: Ø 5 mm
- Diffraction-limited optics pair
- Ø 19.5 mm system mount: Full integration with - multicubeTM system / 30 mm cage system, collimators and adapters

- Discontinued

This product has been discontinued. Requests will be managed according to the residual stock. Contact us to discuss any specific need.

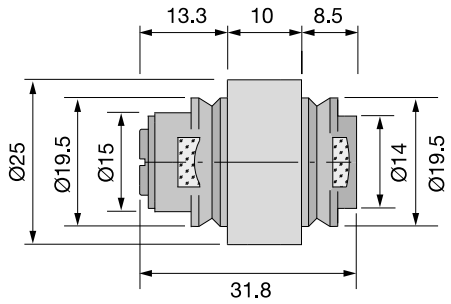
DESCRIPTION

A circular beam profile may be preferred over the elliptical profile usually provided by laser diodes or by tapered amplifiers. Anamorphic Beam-shaping Optics act one-dimensionally on the profile of the collimated beam. They can be used to

- Adjust the larger beam diameter to the dimension of the smaller one, producing a radially symmetric beam
- Adjust the smaller beam diameter to the dimension of the larger one, producing a radially symmetric beam
- Transform a circular beam into an elliptical beam
- Enlarge one elliptical axis to produce a beam with a higher axis ratio

The Anamorphic Beam-shaping Optics type 5AN are cylinder lens systems and, therefore, can be additionally used to correct the astigmatic difference ΔAs of the laser diode or tapered amplifier through a refocusing of the optical system. Coupling efficiencies to single-mode fibers of 80% or more are possible when using Anamorphic Beam-shaping Optics (depending on the beam characteristics of the laser diode or tapered amplifier).

Form Factor
The anamorphic effect is described by the form factor F, which indicates the relative diameter change of the parallel beam.
The target value is calculated from the ratio the beam diameters Ø⊥ and Ø|| of the-collimated beam.



TECHNICAL DATA

5AN-2-V-05

Series	5AN	
Order Code	5AN-2-V-05	
Form factor	0.5	
AR coating	05	
Wavelength range	600 - 1020 nm	
Clear aperture	Ø 5 mm	
Mount	System mount	System mount
	Ø 19.5 mm	Ø 19.5 mm
Outer diameter	Ø 25 mm	
Housing material	Nickel silver / steel	
Weight	62 g	

TECHNOTES

- Astigmatism Correction
  Astigmatism Correction using anamorphic beam-shaping optics type 5AN
- Beam-shaping and fiber coupling
  Using anamorphic optics to increase coupling efficiency

DOWNLOADS

930210390201.pdf (Dimensional drawing)

ACCESSORIES

60EX-5	Eccentric key with a stroke of ± 1.0 mm.
9D-12	Screwdriver WS 1.2
19.5AM25-L	Adapter for 60SMS Laser Beam Couplers Outer diameter Ø 25/28 mm
48MC-MP-19.5	Mounting plate for the Schäfter+Kirchhoff multicube™ system

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