

## 5M-A4.5-01-S

Micro Focus Optics



### FEATURES

Micro focus optics used for focussing the collimated radiation exiting a fiber collimator.

- Attachment optics for fiber collimators type [60FC](#) with outer diameter Ø 12 mm
- Focal length  $f' = 4.5$  mm
- AR Coating 350 - 700 nm
- Monochromatic correction

## DESCRIPTION

The Micro Focus Optics type 5M-A4.5-01-S is used to generate a small laser spot from the collimated radiation of a fiber collimator.

The [size of the spot](#) and its [Rayleigh range](#) is determined by the fiber properties and by the focal lengths of the fiber collimator and of the micro focus optics. For single-mode fibers the Gaussian intensity distribution and beam shape are maintained.

It is designed for the fiber collimators series [60FC](#) with an outer diameter Ø 12 mm.

### Adjustment:

In order to change the working distance of the Micro Focus Optics the lens position of the adjacent collimator has to be readjusted.

### Housing material:

As standard, the housing of the Micro Focus Optics is made of nickel silver.

For amagnetic fiber collimators Schäfter+Kirchhoff offers Micro Focus Optics with housings made of titanium.

## TECHNICAL DATA

5M-A4.5-01-S

Series

5M

Order Code

5M-A4.5-01-S

Focal length	4.5 mm
Working distance A	2.1 - 2.5 mm
AR coating	01
Wavelength range	350 - 700 nm
Lens type	Asphere
Correction	Monochromatic
Numerical aperture	0.55
Clear aperture	Ø 5.8 mm
Outer diameter	Ø 11 mm
Length B	4.5 mm
System mount	Ø 8 mm
Front fitting	-
Housing material	Nickel silver
Weight	5 g
RoHS compliant	
Dimensions (for a complete dimensional drawing please refer to the downloads section)	



## DOWNLOADS



[921120249000.pdf \(Dimensional drawing\).](#)



[Coating-0103-01.pdf \(Coating curve\).](#)

## ACCESSORIES

9D-12

Screwdriver WS 1.2

## RELATED PRODUCTS

**MICRO FOCUS OPTICS  
SERIES 5M**for transforming a collimated beam into a micro focus  
spot**ATTACHMENT OPTICS  
SERIES 5**to attach in the front of collimators with system mount  
Ø 8 mm

This is a printout of the page [https://sukhamburg.com/products/details/5M-A4\\_5-01-S](https://sukhamburg.com/products/details/5M-A4_5-01-S) from 5/6/2024

### CONTACT

For more information please contact:

Schäfter + Kirchhoff GmbH

Kieler Str. 212

22525 Hamburg

Germany

Tel: +49 40 85 39 97-0

Fax: +49 40 85 39 97-79

[info@sukhamburg.de](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://www.sukhamburg.com)

## LEGAL NOTICE

**Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.**

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [\[more\]](#)