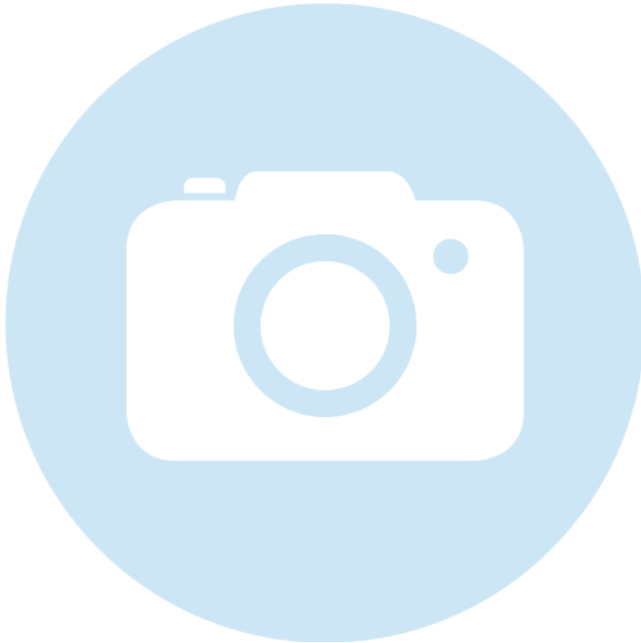


60FC-4-M12-10-OT01

Outer thread M11x0.5 mm



FEATURES

The fiber collimator is designed for collimating radiation exiting from an optical fiber cable or used in reverse for coupling a beam into an optical fiber cable.

- Focal length 12 mm
- Optics type: Doublet optics, Monochromatic
- AR-Coating: 630 - 980 nm
- Receptacle type FC APC
- Front connector accepts attachment optics
- Compact Ø 12 mm housing
- Outer thread M11x0.5 mm

DESCRIPTION

The fiber collimators series 60FC is designed for collimating radiation exiting optical fiber cables with high pointing stability. They can also be used in reverse-mode as fiber incouplers. They are suitable for single-mode and polarization-maintaining fiber cables leading to collimated beams with a Gaussian intensity profile. Please note that for multimode collimation the intensity profile is not Gaussian and depends on certain fiber and radiation properties.

The features of the coupler type 60FC include:

Optics

The monochromat with focal length 12 mm is designed for collimating single wavelengths. It is AR-coated from 630 - 980 nm. It is corrected for spherical aberrations and designed in such a way that it leads to a diffraction-limited beam with an $M^2 < 1.05$. The focus position varies strongly with wavelength so that the collimator has to be recollimated after any changes to the wavelength. It is not suitable for UHV applications.

Adjustment of focus

The distance between fiber end-face and collimating optics is adjusted by means of an eccentric key. The lens does not rotate when adjusting the focus. The final focus setting is locked by means of two radially arranged clamping screws. Additionally attachment optics of series 60FC can be mounted to the front of the collimator.

Optimum lens performance

The angled polish of connectors of type APC is considered by a [pre-angled mechanical coupling axis](#) that compensates the beam deflection and you can use the lens centrically. This minimizes aberrations simply resulting from a non-ideal beam path through the lens.

Connector Type

The fiber coupler has a [receptacle](#) of type FC APC

Material

The fiber collimator type 60FC is made from nickel silver (standard)

Mounting

The collimator has an outer thread M11x0.5 mm or it can be placed into a standard mirror mount using the corresponding [adapters](#).

TECHNICAL DATA

60FC-4-M12-10-OT01

Type	60FC
Order Code	60FC-4-M12-10-OT01
Focal lengths	12 mm
AR coating	10
Wavelength range	630 - 980 nm
Lens type	Doublet optic
Correction	Monochromatic
Numerical Aperature	0.23
Clear aperture	4.5 mm
Connector type	FC APC
Outer diameter	Ø 12 mm
Outer thread	M11x0.5 mm
Tilt adjustment	No
Front fitting	Yes
Housing Material	Nickel silver
Weight	
UHV compatible	No
Suitable for multimode	Yes

Note

DOWNLOADS



[970920520549.pdf \(Dimensional drawing\)](#)



[Coating-1000-25.pdf \(Coating curve\)](#)

ACCESSORIES

**POLARIZATION
ANALYZER SK010PA**

Measurement tool for coupling into polarization-maintaining fiber cables

**ATTACHMENT OPTICS
SERIES 5**

to attach in the front of collimators with system mount
Ø 8 mm

9D-12

Screwdriver WS 1.2

60EX-5

Eccentric key with a stroke of ± 1.0 mm.

RELATED PRODUCTS

**FIBER COLLIMATOR
SERIES 60FC**

for collimating radiation exiting an optical fiber or as
an incoupler

This is a printout of the page <https://sukhamburg.com/products/details/60FC-4-M12-10-OT01> from 5/4/2024

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

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. [\[more\]](#)