

FIBER CONNECTOR OPTIONS

CONNECTOR CHOICES FOR FIBER CABLES BY SCHÄFTER+KIRCHHOFF

Standard fiber cables are equipped with an FC Type connector (FC APC or FC PC). They can also be provided with fiber connectors of type AVIM (compatible with LSA), E2000 or with different types of fiber connector at each end. An overview of detailed features is provided in the table.

- FC (APC (8°-polish) or PC (0°-polish))
- AVIM (APC (8°-polish) or PC (0°-polish)), compatible with LSA
- E2000 (APC (8°-polish) or PC (0°-polish))

RECEPTACLE CHOICES FOR FIBER COUPLERS AND COLLIMATORS BY SCHÄFTER+KIRCHHOFF

Standard fiber couplers and collimators are equipped with an FC Type connector (FC APC or FC PC). They can also be provided with receptacles of type ST, LSA (compatible with fiber connectors type DIN, AVIO and AVIM) or mini AVIM® (compatible with mini AVIM® and midi AVIM®). F-SMA type receptacles are available for 0° and 5° or 8°-polish e.g. for SMA-905 High Power connectors.

- FC (APC (8°-polish) or PC (0°-polish)), standard
- ST (0°-polish)
- LSA (APC (8°-polish) or PC (0°-polish)), compatible with DIN, AVIO or AVIM
- mini AVIM® (APC (8°-polish) or PC (0°-polish)), compatible with mini AVIM® and midi AVIM®
- SMA-905 (F-SMA) (8°-polish, 5°-polish or 0°-polish), e.g. for fibers with SMA-905 High power connector

RECEPTACLE TYPE FC (FC PC AND FC APC)

Fiber connectors of type FC assembled by Schäfter+Kirchhoff - as standard - have an alignment index (key) of 2.14 mm width (wide key, type "N", standard).

All fiber couplers including e.g. the [60SMS](#) or [60FC](#) of type FC also have wide key receptacles, which makes them compatible with **both** wide key and narrow key fiber connectors.

Fibers can optionally be equipped with an alignment key of 2 mm (narrow key, type "R").

COMPATABILITY OF CONNECTORS TYPE FC WITH WIDE KEY AND NARROW KEY

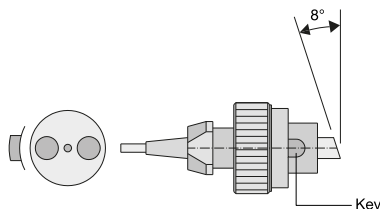
Fibers with narrow key connector can be used with couplers and collimators with wide key receptacle with no problem. You need to simply adhere to the "right-hand orientation rule".

Generally, with any FC PC or FC APC type connector there is a freeplay when inserting the fiber into the fiber coupler. The free play in between the connector ferrule and receptacle is only a few microns, but necessary for inserting the ferrule without force. There is a difference between the receptacle and key width for wide key (2.14 mm) and narrow key (2.0 mm) fibers. If you follow the so-called ["right-hand orientation rule"](#) you can reproducibly attach and reattach even PM fibers with narrow key receptacle to fiber couplers with wide key receptacle without difficulty.

Connector Type	SM fiber	PM fiber	MM fiber	PC / APC	opt. amagn. connectors	opt. end caps	coupling type	Remarks
FC (wide key, "N")	x	x	x	x/x	x	x	Screw	Standard, compatible with all couplers type FC
FC (narrow key, "R")	x	x	x	x/x	x	x	Screw	compatible with all couplers type FC
AVIM	x	x	x	x/x			Screw	comp. with LSA
LSA (DIN)	x	x	x	x/x			Screw	comp. with DIN, AVIO and AVIM
SMA-905 (F-SMA)	x		x	x/x			Screw	e.g.SMA-905 high power connector
E2000	x	x	x	x/x			Snap	

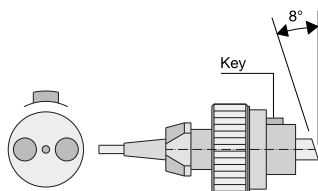
END CAPS AND AMAGNETIC CONNECTORS

If necessary, fiber connectors of type FC can be equipped with [end caps](#) to reduce the power density at the fiber end-face or with [amagnetic connectors](#) made from Titanium.



POLISH ORIENTATION (STANDARD)

Orientation of the 8°- polish and index key for fiber connectors of type FC-APC



OPTION: CUSTOMIZED POLISH ORIENTATION

Optional customized orientation (FCP8)

This is a printout of the page <https://sukhamburg.com/support/technotes/fiberoptics/cablebasics/connectorooptions.html> from 5/14/2025

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