

## Fiber cables with amagnetic connectors

PM or single-mode



### FEATURES

Fibers with amagnetic fiber connectors made from Titanium

- Only available for fibers with connector type FC PC or FC APC
- Available for [single-mode fibers series SMC](#)
- Available for [polarization-maintaining fibers series PMC](#)
- Available for [PCF fibers](#) (single-mode and PM)

Please go to the [Product Configurator for Fiber Cables](#) and check "amagnetic" under "special connector features" to find a fiber with amagnetic titanium fiber connectors.



## DESCRIPTION

Schäfter+Kirchhoff offers amagnetic FC-APC and FC-PC fiber connectors completely made of titanium and with a ceramic ferrule. These connectors are available for all [single-mode](#), [polarization-maintaining](#) and [PCF](#) fiber cables.

The special titanium connectors with ceramic ferrule ensure that the relative permeability  $\mu_r$  of the connector is near 1 ( $\chi = 5 \cdot 10^{-5}$ ,  $\mu_r = 1.00005$ ), making it transparent to magnetic fields. The strengths of a magnetic field or the flux lines and absolute value of the defined magnetic field used in the experiment or application are not perturbed by the fiber connector. Such highly defined magnetic fields are used for example in Electron Spin Resonance (ESR) or Nuclear Magnetic Resonance (NMR) experiments. Another application of amagnetic fiber connectors is the highly precise measurement of a magnetic field (magnetometer) where perturbation of the magnetic field by magnetic materials close to the setup is undesirable.

## TECHNOTES

- [Amagnetic fiber connectors](#)  
[Special features of titanium connectors](#)

## RELATED PRODUCTS

<b>TITANIUM FIBER COLLIMATOR SERIES 60FC</b>	for collimating radiation exiting an optical fiber or as an incoupler
<b>TITANIUM LASER BEAM COUPLERS SERIES 60SMS</b>	Amagnetic Titanium Laser Beam Couplers series 60SMS for coupling into single-mode and polarization-maintaining fiber cables
<b>FIBER CABLES SMC</b>	Single-mode fiber cables
<b>FIBER CABLES PMC</b>	Polarization-maintaining fiber cables
<b>NEW: FIBER CABLES PCF-P</b>	Endlessly single-mode, optionally polarization-maintaining photonic crystal fibers series PCF with Gaussian intensity profile
<b>TITANIUM COMPONENTS</b>	Fiber Couplers and Fiber Couplers made from amagnetic titanium.

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