

Vacuum Feed-Throughs V-SF

with polarization-maintaining fiber cable



FEATURES

Vacuum flange type SF with integrated fiber cable

- Screw-type flange M12 x 0.75 mm (nickel silver)
- Suitable for vacuums down to 10^{-7} mbar
- Integrated polarization-maintaining fiber cable PMC
- Fiber cables with cut-off wavelengths 360 nm - 1800 nm
- Different connector types



DESCRIPTION

The fiber cables with vacuum feed-through made by Schäfter+Kirchhoff are equipped with polarization-maintaining single-mode fiber cables for wavelengths from 360 to 1800 nm. The feed-throughs are suitable for vacuums down to 10^{-7} mbar and are supplied with a screw-type flange with thread type M12 x 0.75 mm (nickel silver). It is sealed by a Viton O-ring sealing.

End-to-end fiber cable

All vacuum feed-throughs are supplied with a non-exchangable, continuous, end-to-end fiber cable. That means there is no additional fiber connection (mating) at the vacuum flange.

Benefits:

- No additional coupling losses due to mating (especially important for transmitting short wavelengths)
- No reduction in [Polarization Extinction Ratio \(PER\)](#) due to mating

PM fiber cable

On the vacuum side, the fiber cables are equipped with Ø 900 µm buffer made of Hytrel or Nylon. The part of the fiber cable outside the vacuum, has a Ø 3 mm cable with Kevlar strain-relief with bend protection both at the fiber connector and the flange.

The polarization-maintaining fiber cables can be equipped with [end caps](#) for reducing the power density at the fiber end-faces.

As an option the connector can be made of [amagnetic Titanium](#) (connector type FC only).

Please refer to the individual [PMC fiber cable pages](#) for all fiber options. The connector types are described in detail [here](#).

How to order

For a specific feed-through please [contact](#) Schäfter+Kirchhoff. We additionally need information on:

- Fiber type
- Cable length inside / outside the vacuum
- Connector type inside / outside the vacuum

An example configuration can be found [here](#).

DOWNLOADS



[130810090601.pdf \(Dimensional drawing\)](#)

ACCESSORIES

POLARIZATION ANALYZER SK010PA

Measurement tool for coupling into polarization-maintaining fiber cables

RELATED PRODUCTS

FIBER CABLES PMC

Polarization-maintaining fiber cables

FIBER COLLIMATOR SERIES 60FC

for collimating radiation exiting an optical fiber or as an incoupler

LASER BEAM COUPLERS SERIES 60SMS

for coupling into single-mode and polarization-maintaining fiber cables

This is a printout of the page <https://sukhamburg.com/products/fiberoptics/fibercable/feedthrough/series/sf-pm.html>
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