

## Vacuum Feed-Throughs V-KF16

with polarization-maintaining fiber cable



### FEATURES

Vacuum flange type KF16 with integrated fiber cable

- Based on small flange KF16 (stainless steel)
- 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 small flange KF16 (DIN 28403 and ISO 2861, stainless steel). Maximum temperature range is -10 °C - 70 °C.

### End-to-end fiber cable

All vacuum feed-throughs are supplied with a non-exchangeable, 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



[130810090701.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/kf16-pm.html>  
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