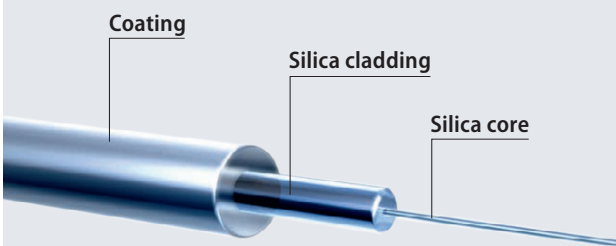


FiberTech® singlemode special fibers

Bend-insensitive, Select-Cut-Off and polarization-maintaining fibers (PM)



We offer a wide portfolio of Select-Cut-Off and polarization-maintaining singlemode fibers for a wide wavelength range from UV to IR.

Singlemode special fibers are the correct choice for current and future applications in data transmission, optical communications, sensorics and high-power laser transmission. They offer excellent geometrical specifications, high stability and best tolerances in fiber geometry.

Apart from our Singlemode standard fibers, we offer a variety of options and possibilities for adjusting the fiber's design to the customer's application. This covers specific cut-off wavelengths from UV to IR as well as mode field diameters at the desired operating wavelength. Customer-specific demands concerning the numerical aperture can be met by the use of appropriate doping concentrations or special refractive index profiles. Reduced jacket-geometry or adjusted dispersion support the challenging application fields of our customers.

Our singlemode fibers can be coated with acrylate or dual acrylate, high-temperature acrylate or polyimide coatings. Additional jacketing with Nylon or Tefzel buffer materials protects the fibers during the operation in different temperature ranges or under chemical influences.

All fibers can be customer-specifically assembled according to your respective application fields.

FiberTech® Select-Cut-Off singlemode fibers

Select-Cut-Off singlemode fibers: VIS-IR

Mode field Ø [µm]	3.5 at 460 nm	3.3 at 488 nm	3.5 at 515 nm	4.4 at 630 nm	4.0 at 630 nm	5.0 at 850 nm	5.6 at 830 nm	4.2 at 830 nm
Jacket Ø [µm]	125	125	125	125	125	125	125	80
Transmission properties								
Wavelength range [nm]	400–550	450–515	450–580	600–700	600–760	760–980	800–920	800–840
Cut-Off wavelength [nm]	370	400	430	550	570	730	730	700
Attenuation [dB/km]	35 at 460 nm	12 at 630 nm	12 at 630 nm	15 at 630 nm	12 at 630 nm	3.5 at 850 nm	5 at 830 nm	5 at 830 nm
Numerical aperture	0.12	0.10–0.14	0.13	0.10–0.14	0.13	0.13	0.10–0.14	0.14–0.18

Coating – acrylate

Coating Ø [µm]	245	245	245	245	245	245	245	165
Order no.:	84820001F	84820002F	84820003F	84820004F	84820005F	84820006F	84820007F	84820008F

Further jacket diameters, cut-off wavelengths, coatings and assemblies on request.

Select-Cut-Off singlemode fibers: VIS-IR

Mode field Ø [µm]	2.6 at 1100 nm	5.8 at 980 nm	4.2 at 980 nm	5.9 at 980 nm	3.3 at 1100 nm	2.6 at 1100 nm	9 at 1310 nm	
Jacket Ø [µm]	125	125	125	125	125	125	80	
Transmission properties								
Wavelength range [nm]	960–1600	970–1210	980–1600	980–1600	1100–1600	1100–1600	1250–1610	
Cut-Off wavelength [nm]	900	920	920	920	1000	1000	1200	
Attenuation [dB/km]	20 at 1550 nm	3 at 980 nm	3.5 at 980 nm	2.1 at 980 nm	20 at 1550 nm	20 at 1550 nm	2 at 1310 nm	
Numerical aperture	0.35	0.14	0.2	0.14	0.28	0.35	0.11–0.13	

Coating – acrylate

Coating Ø [µm]	245	245	245	245	245	245	165
Order no.:	84820009F	84820010F	84820011F	84820013F	84820014F	84820015F	84820016F

Further jacket diameters, cut-off wavelengths, coatings and assemblies on request.

Select-Cut-Off singlemode fibers : VIS-IR

Mode field Ø [µm]	5.4 at 1310 nm	9.3 at 1310 nm	6.7 at 1310 nm	9.5 at 1550 nm	9.5 at 1550 nm	4.2 at 1550 nm	8.8 at 1550 nm	8.8 at 1550 nm
Jacket Ø [µm]	80	80	80	125	80	125	125	125
Transmission properties								
Wavelength range [nm]	1250–1610	1310–1620	1310–1620	1460–1620	1460–1620	1460–1620	1330–1620	1330–1620
Cut-Off wavelength [nm]	1200	1250	1250	1400	1400	1430	1200	1200
Attenuation [dB/km]	2 at 1310 nm	0.75 at 1310 nm	0.75 at 1310 nm	0.5 at 1550nm	0.5 at 1550 nm	3 at 1550 nm	3 at 1550 nm	3 at 1550 nm
Numerical aperture	0.19–0.21	0.11	0.16	0.13	0.13	0.29–0.31	0.14	0.14

Coating – acrylate

Coating Ø [µm]	165	165	165	245	165	245	245	245
Order no.:	84820017F	84820018F	84820019F	84820020F	84820021F	84820022F	84820023F	84820024F

Further jacket diameters, cut-off wavelengths, coatings and assemblies on request.