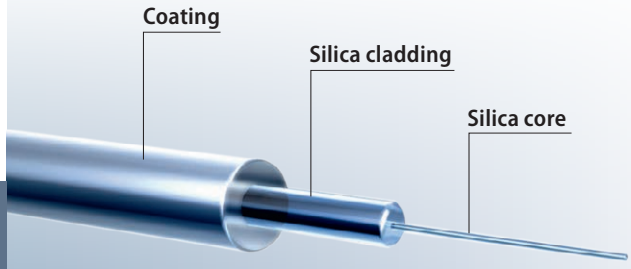
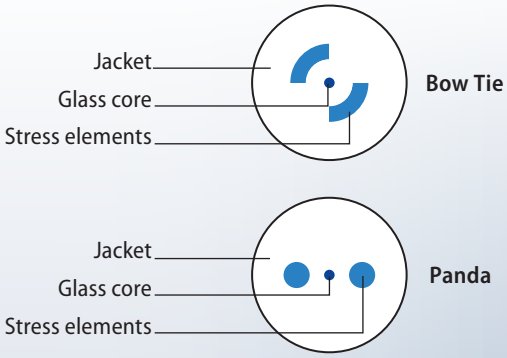
FiberTech® Polarization-maintaining fibers (PM)

Fiber specifications

Polarization maintaining fibers
VIS-IR





Polarization-maintaining fibers are special singlemode fibers that maintain the polarization of the light in the fiber. Stress elementsembedded in the cladding exert mechanical stresses on the fiber core, which leads to birefringence in the fiber core.

The stress elements embedded can have different designs. These fibers are used in networks with optical fibers, for pump lasers and for microscopic applications.

	Polarization maintaining fibers: VIS-IR					
Mode field Ø [µm]	3.2 at 405 nm	3.3 at 515 nm	4.0 at 515 nm	3.6 at 488 nm	4.0 at 515 nm	3.2 at 630 nm
Jacket Ø [µm]	125	125	125	125	125	125
Transmision properties						
Wavelength range [nm]	400–500	460–630	480–540	480–540	480–540	600–675
Cut-Off wavelength [nm]	365	410	435	410	435	550
Attenuation [dB/km]	50 at 405 nm	30 at 460 nm	30 at 480 nm	100 at 488 nm	30 at 480 nm	15 at 630 nm
Fiber type	Panda	Panda	Panda	Bow tie	Panda	Bow tie
Numerical aperture	0.12	0.12	0.1	0.11	0.1	0.16
	Coating – acrylate					
Coating Ø [µm]	245	245	245	245	400	245
Order no.:	84821045G	84821001G	84821003H	84821004E	84821005H	84821006E

Jacketings and assemblies available on request.

Polarization maintaining fibers: VIS-IR							
Mode field Ø [µm]	4.0 at 630 nm	4.0 at 630 nm	4.0 at 850 nm	5.3 at 780 nm	5.5 at 850 nm	4.2 at 830 nm	5.5 at 850 nm
Jacket Ø [µm]	125	125	125	125	125	125	125
Transmision properties							
Wavelength range [nm]	620–675	630–780	750–820	780–980	800–880	800–880	800–880
Cut-Off wavelength [nm]	560	560	680	710	725	700	725
Attenuation [dB/km]	12 at 630 nm	12 at 630 nm	8 at 780 nm	4 at 780 nm	3 at 850 nm	5 at 830 nm	3 at 850 nm
Fiber type	Panda	Panda	Bow tie	Panda	Panda	Bow tie	Panda
Numerical aperture	0.13	0.13	0.16	0.12	0.11	0.16	0.11
Coating – acrylate							
Coating Ø [µm]	165	245	245	245	245	245	400
Order no.:	84821008H	84821009G	84821010E	84821011G	84821012H	84821013E	84821014H

Jacketings and assemblies available on request.

Polarization maintaining fibers: VIS-IR					
Mode field Ø [µm]	6.6 at 980 nm	6.6 at 980 nm	6.0 at 980 nm	5.4 at 980 nm	6.6 at 1300 nm
Jacket Ø [µm]	125	125	125	125	125
Transmision properties					
Wavelength range [nm]	950–1080	950–1080	970–1170	1020–1130	1270–1390
Cut-Off wavelength [nm]	875	875	920	930	1150
Attenuation [dB/km]	2.5 at 980 nm	2.5 at 980 nm	3 at 980 nm	3 at 1064 nm	2 at 1300 nm
Fiber type	Panda	Panda	Bow tie	Bow tie	Bow tie
Numerical aperture	0.12	0.12	0.14	0.16	0.16
Coating – acrylate					
Coating Ø [µm]	245	400	245	245	245
Order no.:	84821016H	84821017H	84821018E	84821019E	84821020E

Jacketings and assemblies available on request.

Polarization maintaining fibers: VIS-IR						
Mode field Ø [µm]	9.5 at 1300 nm	9.5 at 1300 nm	9.8 at 1400 nm	9.8 at 1400 nm	10.5 at 1550 nm	10.5 at 1550 nm
Jacket Ø [µm]	125	125	125	125	125	125
Transmision properties						
Wavelength range [nm]	1290–1485	1290–1485	1380–1560	1380–1560	1450–1620	1450–1620
Cut-Off wavelength [nm]	1195	1195	1290	1290	1370	1370
Attenuation [dB/km]	1 at 1300 nm	1 at 1300 nm	1 at 1400 nm	1 at 1400 nm	0.5 at 1550 nm	0.5 at 1550 nm
Fiber type	Panda	Panda	Panda	Panda	Panda	Panda
Numerical aperture	0.11	0.11	0.11	0.11	0.12	0.12
Coating – acrylate						
Coating Ø [µm]	245	400	245	400	245	400
Order no.:	84821023H	84821024H	84821025H	84821026H	84821027H	84821028H

Jacketings and assemblies available on request.