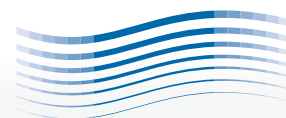


Polarization maintaining fibers

HB Series



OXFORD ELECTRONICS

Manufacture and supply of specialised optical fibers

Also known as polarization preserving or high birefringence optical fiber.

- Polarization preserving

Polarization preserving or high birefringence fiber is used where it is desired to transmit a polarization state that can be rapidly lost in a conventional single mode fiber. It can be used in a variety of optical fiber sensors and is frequently used in optical fiber gyroscopes.

Fibers are available in 80 or 125 μm cladding diameters. They have acrylate coating suitable for temperatures from -40 to $+85^\circ\text{C}$. For high temperature use a polyimide is available (-40 to $+300^\circ\text{C}$).

	HB400	HB600	HB800	HB1300	HB1300
Operating wavelength (nm)	400	633	800	1300	1550
Attenuation (dB/km)	350	<12	<5	<2	<2
Cut-off wavelength	<380	<600	<800	<1250	<1400
Mode field diameter	3	3.5	5	9	10
Beat length*	<2	<3	<5	<7	<8
Numerical aperture (N.A)	0.14	0.14	0.14	0.14	0.14

*Beat length at operating wavelength.

Ordering information

HB 800-125 P

Coating type
(P = Acrylate, I = Polyimide)
Cladding diameter
Operating wavelength