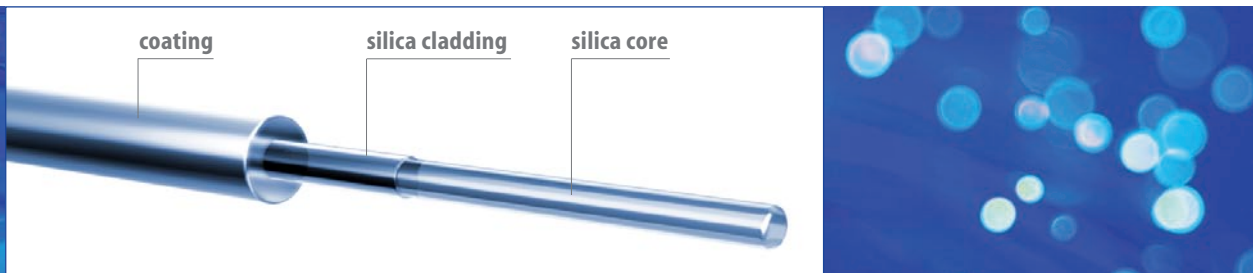


## Polarisation maintaining fibers



Coating: Dual acrylate for  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$

### Construction

Core	Quartz
Cladding	Quartz
Coating	Dual acrylate, no buffer

*Other parameters on request*

### Numerical aperture

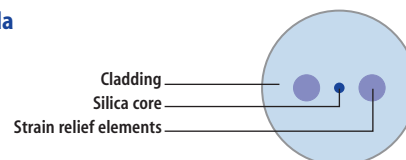
0.1 .. 0.18

### Properties

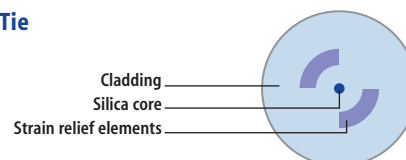
you can find on page 2 

Optical measurement systems use the interference of two waves, which must have the same polarisation. In case of transmission of polarized light in optical wave guides the polarisation maintaining fibers has to be chosen. These are special produced single mode fibers, where mechanical stress induces a high birefringence in the fiber core. Different types of strain relief elements are available (see above). Polarisation maintaining fibres are available from the visible to the NIR range. The cut off wavelength is the wavelength where one mode can be transmitted in the fibre. The fiber acts optimal like a single mode fiber in the wavelength range between the cut-off wavelength and the 1.3 time of the cut off wavelength. Because of the large tolerance of the cut-off-wavelength it is recommended the give the working wavelength when ordering. We chose the optimal fiber for you.

### Panda



### Bow Tie



## Properties

Order no.	Wave-length range [nm]	Cut-off wave-length [nm]	Modefield diameter [μm]	Beat length range [mm]	Max. cross talk at 100 m [dB]	Fiber type	NA ± 0.02	Clad-ding (± 2 %) [μm]	Coating (± 5 %) [μm]	Bending radius short term [mm]	Bending radius long term [mm]	Max. Attenuation [dB/km]	Proof test level [N/mm <sup>2</sup> ]	Product description
84821001G	460 – 630	410 ± 40	3.3 ± 0.5 at 515 nm	1.4	–30	Panda	0.12	125	245	12	25	30 at 460 nm	1400	F-Y0 Y0 PM460/125
84821002K	470 – 630	420 ± 50	3.2 ± 0.5 at 488 nm	1.2		Bow tie	0.13	125	245	12	25	100 at 488 nm	700	F-Y0 Y0 PM470/125
84821003H	480 – 540	435 ± 35	4.0 ± 1 at 488 nm	2	–30	Panda	0.1	125	245	12	25	30 at 480 nm	700	F-Y0 Y0 PM480/125
84821004E	480 – 540	410 ± 60	3.6 ± 1 at 488 nm	2		Bow tie	0.11	125	245	12	25	100 at 480 nm	700	F-Y0 Y0 PM480/125
84821005H	480 – 540	435 ± 35	4.0 ± 1 at 488 nm	2	–30	Panda	0.1	125	400	12	25	30 at 480 nm	700	F-Y0 Y0 PM480/125
84821006E	600 – 675	550 ± 50	3.2 ± 1 at 630 nm	2		Bow tie	0.16	125	245	12	25	15 at 630 nm	700	F-Y0 Y0 PM600/125
84821007K	620 – 675	560 ± 60	4.0 ± 0.5 at 630 nm	1.5		Bow tie	0.14	125	245	12	25	12 at 630 nm	700	F-Y0 Y0 PM620/125
84821008H	620 – 675	560 ± 60	4.0 ± 1 at 630 nm	2	–30	Panda	0.13	125	400	12	25	12 at 630 nm	700	F-Y0 Y0 PM620/125
84821009G	630 – 780	570 ± 50	4.0 ± 0.5 at 630 nm	1.8	–30	Panda	0.13	125	245	12	25	12 at 630 nm	1400	F-Y0 Y0 PM630/125
84821010E	750 – 820	680 ± 70	4.0 ± 1 at 850 nm	2.5		Bow tie	0.16	125	245	12	25	8 at 780 nm	700	F-Y0 Y0 PM750/125
84821011G	780 – 980	710 ± 60	5.3 ± 1 at 780 nm	2.4	–30	Panda	0.12	125	245	12	25	4 at 780 nm	700	F-Y0 Y0 PM780/125
84821012H	800 – 880	725 ± 75	5.5 ± 1 at 850 nm	1 – 2	–30	Panda	0.11	125	245	12	25	3 at 850 nm	700	F-Y0 Y0 PM800/125
84821013E	800 – 880	700 ± 100	4.2 ± 1 at 830 nm	2.7		Bow tie	0.16	125	245	12	25	5 at 830 nm	700	F-Y0 Y0 PM800/125
84821014H	800 – 880	725 ± 75	5.5 ± 1 at 850 nm	1.5 – 2.7	–30	Panda	0.11	125	400	12	25	3 at 850 nm	700	F-Y0 Y0 PM800/125
84821015K	800 – 880	725 ± 75	4.5 ± 0.5 at 820 nm	1.8		Bow tie	0.17	80	165	10	20	4 at 820 nm	700	F-Y0 Y0 PM800/80
84821016H	950 – 1080	875 ± 75	6.6 ± 1 at 980 nm	1.5 – 2.7	–30	Panda	0.12	125	245	12	25	2.5 at 980 nm	700	F-Y0 Y0 PM950/125
84821017H	950 – 1080	875 ± 75	6.6 ± 1 at 980 nm	1.0 – 2.0	–30	Panda	0.12	125	400	12	25	2.5 at 980 nm	700	F-Y0 Y0 PM950/125
84821018E	970 – 1170	920 ± 50	6.0 ± 1 at 980 nm	1.5 – 2.7		Bow tie	0.14	125	245	12	25	3 at 980 nm	700	F-Y0 Y0 PM970/125
84821019E	1020 – 1130	930 ± 90	5.4 ± 1 at 980 nm	1.5 – 2.7		Bow tie	0.16	125	245	12	25	3 at 1064 nm	700	F-Y0 Y0 PM1020/125
84821020E	1270 – 1390	1150 ± 120	6.6 ± 1 at 1300 nm	4.1		Bow tie	0.16	125	245	12	25	2 at 1300 nm	700	F-Y0 Y0 PM1270/125
84821021K	1290 – 1450	1190 ± 100	7.0 ± 0.5 at 1300 nm	3		Bow tie	0.16	80	165	10	20	2 at 1300 nm	700	F-Y0 Y0 PM1290/80
84821022K	1290 – 1450	1190 ± 100	8.4 ± 0.4 at 1300 nm	3		Bow tie	0.13	80	165	10	20	2 at 1300 nm	700	F-Y0 Y0 PM1290/80
84821023H	1290 – 1485	1195 ± 95	9.5 ± 1 at 1300 nm	2.5 – 4.0	–30	Panda	0.11	125	245	12	25	1 at 1300 nm	700	F-Y0 Y0 PM1290/125
84821024H	1290 – 1485	1195 ± 95	9.5 ± 1 at 1300 nm	2.5 – 4.0	–30	Panda	0.11	125	400	12	25	1 at 1300 nm	700	F-Y0 Y0 PM1290/125
84821025H	1380 – 1560	1290 ± 90	9.8 ± 1 at 1400 nm	2.8 – 4.7	–30	Panda	0.11	125	245	12	25	1 at 1400 nm	700	F-Y0 Y0 PM1380/125
84821026H	1380 – 1560	1290 ± 90	9.8 ± 1 at 1400 nm	2.8 – 4.7	–30	Panda	0.11	125	400	12	25	1 at 1400 nm	700	F-Y0 Y0 PM1380/125
84821027H	1450 – 1620	1370 ± 80	10.5 ± 1 at 1550 nm	3 – 5	–30	Panda	0.12	125	245	12	25	0.5 at 1550 nm	700	F-Y0 Y0 PM1450/125
84821028H	1450 – 1620	1370 ± 80	10.5 ± 1 at 1550 nm	3 – 5	–30	Panda	0.12	125	400	12	25	0.5 at 1550 nm	700	F-Y0 Y0 PM1450/125
84821029K	1500 – 1620	1370 ± 130	10.5 ± 1 at 1550 nm	4.0		Bow tie	0.13	125	245	12	25	1 at 1550 nm	700	F-Y0 Y0 PM1500/125
84821030K	1500 – 1620	1370 ± 130	7.8 ± 0.5 at 1550 nm	4.0		Bow tie	0.17	80	165	10	20	2 at 1550 nm	700	F-Y0 Y0 PM1500/80
84821031E	1520 – 1620	1375 ± 145	7.9 ± 1 at 1550 nm	4.9		Bow tie	0.16	125	245	12	25	2 at 1550 nm	700	F-Y0 Y0 PM1520/125