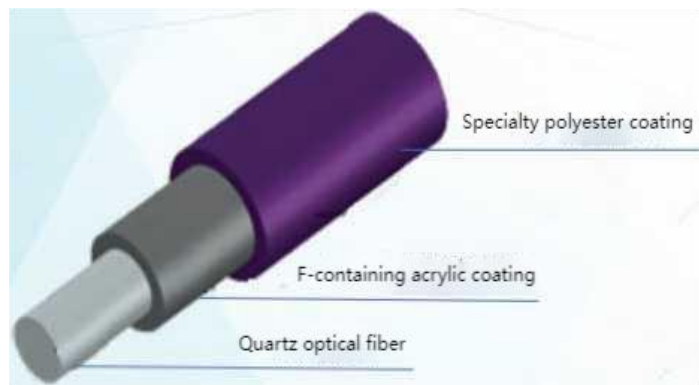
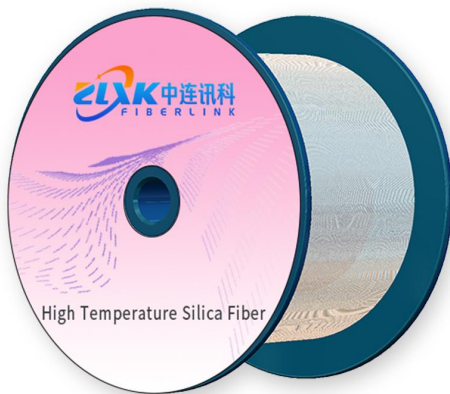


High Temperature Resistant Quartz Fiber

Product Description

High temperature resistant optical fiber is mainly used for sensing, communication, lighting and other fields under high temperature and high humidity and other harsh environments. The coating modulus is wear-resistant and corrosion-resistant; the gas-containing acrylic resin can ensure the long-term stable use of optical fiber below 150°C, and the polyimide ester coating can make the optical fiber work stably in the environment below 300°C.



Features

- Excellent stability in high temperature environments
- Precise geometry and excellent optical properties
- Wide application temperature range
- Good mechanical strength and flexibility for easy processing
- Customizable geometry and optical profiles

Applications

- Aerospace
- Mining industry
- Oil and gas
- High temperature medical
- Electric power
- Other fields

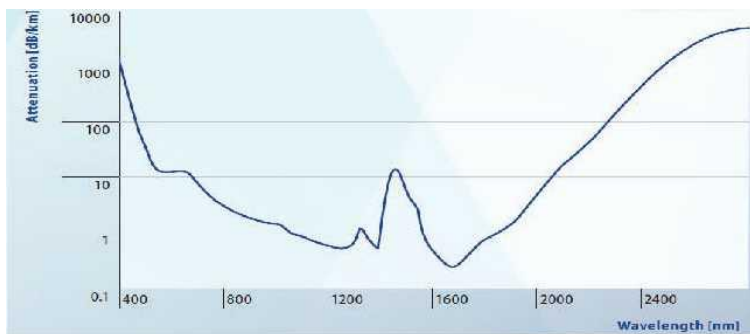


1. High temperature fiber with fluorine polyester coating

This product is a new type of high temperature resistant fiber developed on the basis of rigid plastic cladding, the fiber is coated with a special polyester coating to make the fiber high temperature resistant and reduce the cost of use.

In addition, the geometry can be customized according to customer requirements, quartz glass cladding diameter 100~660 μ m coating thickness and numerical aperture can also be customized.

Optical mapping



Product Model

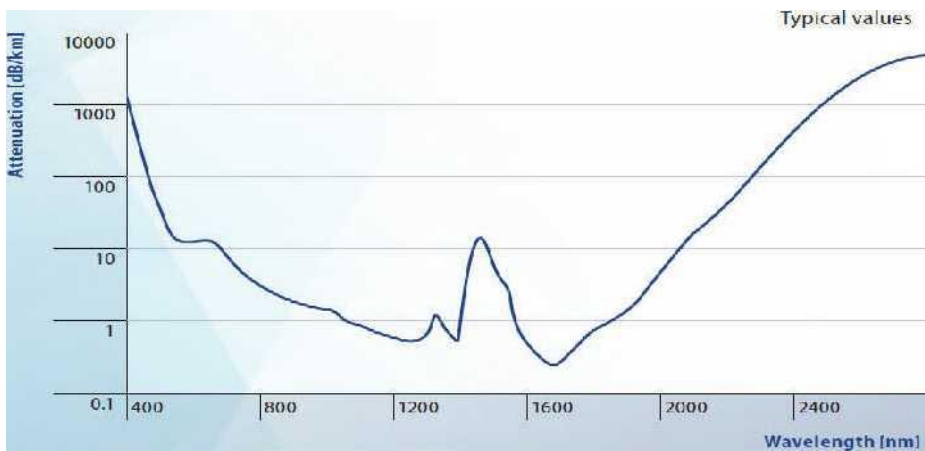
Fiber Type	Core diameter (μ m)	Cladding (μ m)	Polyester coating diameter (μ m)
HT-100/110-150-A	100 \pm 0.7	110 \pm 0.8	245 \pm 20
HT-200/220-400-A	200 \pm 0.7 : . 7	220 \pm 0.8 : 0.8	300 \pm 20 t20
HT-300/330-500-A	300 \pm 2 \pm 2	330 \pm 3 \pm 3	450 \pm 25 t25
HT-400/440-650-A	400 \pm 3 \pm 3	440 \pm 4 \pm 4	550 \pm 30 t30
HT-500/550-730-A	500 \pm 3 \pm 3	550 \pm 4 \pm 4	700 \pm 30 t30
HT-600/660-1000-A	600 \pm 5 \pm 5	660 \pm 6 \pm 6	800 \pm 30 t30



2. Polygel imide ester coated high temperature optical fiber

This fiber is heat curing coated high temperature resistant fiber, regular standard coating thickness $30 \pm 5 \mu\text{m}$, withstand higher temperature, use temperature: short-term withstand 350°C , long-term $-65 \sim 30^\circ\text{C}$. geometry, numerical aperture and coating thickness can be customized according to customer needs.

Optical mapping



Product Model

Fiber type	Core diameter (μm)	Cladding (μm)	Coating diameter (μm)	NA Value
HT-200/220-240-P	200 ± 0.7	220 ± 0.8	$240 +0 / - 5$	0.22 ± 0.02
HT-300/330-360-P	300 ± 2	330 ± 3	360 ± 8	0.22 ± 0.02
HT-400/440-480-P	400 ± 3	440 ± 4	480 ± 8	0.22 ± 0.02
HT-500/550-600-P	500 ± 3	550 ± 4	600 ± 8	0.22 ± 0.02
HT-600/660-710-P	600 ± 5	660 ± 6	710 ± 8	0.22 ± 0.02

Note: Due to the hard material of high temperature resistant coating, it should be loosely wound on a disc with diameter greater than 36cm for attenuation test.

In addition to the above products, we can also apply high-temperature coatings on various core sizes (e.g. $200 \mu\text{m}$, $300 \mu\text{m}$, $330 \mu\text{m}$, $400 \mu\text{m}$, $440 \mu\text{m}$, etc.) with different core/package ratios and different numerical apertures according to customer requirements.

Code naming rule:

Take HT-200/220-240-P for example, HT fiber type high temperature resistant, 200/220 core/cladding diameter, 240 coating diameter, P coating material.

