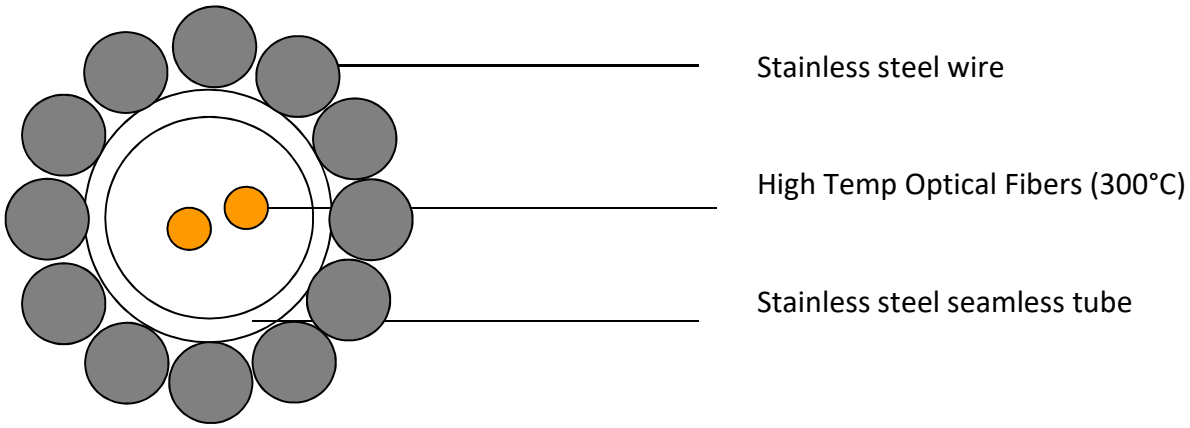
High Temperature Probe Cable

Product description

Temperature detection cable with metal armor protection structure with central stainless-steel tube and twisted wire strength members. This cable has excellent mechanical properties, high tensile, compressive, waterproof, anti-rodent etc., for a variety of harsh environments.



Features

1. Anti-corrosion (stainless steel 304 or 316 depending on environment)
2. Rapid thermal response
3. High temperature (upto 300°C)
4. High tensile strength
5. Waterproof construction

Recommended use

A variety of high temperature, harsh environment applications including

- Process monitoring
- Fire detection
- Geothermal and environmental (borehole, dams, CO2 sequestration…)

Installation Method:

- Direct burial or ducts
- Suspension overhead
- Strapping or other fixtures

Key parameters:

	Attribute	Comments
Appearance size	Cable diameter	2.9mm (tolerance 0.1mm)
	Minimum length	1000 meters
Material	Optical fiber	High-temperature fibers (150 & 300℃ available)
	Central tube	SS304 or 316 stainless steel seamless tube
	Reinforcing elements	12 SS304 or 316 stainless steel wires
Optical fiber	Fiber Type	Multimode 62.5 or 50/125
	Fiber Count	1 or 2 core
Optical properties	attenuation	≤3.0dB / km (850nm)
		≤1.0dB / km (1300nm)
Mechanical properties	Allowable tension (25 ℃)	Long term -1500N
		Short term -3000N
	Allowable pressure	Long-term 2000N /10cm
		Short-term 4000N /10cm
	Minimum bend radius	Static 15D (D is cable diameter)
		Dynamic 20D (D is cable diameter)
Operating temperature	Long term	-50℃~ +300℃ (150℃ version available)
Thermal expansion coefficient		14.3 × 10^{-6}m/ M℃
Weight	Net cable	33kg / km
Standards	GB / Industry Standard	GB / T 7424.2-2008
		GB16280-2014
Package	Packaging Materials	Wooden reel