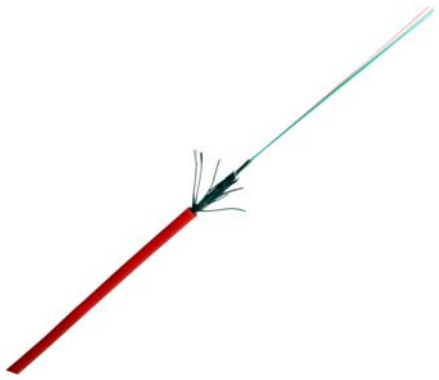
Ordinary Temperature Sensing Cable HDPE

DiTemp



ENHANCED CHEMICAL AND MECHANICAL PROTECTION
DISTRIBUTED FIBER OPTIC TEMPERATURE SENSOR FOR CIVIL, GEOTECHNICAL MONITORING AND LEAK DETECTION

Reliable and versatile cable for easy installation.
Extra protection for Harsh environments.

Description

The Ordinary Temperature Sensing cable HDPE is a unique sensor for the evaluation of distributed temperature over several kilometers.

The Ordinary Temperature Sensing cable HDPE is used in a wide range of applications that require distributed temperature sensing, such as temperature monitoring of concrete in massive structures, waste disposal sites, on- and off-shore sites in gas and oil industry, hot spots, cold spots and leakage detection of flow lines and reservoirs, building installations, just to name a few.

The Ordinary Temperature Sensing cable HDPE is a small fiber optic cable, armored with stainless steel loose tube gel filled, stainless steel strength members and HDPE outer sheath. The central loose tube is hermetically sealed and contains 4 bend insensitive fibers with a dual layer acrylate coating for increased micro bending performance.

This sensor is particularly suitable for outdoors and harsh environment applications with different methodology of installation: direct burial in the ground or concrete, clamped to a pipe, anchored or glued.

Thanks to the special package design, the Ordinary Temperature Sensing cable HDPE offers high tensile strength, crush resistance, longitudinal and lateral water tightness, chemical and abrasion resistance and excellent rodent protection.

The Ordinary Temperature Sensing cable HDPE is fully compatible with the DiTemp system and all its accessories.

Key Features

- DiTemp compatible
- Fast temperature response
- High tensile strength
- High crush resistance
- Excellent rodent protection
- High chemical resistance
- Robust abrasion resistant cable sheath
- Laterally watertight
- Compact and flexible
- Halogen free
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Applications

- Harsh environments
- Pipeline leak detection
- Dam and Levee seepage monitoring
- Smart buildings
- Distributed temperature sensing

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Temperature range

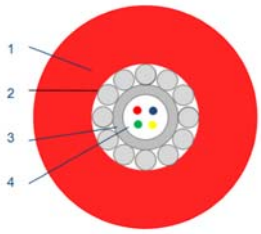
Operating temperature:	-40 °C to +85 °C
Storage temperature:	-40 °C to +85 °C
Installation temperature:	-10 °C to +50 °C

Technical Data

Outer diameter:	6.0 mm
Weight:	42 kg/km
Max crush resistance:	800 N/cm
Max tensile strength:	1300 N (installation)
Max tensile strength:	900 N (operation)
Min bending radius:	120 mm (with tensile)
Min bending radius:	90 mm (without tensile)
Hydrostatic pressure:	300 kPa (bar)

Fiber Types

Fiber support:	MMF 50 / 125 µm ITU-T G.651 compliant
Fiber attenuation (cabled @ 20 °C):	≤ 3.0 dB @ 850 nm ≤ 1.0 dB @ 1300 nm
Number of fiber:	4



1. HDPE outer sheath
2. Stainless steel wires, 316L
3. Stainless stell loose tube, 316L
4. Bend insensitive optical fibers

Certification and compliance

CE Marking

Cable tests complying with IEC 60794-1-2

Accessories and ordering information

14.1418 DiTemp Ordinary Temperature Sensing Cable HDPE

Accessories:

- Cable termination with connectors
- Junction box
- Splice box

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