

14.1410 DITEMP ORDINARY TEMPERATURE SENSING CABLE

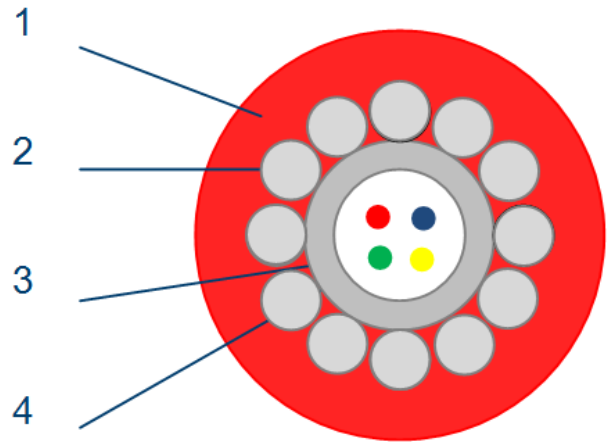
For distributed temperature sensing



GENERAL DESCRIPTION

The DiTemp[®] Ordinary Temperature Sensing cable is a unique sensor for the evaluation of distributed temperature over several kilometers.

The DiTemp[®] Ordinary Temperature Sensing cable 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.



- 1 PA outer sheath
- 2 Stainless steel wires, 316L
- 3 Stainless steel loose tube, 316L
- 4 Bend insensitive optical fibers

TECHNICAL DESCRIPTION

The DiTemp[®] Ordinary Temperature Sensing cable is a small fiber optic cable, armoured with stainless steel loose tube gel filled, stainless steel strength members and PA 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 DiTemp[®] Ordinary Temperature Sensing cable offers high tensile strength, crush resistance, lateral water tightness, chemical and abrasion resistance and excellent rodent protection.

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

FEATURES

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

TEMPERATURE RANGE

- Operating temperature -40 °C to +85 °C
- Storage temperature -40 °C to +85 °C
- Installation temperature -10 °C to +50 °C
- Short-term temperature (max 1 h) -50°C to +150°C

TECHNICAL DATA

- Outer diameter 3.8 mm
- Weight 26 kg/km
- Max crush resistance 800 N/cm
- Max tensile strength 1300 N (installation)
- Max tensile strength 900 N (operation)
- Min bending radius 80 mm (with tensile)
- Min bending radius 60 mm (without tensile)
- Hydrostatic pressure 300 kPa (bar)

FIBER TYPOLOGY

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

CERTIFICATION AND COMPLIANCE

Cable tests complying with IEC 60794-1-2

ACCESSORIES AND ORDERING INFORMATION

- Cable termination with connectors
- Junction box
- Splice box