

14.1419 DITEMP BUDGET TEMPERATURE SENSING CABLE

For distributed temperature sensing



GENERAL DESCRIPTION

The DiTemp® Budget Temperature Sensing cable is a reliable budget sensor for the evaluation of distributed temperature over several kilometers.

The DiTemp® Budget 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.

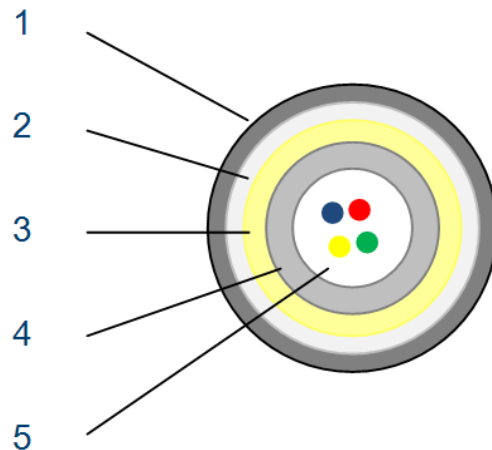
TECHNICAL DESCRIPTION

The DiTemp® Budget Temperature Sensing cable is a small fiber optic cable, armoured with different protective layers that includes a 2.2 mm Stainless Steel loose tube, a Kevlar reinforcing sheath, a Stainless Steel braiding sheath and an outer PE jacket. The central loose tube contains up to 4 fibers with acrylate coating.

This sensor is 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 multi layer package design the DiTemp® Budget Temperature Sensing cable offers high tensile strength, crush resistance, chemical and abrasion resistance and good rodent protection.

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



- 1 PE outer jacket
- 2 Stainless Steel braiding sheath
- 3 Kevlar sheath
- 4 Stainless Steel loose tube
- 5 Temperature Multi Mode Fiber

FEATURES

- DiTemp compatible
- High tensile strength
- High crush resistance
- Good rodent protection
- Abrasion resistant cable sheath
- Flexible
- Fast temperature response

TEMPERATURE RANGE

- Operating temperature -55 °C to +85 °C
- Storage temperature -55 °C to +85 °C
- Installation temperature -10 °C to +50 °C

TECHNICAL DATA

- Outer diameter 5.0 mm
- Weight 38 kg/km
- Max crush resistance 3300 N/cm
- Max tensile strength 2000 N (installation)
- Max tensile strength 1100 N (operation)
- Min bending radius 100 mm (with tensile)
- Min bending radius 75 mm (without tensile)

FIBER TYPOLOGY

- Fiber support MMF 50 / 125 μm ITU-T G.651 compliant
- Fiber attenuation (cabled @ 20 °C)
 - ≤ 3.5 dB @ 850 nm
 - ≤ 1.5 dB @ 1300 nm
- Number of fiber 4

ACCESSORIES AND ORDERING INFORMATION

- Cable termination with connectors
- Junction box
- Splice box