

# 14.1418 DITEMP ORDINARY TEMPERATURE SENSING CABLE HDPE



*For distributed temperature sensing*



## GENERAL DESCRIPTION

The DiTemp<sup>®</sup> Ordinary Temperature Sensing cable HDPE is a unique sensor for the evaluation of distributed temperature over several kilometers.

The DiTemp<sup>®</sup> 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.

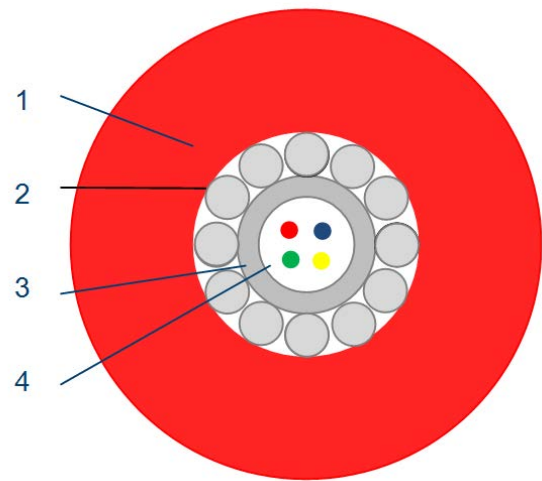
## TECHNICAL DESCRIPTION

The DiTemp<sup>®</sup> Ordinary Temperature Sensing cable HDPE is a small fiber optic cable, armoured 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 DiTemp<sup>®</sup> 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 DiTemp<sup>®</sup> Ordinary Temperature Sensing cable HDPE is fully compatible with the DiTemp<sup>®</sup> system and all its accessories.



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

## FEATURES

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

## TEMPERATURE RANGE

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

## TECHNICAL DATA

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- 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 TYPOLOGY

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

## CERTIFICATION AND COMPLIANCE

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Cable tests complying with IEC 60794-1-2

## ACCESSORIES AND ORDERING INFORMATION

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- Cable termination with connectors
- Junction box
- Splice box