

# 11.1010 DITEST ORDINARY TEMPERATURE SENSING CABLE



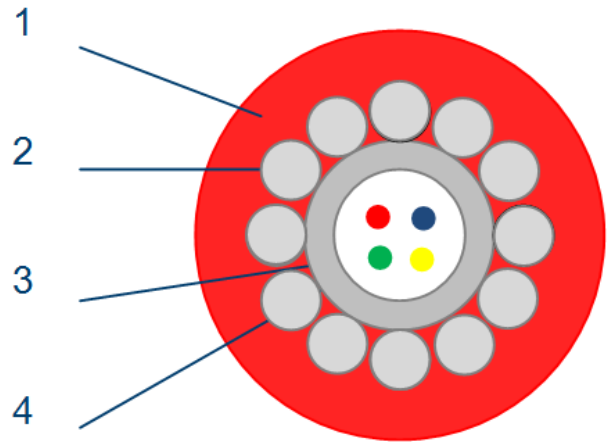
*For distributed temperature sensing*



## GENERAL DESCRIPTION

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

The DiTeSt 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.



## TECHNICAL DESCRIPTION

The DiTeSt 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 DiTeSt Ordinary Temperature Sensing cable offers high tensile strength, crush resistance, lateral water tightness, chemical and abrasion resistance and excellent rodent protection.

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

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

## FEATURES

- DiTeSt 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

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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
- Short-term temperature (max 1 h) -50°C to +150°C

## TECHNICAL DATA

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- 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

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- Fiber support SMF 9 / 125  $\mu\text{m}$  ITU-T G.652.D compliant
- Fiber attenuation (cabled @ 20 °C)  $\leq 0.36 \text{ dB @ } 1310 \text{ nm}$   
 $\leq 0.25 \text{ dB @ } 1550 \text{ nm}$
- 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
- SMF ITU-T G.657 compliant upon request