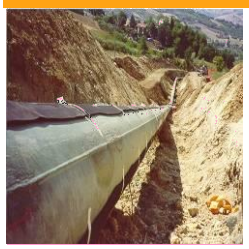
14.1416 DITEMP SMARTAPE II DISTRIBUTED TEMPERATURE SENSOR



GENERAL DESCRIPTION

The DiTemp SMARTape II temperature sensors are designed for distributed thermal (average temperature) monitoring over long distances.

It is used for surface installation on smooth surfaces or embedding into composites.

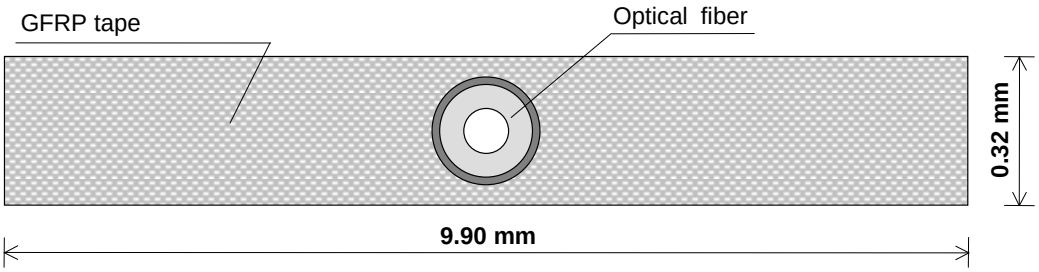
TECHNICAL DESCRIPTION

The DiTemp SMARTape II sensor consists of a multi mode optical fibre embedded in a Glass Fiber Reinforced Polymer / Epoxy tape. The tape itself provides high mechanical, chemical and temperature resistance. The size of the tape makes the sensor easy to transport and install. The SMARTape II sensor is designed for use in harsh environments often found in civil and Oil&Gas engineering applications. It is usually glued to the structures, but can also be clamped or embedded into composite.

SMARTape II sensors are fully compatible with DiTemp system. They are delivered on spools and with all the necessary accessories such as the gland nuts (IP65), pigtails and connectors (E-2000, FC-PC or other on request).

FEATURES

- **Distributed temperature sensing**
- **Wide temperature range**
- **Mechanically reinforced**
- **Chemically resistant**
- **Easy and rapid installation**
- **Light weight & small dimensions**



TECHNICAL CHARACTERISTIC AND PERFORMANCES

Temperature monitoring fibers	1
Maximal length	~ 800m, more upon request
Calibration	not necessary
Temperature range	-40°C to +120°C operating in long term -5°C to +50°C installation and storage -40°C to +80°C pigtail and connectors
Stability	> 20 years
Dimensions	~ 0.2 x ~ 13 mm
Sensor weight	~ 3.8 ± 0.2 kg / km
Minimal bending radius	~ 100 mm operating in long-term ~ 50 mm installation and storage
Tensile strength	≥ 400 MPa (ASTM D3916)
Elongation at break	≥ 2.5 % (ASTM D3916)
Max hydrostatic pressure	$3x10^7$ Pa (300 bars)
Chemical resistance	good
Optical connectors	E2000 APC with protected pigtails (other on request)

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NOVA METRIX