Robust & Cost effective Fiber Optic Sensor for Energy Temperature Monitoring solutions

**Description**

The FISO heavy duty TPT-62 fiber optic temperature sensor is specifically designed for permanent installation in oil-filled transformers. It clearly demonstrates FISO’s experience and leading edge technology in direct winding temperature measurement.

Offered at no extra cost, the EasyDisk allows quick and secured spacer instrumentation without any adhesive.

It ensures optimal sensor tip positioning on the conductor to allow reliable and accurate temperature measurements. The EasyDisk provides the best protection during all transformer manufacturing steps including winding compression.

The Nomex™ EasyDisk also locks the PTFE Spiral-Wrap sheathing in the spacer to ease optical cable routing.

The TPT-62 double PTFE oil permeable sheathing, with transversal slits, is designed to withstand installation stresses, harsh testing conditions such as kerosene vapour, heat runs and induced vibration during the overall lifetime of the transformer.

The TPT-62 can be used with all Nortech 62.5µm monitors (Sentinel II, EasyGrid, EasyGrid LT). Neither the signal conditioner nor the TPT will require any calibration for the life of the transformer.

**Key Features**

- Robust Design
- -40°C to 225°C
- Nomex™ EasyDisk (Patent Pending)
- Direct Contact
- RFI/EMI Immune
- High Dielectric Constant
- No Calibration required

**Applications**

- Power Transformer Winding & Core Hot Spot
- Power Transformer Top & Bottom oil
- All types of Transformers (MV, HV, EHV, UHV, HVDC)
- Reactors, Generators, Switchgear
- Load Tap Changers

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Specifications

Temperature Range | -40°C to 225°C
Resolution          | 0.1°C
Accuracy            | ±1°C
Fiber Type          | 62.5 µm Silica Fiber
Cable Sheathing     | Double PTFE Sheathing
                    | - 0.85 mm PTFE Cable with Slits for Oil Permeability
                    | - 3.15 mm PTFE Spiral Wrap
Available Sensor Length | 2 to 15 Meters (1m Increment)
Connector Type      | ST Connector

RF &EMI Susceptibility | Completely Immune
Chemical Resistance    | Compatible with Most Aggressive Chemicals such as Hot Kerosene Vapor
Tip Termination        | EasyDisk Ø 18.55 mm (standard)
                    | MiniDisk Ø 6.2 mm (Optional)
                    | Bare Tip / No Disk (Optional)
                    | Glued Tip / No Disk (Optional)

Sensor Certification
ASTM D-3426
ASTM D-149

TPT-62 Ordering Information

TPT - 62 - C7 - F2 - M - R1 - ST

Sensor Tip Options
- ED : EasyDisk (Recommended)
- MDXXYY : MiniDisk (Spiral wrap glued at XX mm) (Disk to tip YY mm)
- BA : Bare Standard (Spiral wrap at 50 mm)
- BAXX : Bare XX mm (Spiral wrap at XX mm)
- GL : Glued Standard (Spiral wrap glued at 50 mm)
- GLXX : Glued XX mm (Spiral wrap glued at XX mm)

Sensor Tip Options
- XX : Sensor length in meters (From 2 to 15 meters)

Knockout Punch Kit for Spacers