
TEMPERATURE SENSORS

Model FOT

APPLICATIONS

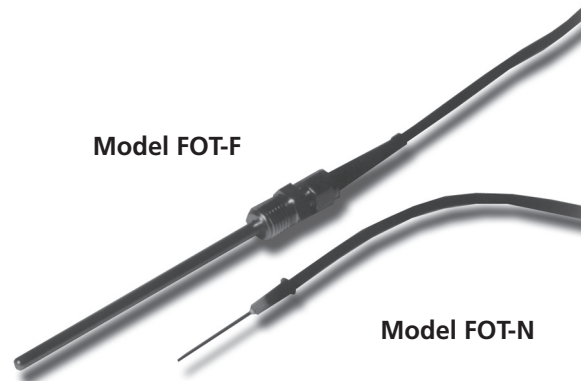
- Dams and bridges
- Tunnel linings
- Nuclear power plants
- Buildings
- Microwaves and RF
- In-situ process monitoring
- Harsh and hazardous environments
- High temperature/voltage/pressure environments

DESCRIPTION

FOT-F and FOT-N temperature transducers combine all the desired characteristics expected from the ideal sensor. Their compact size, immunity to EMI/RFI/lightning, resistance to corrosive environments, high accuracy and reliability make them the best choice for temperature measurements in harsh environments. Our fiber optic temperature gauges are based on the thermal expansion of highly stable glass, allowing precise, stable, and repeatable measurements.

The protection tube of the FOT-N is smaller in size than the FOT-F, which comes equipped with a NPT stainless steel fitting. The FOT-F can be installed in vacuum and high pressure environments or high voltage applications, whereas the FOT-N is mainly used for embedment in concrete or in open air. Both models are fitted with the extrinsic Fabry-Perot fiber optic transducers enclosed inside a protective stainless steel tube.

Our readout units and dataloggers are designed for civil engineering, R&D, industrial applications and have a built-in datalogging capability for up to 50 000 measuring points. The fiber optic lead cable can be up to several kilometers long.

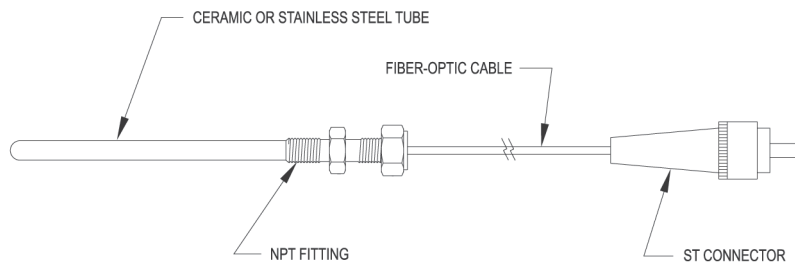


FEATURES

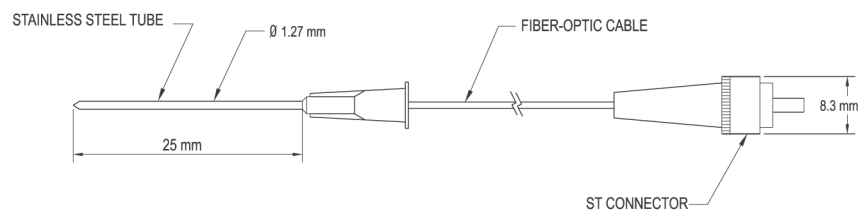
- Intrinsically safe
- Immune to EMI/RFI/lightning
- Can be used at a temperature of up to 350°C
- High accuracy
- Miniature and rugged sensor

SPECIFICATIONS

TRANSDUCER TYPE	FOT-F	FOT-N
Range	-40 to +350°C (cable dependent)	-40 to +85°C
Accuracy/Repeatability	±1°C or 1% of F.S. (whichever is greater)	±0.5°C
Resolution	0.1°C	0.1°C
Response time	Less than 3 seconds (tube dependent)	Less than 1.5 seconds (tube dependent)
EMI/RFI susceptibility	Intrinsic immunity	Intrinsic immunity
Fiber optic cable	CFO-1TF	CFO-3STD
Connection	NPT stainless steel male fitting 1/8 or 1/4 inch.	None
Protection tube	Stainless steel (ceramic optional) 3 to 10 mm O.D. 300 mm length	Stainless steel 1.27 mm O.D. 25 mm length
Connector	ST	ST



Model FOT-F



Model FOT-N