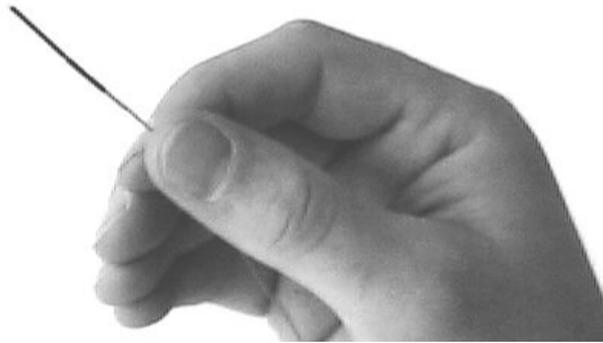


product datasheet

FOT-L/FOT-H Temperature Sensors



Key features

Intrinsically safe

Immune to EMI/RFI

Up to 350°C (650°F)

High accuracy

Miniature and rugged sensor

Compatible with all of FISO's fiber-optic signal conditioners

Applications

Microwaves and RF

Medical applications

Nuclear environments

In-situ process monitoring

Harsh and hazardous environments

High temperature environments

Aerospace applications

THE NORTECH™ OPTICAL SIGNAL CONDITIONER IS A FLEXIBLE, MULTI-CHANNEL FIBER OPTIC SIGNAL CONDITIONER DESIGNED SPECIFICALLY FOR DIRECT, REAL TIME TEMPERATURE MONITORING OF TODAY'S TRANSFORMERS

FOT-L and FOT-H temperature transducers combine all the desired characteristics you would expect from the ideal sensor. Their compact size (less than 1.4 mm O.D.), immunity to EMI/RFI, 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. All our temperature transducers are designed to mate with FISO's line of signal conditioners.

The model FOT-L is sheathed with Teflon and has a temperature range of -40 to +250°C. The FOT-H is designed to withstand a temperature of up to 350°C and is sheathed with braided fiberglass with a 4-cm long polyimide tip.

Through the use of a white-light cross-correlator (U.S. Patents 5,392,117 and 5,202,939), our signal conditioners are capable of measuring the absolute cavity length of FISO Technologies' Fabry-Perot fiber optic transducers with astonishing accuracy, providing highly accurate and reliable measurements. This technology allows other essential parameters like pressure, strain, displacement and force and load to be measured with the same signal conditioner.

Compatible with all of FISO's high-performance fiber-optic signal conditioners, these temperature transducers offer accuracy and reliability in high temperatures and hostile environments. Our signal conditioners are designed for R&D and industrial applications and have built-in data logging capability for up to 50 000 measuring points. The fiber-optic lead cable can be up to several kilometers long.

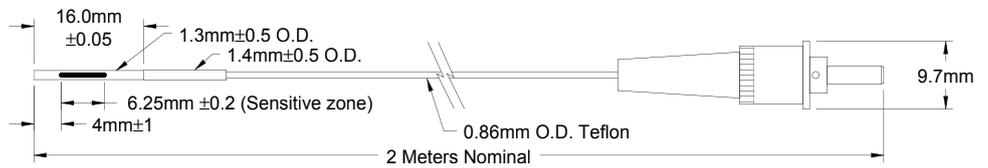
specifications



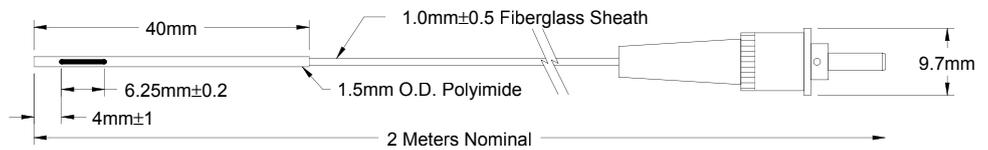
Temperature range:	FOT-L: -40 to 250 °C FOT-H: -40 to 350 °C
Resolution:	0.1 °C
Accuracy/repeatability:	± 1 °C or 1% of FS (which ever is greater); ± 0.5 °C or 0.5% of FS (which ever is greater) optional
Response time:	Less than 1.5 second
EMI/RMI susceptibility:	Intrinsic immunity
Compatibility:	All FISO's signal conditioners
Cable length:	2 meters length Optional: 5 or 10 meters length Custom length up to 5 km available (contact factory)
Fiber-Optic Cable:	FOT-L: All Teflon™ FOT-H: Braided fiberglass with 4-cm long Polyimide protection tip
Connector:	ST Connector
Probe dimensions:	FOT-L: 1.4 mm O.D. (sensitive zone 6.25 mm length) FOT-H: 1.45 mm O.D. (sensitive zone 6.25 mm length)

Dimensions

FOT-L



FOT-H



FISO
Technologies

500 St-Jean-Baptiste Avenue
Suite 195
Quebec (Quebec)
Canada G2E 5R9

Phone:
(418) 688-8065
Fax:
(418) 688-8067

info@fiso.com
www.fiso.com

FISO Technologies, Incorporated reserves the right to make any changes in the specifications of their products without prior notice.
DOC: MC-00028R5 PRINTED IN CANADA/IMPRIMÉ AU CANADA