# **FOS-Series**



## **Fiber Optic Sensor**

The FOS-Series fiber optic sensors are designed to be reliable and work for a wide range of applications. Fiber optic temperature measurement using the FOS-Series sensors provides accurate  $\pm 0.8$ °C readings combined with a fast response time up to 200 ms. The FOS-Series boasts a -200°C to 250°C temperature measurement range as well as 1.6 mm (1/16") probe diameter.

One of the greatest aspects of fiber optic temperature sensing is that the sensors do not require any recalibration. Fiber optic sensors have high repeatability, stability and no signal degradation due to cable length.

Fiber optic sensors transfer information to the fiber optic monitor via light that travels through the fiber optic cable. This is quite different compared to traditional sensors that use resistance/voltage to communicate with monitors. Since fiber optic sensors use light the signal is very fast, reliable and is not influenced by outside forces such as EMI, RFI, NMR or microwave radiation.



### **Features**

- Temperature ranges from -200°C to 250°C
- Sensors require no recalibration
- Accuracy ±0.8 °C (±0.2 °C in relative temperature)
- FOS-LU-\* models feature more durable sensor tip coated in polyimide material
- Sensors immune to RFI, EMI, NMR, corrosive and microwave radiation
- Complete the system with a fiber optic monitor
- Cable extension accessories available

# **Specifications**

Process Temperature Range	-200 to 250°C (-328 to 482°F)
Accuracy	± 0.8°C (1.8°F)
Repeatability	0.2°C
Cable Material	PTFE
Connection Type	ST Connector
Response Time	Up to 200 ms

Ordering Example: FOS-LT-5: 5 Meter, -200 to 250°C PTFE Coated Fiber Optic Sensor.

#### UNRESTRICTED

# Drawings

# FOS-LT-\*

