



FOT[™]-200 FIBER OPTIC TEMPERATURE SENSOR

NC/TM

GENERAL SPECIFICATIONS

Operation

Sensitivity	0.128 mA/ °C <i>[0.071 mA/</i> °F]
Measuring range	25 to 125 °C [77 to 257 °F]
Output	7.2 to 20 mA
Accuracy	±5 °C [±9 °F]
Repeatability	±2 °C [±3.6 °F]
Maximum residual noise ¹	39 µA RMS
Maximum response time ²	
63 %	1 minute
90 %	3 minutes
Output load	500 Ω max.
Temperature drift (conditioner)	< 500 ppm/ °C
Power Requirements	
Voltage	24 Vdc ± 15 %
Consumption	40 mA max.
Polarity reversal protection	Built-in
Connection	
Connector type	5-pin M12 male
Maximum signal cable length	300 m [984 ft]
Environment	
Temperature range	
Operating	
Sensor head	-20 to 135 °C [-4 to 275 °F]
Conditioner	0 to 60 °C <i>[32 to 140 °F]</i>
Storage	-20 to 70 °C [-4 to 158 °F]
Humidity	Up to 95 %, non-condensing
Electrical insulation	
Head vs conditioner	Up to 3 kV / mm (25 °C <i>[</i> 77 ° <i>F]</i> & 25 % humidity)
Electrical & magnetic field	No effect (head only)
Physical Characteristics	
Sensor head	Non-conductive materials
Integral cable	Fiber optics / PTFE jacket
Length	10 m <i>[</i> 33 <i>ft]</i>
Minimum bending radius (routing path)	80 mm <i>[3.15 in]</i>
Minimum bending radius (excess coiled)	150 mm <i>[6 in]</i>
Conditioner body	Nickel-plated brass alloy

Note 1: Measured inside a 1 kHz bandwidth, with shielded cable grounded at both ends.

Note 2: The maximum response time is the amount of time required to reach 63 % or 90 % of the final measurement value. These values are based on the optimum thermal transfer to the sensor.





ИС/ТМ



DIMENSIONS



PRODUCT IDENTIFICATION

Product Number	Description
VSM-FOT200-10	FOT-200 Fiber Optic Temperature Sensor (10 m)

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