

# OxyGuard Temperature Probes

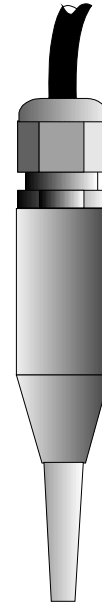
*Temperature Measurement Probes with or without built-in Transmitter*



Temperature Probe  
with built-in transmitter  
and thread fitting



Temperature Probe with  
built-in transmitter



Temperature Probe  
without transmitter

Probes shown 75%  
of natural size

OxyGuard temperature measurement probes are available with or without built-in transmitter. Both use a precision thermistor network as sensing device, permitting use with simple, high stability transmitter circuits. The result is an accurate, easy to use and stable temperature measurement system. The probes are designed for use between  $-5^{\circ}\text{C}$  and  $+45^{\circ}\text{C}$ .

The version without built in transmitter is designed for use with the OxyGuard plug-in temperature transmitter or OxyGuard monitoring units, but OxyGuard can also supply interface amplifiers to suit other equipment.

The version with built-in transmitter is a true 2-wire 4 to 20 mA device. When connected to a source of voltage between 14 and 32 volts it regulates the current in the circuit between 4 mA and 20 mA according to the temperature.

OxyGuard temperature probes are also available with pt100 sensor.

# Technical Information

## Technical Advantages

The OxyGuard temperature probes are robust, accurate and easy to use. They are filled with a special cast resin that protects against moisture. As standard the probes are fitted with 5 m cable, but they can be supplied with other lengths on request. The sensor in both types of probe consists of a metal cylinder containing the thermistor network. This sensor tip is fitted to a black plastic housing. Standard types of housing are shown overleaf, but others can be supplied on request, e.g. to fit other pipe threads or fittings.

## Specifications

### Sensor

Construction:	Sensor tip 9mm dia. x 32 mm. Body 21.5 mm dia. Total length with cable gland 117 mm. Also available with ½" pipe thread. Other body shapes available on request.
Cable length:	Standard cable 5 m 2-wire 0.75 mm <sup>2</sup> PUR. Other lengths available on request.
Operating temperature:	Standard range: -5°C to +45°C.
Accuracy:	+/- 0.2 deg. C
Standard Accessories:	Junction box with terminals and cable glands.

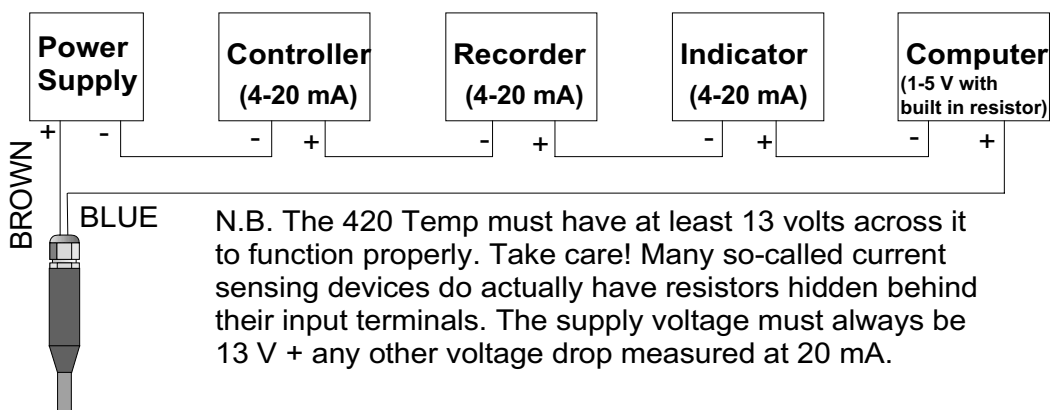
### Probe with 4-20 mA Transmitter

Construction:	Sensor tip 9mm dia. x 32 mm. Body 21.5 mm dia. Total length with cable gland 138 mm. Also available with ½" pipe thread. Other body shapes available on request.
Cable length:	Standard cable 5 m 2-wire 0.75 mm <sup>2</sup> PUR. Other lengths available on request.
Operating temperature:	Standard range: -5°C to +45°C.
Calibration:	Factory calibrated; 4-20 mA = -5°C to +45°C. Other values on request.
Accuracy:	+/- 0.2°C.
Warm-up time:	1 millisecond.
Supply:	14 volt (50 ohm loop resistance) to 32 VDC (950 ohm loop resistance).
Standard Accessories:	Junction box with terminals and cable glands.

## Ordering Information

D061: Standard temperature probe.	D062: Temperature probe with built-in transmitter
D062TH: as D062 but with thread mount.	D063: Temperature probe with PT100 sensor.

### Connection Example - 420 Temp



N.B. The 420 Temp must have at least 13 volts across it to function properly. Take care! Many so-called current sensing devices do actually have resistors hidden behind their input terminals. The supply voltage must always be 13 V + any other voltage drop measured at 20 mA.