

PyroCouple M

Two-Piece Non-Contact Temperature Sensor



The PyroCouple M Series is a range of miniature infrared temperature sensors with separate electronics.

PyroCouple M sensors are capable of measuring temperatures in the range -20°C to 500°C and are available with either a current, voltage or thermocouple output.

GENERAL SPECIFICATIONS

Temperature Range (other sub ranges to order)

Field of View	-20°C to 100°C	0°C to 250°C	0°C to 500°C
2:1	PCM21LT-X	PCM21MT-X	-
15:1	PCM151LT-X	PCM151MT-X	PCM151HT-X
30:1	PCM301LT-X	PCM301MT-X	PCM301HT-X

Output	See table
Accuracy	±1% of reading or ±1°C whichever is greater
Repeatability	±0.5% of reading or ±0.5°C whichever is greater
Emissivity	Fixed at 0.95
Response Time, t90	240 ms (90% response)
Spectral Range	8 to 14 µm
Power	24 V DC (13 V DC to 28 V DC max)
Max. Loop Impedance	750 Ω (4-20 mA output)
Output Impedance	56 Ω (voltage/thermocouple output)

MECHANICAL

	Sensing head	Electronics Module
Construction	Stainless Steel	Die-cast Aluminium
Dimensions	18 mm dia. x 45 mm long	98mm x 64mm x 34mm
Thread Mounting	M16 x 1 mm pitch	
Cable Length	1 m	
Weight with Cable	205 g	

ENVIRONMENTAL

Environmental Rating	IP65
Ambient Temperature Range	0°C to 70°C
Relative Humidity	95% max. non-condensing

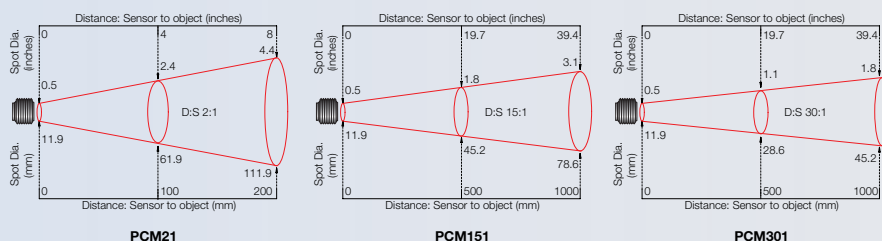
Output	Model-X
4-20 mA	-0
0-50 mV	-1
T thermocouple	-2
J thermocouple	-3
K thermocouple	-4
0-5V	-5

The miniature sensing head measures just 18mm diameter x 45mm. It is made of stainless steel, sealed to IP65, and will operate in ambient temperatures up to +70°C without additional cooling. This makes the PyroCouple M Series ideal for applications where there is only a small amount of room available to mount the sensor or the ambient temperature around the sensing head is higher than normal.

The electronics module measures 98mm x 64mm x 34mm. It is made of die-cast aluminium, sealed to IP65, and will operate in ambient temperatures up to +70°C. It is powered from a 24 VDC (28 VDC max) power source.

The emissivity setting is fixed at 0.95, making the PyroCouple M Series suitable for the majority of applications where the target is made of a non-reflective material such as paper, plastic, rubber, cloth, food etc. or it can be used to measure metals that are painted, anodised or oxidised.

DIAMETER OF TARGET SPOT MEASURED VERSUS DISTANCE FROM SENSING HEAD



ACCESSORIES

- Fixed mounting bracket
- Adjustable mounting bracket
- Air purge collar
- Laser sighting tool

OPTIONS

- Other outputs available upon request
- Longer cable (3 m max.)
- Certificate of calibration

Calex Electronics Limited

PO Box 2, Leighton Buzzard, Bedfordshire, England LU7 4AZ
 Tel: +44 (0)1525 373178/853800 Fax: +44 (0)1525 851319 Lo-call Tel: 0845 3108053
 E-mail: info@calex.co.uk Online: <http://www.calex.co.uk>

CALEX
ELECTRONICS LIMITED