

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
∅ 5mm @ 100mm	PCMCFLT-X	PCMCFMT-X	PCMCFHT-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

Construction	Sensing head Stainless Steel	Electronics Module 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.

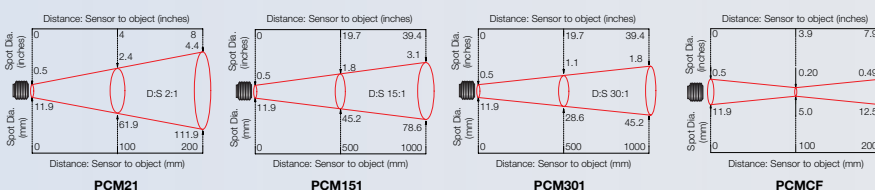
ACCESSORIES

- 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

DIAMETER OF TARGET SPOT MEASURED VERSUS DISTANCE FROM SENSING HEAD



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