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**

<table>
<thead>
<tr>
<th>Field of View</th>
<th>-20°C to 100°C</th>
<th>0°C to 250°C</th>
<th>0°C to 500°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:1</td>
<td>PCM21LT-X</td>
<td>PCM21MT-X</td>
<td>-</td>
</tr>
<tr>
<td>15:1</td>
<td>PCM151LT-X</td>
<td>PCM151MT-X</td>
<td>PCM151HT-X</td>
</tr>
<tr>
<td>30:1</td>
<td>PCM301LT-X</td>
<td>PCM301MT-X</td>
<td>PCM301HT-X</td>
</tr>
<tr>
<td>ø 5mm @ 100mm</td>
<td>PCM5FLT-X</td>
<td>PCM5FMT-X</td>
<td>PCM5FHT-X</td>
</tr>
</tbody>
</table>

**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

**Max. Loop Impedance**
24 V DC (13 V DC to 28 V DC max)

**Output Impedance**
56 Ω (voltage/thermocouple output)

**MECHANICAL**

**Sensing head**
- Stainless Steel
- ø 5mm diameter x 45mm long
- M16 x 1mm pitch

**Electronics Module**
- Die-cast Aluminium
- 98mm x 64mm x 34mm

**ENVIRONMENTAL**

**Environmental Rating**
IP65

**Ambient Temperature Range**
0°C to 70°C

**Relative Humidity**
95% max. non-condensing

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

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

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