

# TMP-100

## Multi-Point Digital Pyrometer

Protect your engine from costly failure. The TMP-100™ Multi-Point Digital Pyrometer measures the temperature of power cylinders, turbocharger, compressor discharge, coolant, lubricant, valves, etc... Monitors the temperature of 19 points in any process.

### 2-Year Warranty

### FEATURES

- Digital readout with 1° resolution.
- Intrinsically safe. Third-party approved. No expensive hazardous enclosure required.
- Heavily gold-plated selector switch for long life, trouble-free operation.
- Integral 2-pole selector switch permits using grounded or ungrounded thermocouples.
- Requires no external dc or ac power.
- Fits existing cutouts and mounting holes of other popular pyrometers.
- Compensation for lead lengths or lead resistances not required; use inexpensive small gauge thermocouple extension wire and save cost and space.
- Fully gasketed; rugged construction.
- Readout unaffected by power line noise and spikes (no line connections).



### SPECIFICATIONS

**Display:** 3-1/2 digit (–999 to +1999), 0.5" high, liquid crystal display, 1° increment. Brightness increases with ambient light (no outdoors fadeout).

- Momentarily pressing the front display push button activates the display for 50 seconds.

**Environment Temperature:** 0°F to +165°F (–18°C to +74°C); 0.25% maximum effect on readout.

**Selector Switch:** Two-pole, 19-position, double gold plating of contacts.

**Sensor:**

- *Thermocouples:* Grounded or ungrounded; integral cold junction compensation. Thermocouple extension wire resistance of up to 100Ω introduces less than 1° error.

**Power:** Two common 9-volt batteries such as Mallory M1604HD2, Eveready 1222, Ray-O-Vac D1604. Battery life is approximately 4000 viewings, or a couple of years, under typical operation. Appearance of decimal points after every digit indicates discharged batteries.

## INTRINSIC SAFETY

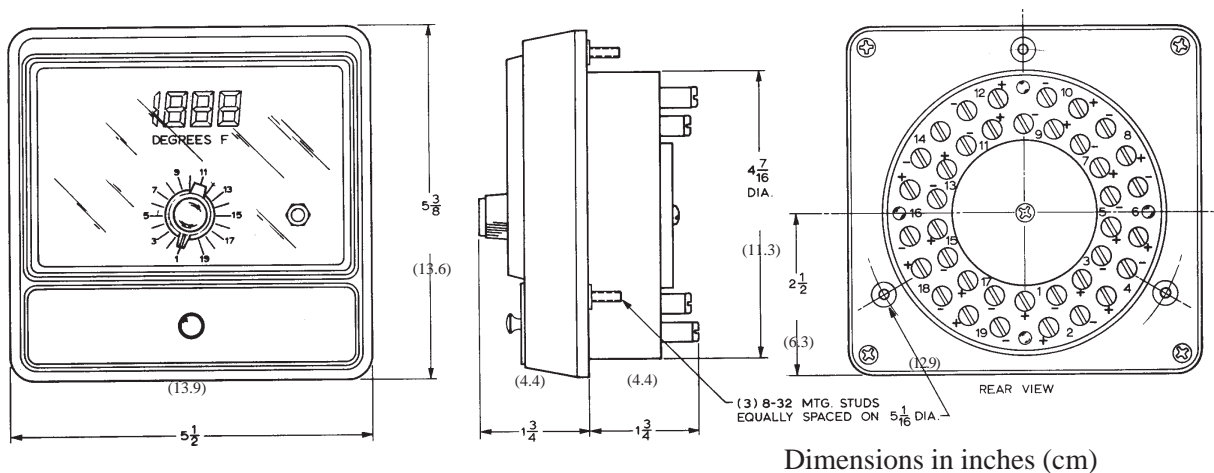
### \*THIRD PARTY APPROVALS



**Canadian Standards Assoc:**  
Intrinsically safe for Class I, Division 1, Groups C and D hazardous locations, when used only with previously mentioned 9-volt batteries.

Per ISA-RP-12.2 criteria. All circuits and electrical components operate at low energy levels, incapable of releasing sufficient electrical or thermal energy under normal or abnormal conditions to cause ignition of hazardous atmospheric mixtures of pentane, ethylene, or methane in their most easily ignited concentrations.

## OUTLINE DRAWING



Dimensions in inches (cm)

### HOW TO ORDER:

Part Number	Range	Sensor Type
TMP100-11	-50° to +1500°F	J (Iron-Constantan)
TMP100-12	-50° to +800°C	J (Iron-Constantan)
TMP100-13	-50° to +1800°F	K (Chromel-Alumel)
TMP100-14	-50° to +1000°C	K (Chromel-Alumel)