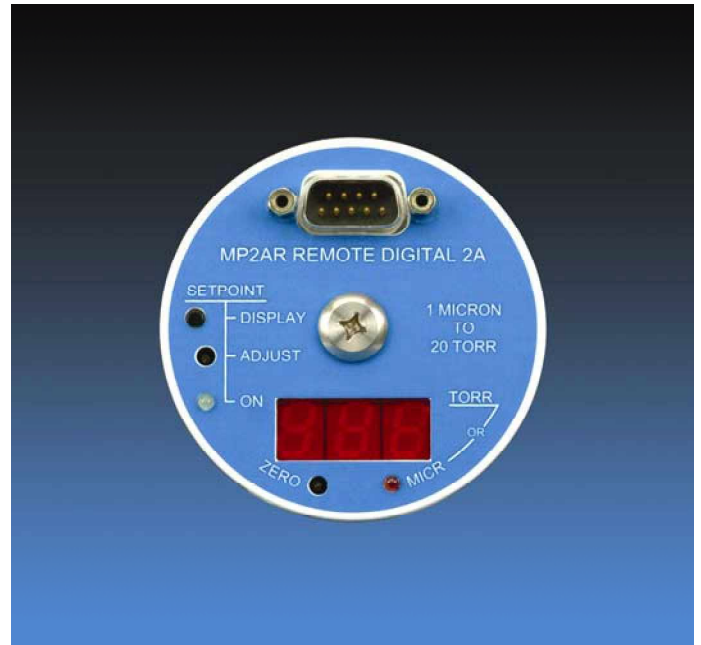


## MP2AR Remote Thermocouple Gauge

Range: 1 – 20,000 Microns

- **PERFORMANCE** – Provides repeatable vacuum measurement
- **DESIGN** – Rugged self-contained system will provide reliable and long lasting operation in the most demanding of industrial applications
- **EFFICIENCY** – Easy to replace sensors with zero adjustment
- **Economy** – Cost effective unit for fundamental applications



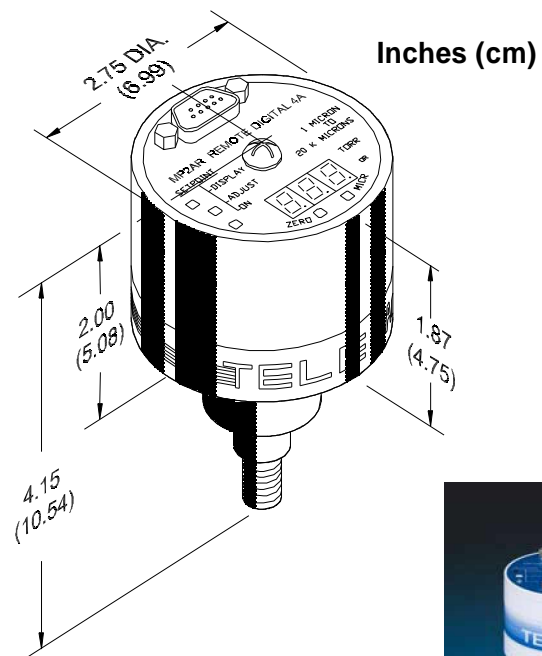
### Description

The MP2AR series Remote Thermocouple Gauges are compact, durable, cost advantageous and repeatable vacuum measuring systems. The rugged 2A Thermocouple sensor design withstands harsh operating environments and the MP2AR's compact design will fit in almost any space area and can be mounted in any position. The self-contained electronics allows you to measure vacuum without using traditional large panel-mount instrumentation systems, clearly a more economical solution. The linear 0-10V output signal can be used for remote displaying and controlling of your vacuum measurement system. The easily adjustable setpoint feature uses a Form C relay contact allowing you to control other functions of your process.

### Applications:

|                         |                       |                 |
|-------------------------|-----------------------|-----------------|
| Cryogenics              | Heat Treatment        | Coating Process |
| Pharmaceutical Products | Electron Beam Welders |                 |
| Petrochemical           | Textile               |                 |

### Dimensions



**Ordering Information**

MP2AR Analog output with LED Display  
 Display range:  $1 \times 10^{-3}$  to 20 Torr  
 1 relay contact,

Part Number  
 2 - 7910 - X YY

**X 0-10 V Output**

|   |          |                                |
|---|----------|--------------------------------|
| 1 | Linear : | 0 to 1000 microns              |
|   |          | 10 volts = 1,000 microns       |
|   |          | 0 volts = 0 microns            |
|   |          | Includes Non-Linear Full Scale |
|   |          | 0.88 volts = 20,000 microns    |
|   |          | 10 volts = 0 microns           |

**YY Vacuum Fittings**

|    |  |
|----|--|
| 10 | 1/8" NPT Nickel Plate Brass<br>Following are Stainless Steel Connections |
| 01 | 1/8" NPT   |
| 11 | 1/2" Port Diameter   |
| 30 | NW16 KF Flange   |
| 31 | NW25 KF Flange   |
| 32 | NW40 KF Flange   |
| 40 | 8 VCO male type  |
| 41 | 8 VCO female type  |
| 42 | 8 VCR male type  |
| 43 | 8 VCR female type  |
| 50 | 1.33" Conflat Flange   |
| 52 | 2.75" Conflat Flange   |

**Sensor Only Replacements**

|                                  | Part Number |
|----------------------------------|-------------|
| 2A Sensor w/ 1/8" NPT, Ni Brass  | 2-2100-10   |
| 2A Sensor w/ 1/8" NPT, Stainless | 2-2126-001  |
| 2A Sensor w/ NW 16, Stainless    | 2-2126-030  |

*others available upon request, contact factory*

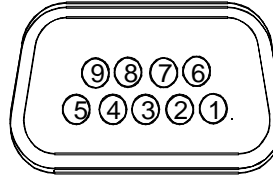
**Cables**

|                                   |            |
|-----------------------------------|------------|
| 10 ft. 9 pin to Strip & Tin Leads | 2-9852-010 |
| 20 ft. 9 pin to Strip & Tin Leads | 2-9852-020 |
| 35 ft. 9 pin to Strip & Tin Leads | 2-9852-035 |
| 50 ft. 9 pin to Strip & Tin Leads | 2-9852-050 |

**Specifications**

|                        |  |                     |
|------------------------|--|---------------------|
| Range                  | 1 to 20,000 microns                    |                     |
| Accuracy               | +/- 1 micron                           | 0-10 microns        |
|                        | +/- 10% of reading                     | 10 to 100 microns   |
|                        | +/- 20% of reading                     | 100 to 1000 microns |
| Mounting Orientation   | None                                   |                     |
| Input Voltage/Power    | Required 24V DC @ 100 mA               |                     |
| Setpoint Relay         | Form C Contact<br>24V .5 A rating      |                     |
| Operating Temperature  | + 15 to +50 C                          |                     |
| Calibration Medium     | Dry Air or Nitrogen                    |                     |
| Sensor Material        | Stainless Steel or Nickel Plated Brass |                     |
| Overpressure Tolerance | 150 PSI                                |                     |

**Electrical Connections**



1. Relay Normally open
2. Relay normally closed
3. +24 Volt power
4. Power common
5. Linear signal output
6. Relay common contact
7. Non-linear signal output
8. Signal return
9. Set point output

**Output Graph**

**2A (linear)**

