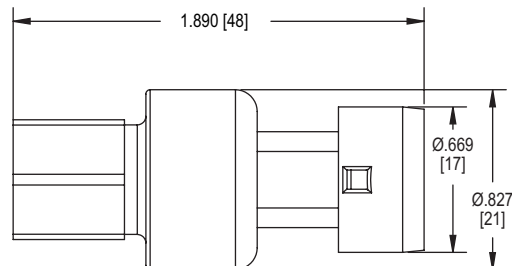




## Series 638R OEM Pressure Transmitter

### Specifications - Installation and Operating Instructions



The **Series 638R OEM Pressure Transmitter** is a high-accuracy, low-cost pressure transmitter designed for industrial markets. This transmitter is designed to work with all liquids and gases that are compatible with the wetted materials. The series features a number of configurable options including wetted materials, process connections, and pressure ranges. Whether the application involves aggressive fluids or extreme temperatures, this transmitter is a great option for most applications.

#### INSTALLATION

- Location:** Select a location where the temperature of the transmitter will be between  $-40^{\circ}$  to  $275^{\circ}\text{F}$  ( $-40^{\circ}$  and  $135^{\circ}\text{C}$ ). The length of pipe connecting the transmitter to the pressure source can be any length necessary. However, the proximity to the pressure source may affect response time.
- Position:** The transmitter is not position sensitive and can be installed in any orientation in order to best fit application requirements.
- Pressure Connection:** Use a small amount of suitable sealant to prevent leaks. Be sure the pressure passage inside the port is not blocked.
- Electrical Connections**

**Wire Length** - The maximum length of wire connecting the transmitter and receiver is a function of wire size and receiver resistance. Wiring should not contribute more than 10% of the receiver resistance to the total loop resistance. For extremely long runs (over 1000 feet), choose receivers with higher resistances to minimize the size and cost of connecting leads. Where wiring length is under 100 feet, wire as small as 22 AWG can be used. Wiring information can be found in Figure A.

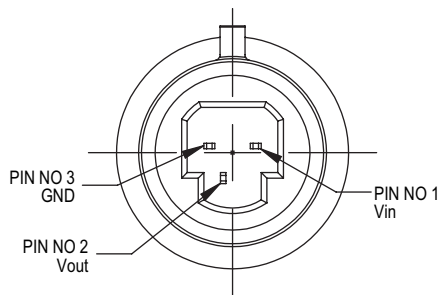


Figure A: Packard connection pin-out

**Note:** The Series 638R requires a 5 VDC power supply. The transmitter can withstand electrical surges in excess of 5 VDC, but will not operate normally at a constant voltage over the rated power supply. Powering the transmitter with voltages above the specified voltage are likely to cause device damage or failure.

#### SPECIFICATIONS

**Service:** Compatible gases and liquids.  
**Wetted Materials:** Brass, aluminum, or 316 SS.  
**Accuracy:**  $\pm 1.2\%$  F.S. (includes linearity, hysteresis, repeatability and calibration); Static error band @  $25^{\circ}\text{C}$ , 5.0 VDC supply voltage.  
**Cycle Life:** 10 million F.S. cycles.  
**Storage Temperature:**  $-40^{\circ}$  to  $302^{\circ}\text{F}$  ( $-40^{\circ}$  to  $150^{\circ}\text{C}$ ).  
**Operating Temperature:**  $-40^{\circ}$  to  $275^{\circ}\text{F}$  ( $-40^{\circ}$  to  $135^{\circ}\text{C}$ ).  
**Pressure Limit:** see model chart.  
**Thermal Effect:**  $\pm 0.013\%$  FS/ $^{\circ}\text{C}$ .  
**Power Supply:** 5 VDC.  
**Output Signal:** 0.5-4.5 VDC ratiometric.  
**Response Time:** 10 ms typical.  
**Output Load:** 20 k $\Omega$  min. (pull-up or pull-down).  
**Current Consumption:** < 10 mA @ 5.5 VDC (8.5 mA typical).  
**Electrical Connection:** Packard connection.  
**Process Connection:** 7/16" 20 UNF (female) or 1/4" NPT (female).  
**Enclosure Rating:** IP67 (with IP67 plug).  
**Mounting Orientation:** Mount in any position.  
**Weight:** 1.1 oz (30 g).  
**Agency Approvals:** CE.

#### VOLTAGE OUTPUT OPERATION

An electrical power supply delivering 5 VDC with minimum current capability of 10 mA (per transmitter) is required to power the device. Shielded cable is recommended when wiring.

#### MAINTENANCE/REPAIR

Upon final installation of the Series 638R, no routine maintenance is required. The Series 638R is not field serviceable and is not possible to repair the unit. Field repair should not be attempted and may void warranty.

#### WARRANTY/RETURN

Refer to "Terms and Conditions of Sale" in our catalog and on our website. Contact customer service to receive a Return Goods Authorization number before shipping the product back for repair. Be sure to include a brief description of the problem plus any additional application notes.