Process Automation Solutions

Data Sheet 692E/082K2

Model 692E Two-wire Electrodeless Conductivity and % Concentration Transmitter

- **Multiple readouts. (Conductivity, concentration, temperature, mA output)**
- **Built in concentration table**
- **Four different temperature compensation method**
- **Define any solution in % concentration**
- **Simple automatic calibration.**
- **Measures conductivity or % concentration.**
- **Easy setup and operation.**
- **Diagnostics identify problems.**
- **NEMA 4X protection.**

• Specifications

Operational:

Display.....4-1/2 digit LCD with measurement unit and setup variable identifiers, 7/8 inch high digits

Measuring Ranges: Conductivity.....0.0-500.0 µS/cm, 0-2000 µS/cm, 0.000-2.000 mS/cm, 0.00-20.00 mS/cm, 0.0-200.0 mS/cm, 0-2000 mS/cm or 0.00-8.00 S/cm, selectable with user-entered full-scale value

Concentration…….0.0-100.0%

Temperature……..(–) 10.0 to (+) 200.0°C (14 to 392°F)

Ambient Conditions .....-20 to + 60°C (-4 to +140°F), 0 to 95% relative humidity, non-condensing.

Temperature Compensation .....None, user-entered linear % per C slope, user-entered temperature curve, or automatic over –10 to +200°C when built-in solution concentration conversion table is used. Temperature sensor is 1000 ohm platinum RTD.

Sensor-To-Transmitter Distance:……Maximum cable length is a function of measuring range and allowable non-linearity. The following schedule is recommended:

Full-scale Range	Max. Length
500 to 50,000 microSiemens/cm	100 feet
50, 000 to 2, 000,000 microSiemens/cm	200 feet

Power Requirements……..16-36 volts DC

Analog Outputs ……Isolated 4-20 mA with output hold feature

Range Expand - The 4-20 mA output can be made to represent any segment of the measuring scale.

Maximum Loop Load……With 24 VDC supply: 400 ohms
(load in series with 692 and power supply) With 32 VDC supply: 800 ohms
With 36 VDC supply: 1000 ohms

Transmitter Performance (Electrical, Analog Output):

Sensitivity .....0.3% of span

Stability .....0.1% of span per 24 hours, non-cummulative

Non-Linearity .....0.5% of span

Repeatability .....0.2% of span or better

Temperature Drift …Zero: 0.05% of span per °C; Span: 0.025% of span per °C

Response Time .....1,3,10 or 30 seconds to 90% of value upon step change, selectable

Mechanical:

Enclosure ……General purpose – safe for Division 2; NEMA 4X, Polycarbonate with Two ½ inch conduit holes and four stainless steel mounting tabs

Mounting Conf….Surface mount; optional vertical or horizontal pipe mounting

Net Weight ……..3 lbs. (1.36 kg) approximately

***Note**: For long cable runs, the resistance of the wire must be considered and may decrease maximum load capability.*

Not applicable when using barrier for intrinsic safety.

ELECTRODELESS CONDUCTIVITY CONCENTRATION

Ordering Information

MODEL NUMBER

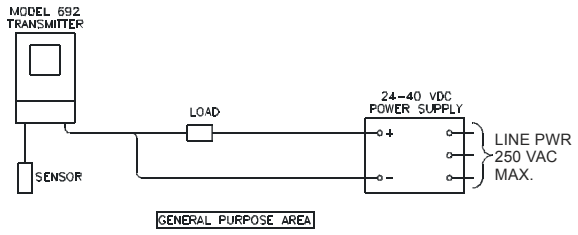
692E Electrodeless conductivity transmitter in NEMA 4x enclosure.

N.....Standard Instrument
K.....Special Instrument

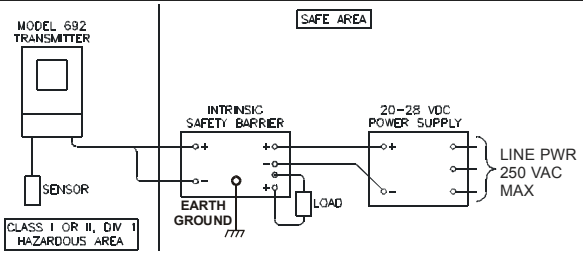
Product Number

Choose one from each category.

Typical Wiring System



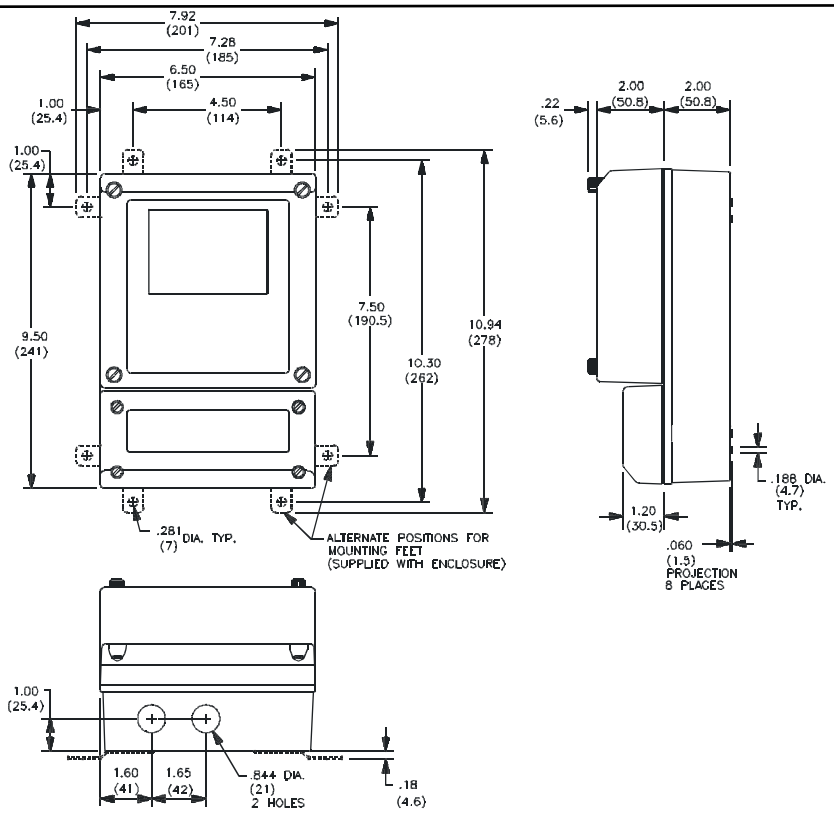
General Purpose Area Use (Powered without Barrier)



Hazardous Area Use (Powered through Barrier)

Dimensions

Inches (mm)



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