5081 (2-wire)

Model 5081 pH & ORP 2-Wire Loop-Powered Transmitter & Analyzer



pH/ORP/ISE Sensors WITHOUT preamplifier Hook-Up Schematic
pH/ORP/ISE Sensors WITH preamplifier Hook-Up Schematic
pH/ORP/ISE Sensors with Mini External Preamplifier Hook-Up Schematic
Guide to quick disconnect Q7M/Q7F snap cable system for Rosemount transmitters

- The Transmitter has a rugged, weatherproof , corrosion-resistant enclosure.
- NEMA 4X and IP65 of epoxy-painted aluminum.
- This enclosure also meets NEMA 7B explosion-proof standards.
- 24V DC Operation Standard, 12 V minimum and 42.4 maximum.
- Continous Diagnostics monitor sensor performance and warns of failure (FAULT) or approaching failure (WARNING).

- CE Certification for Class I, Division I Areas and FM group A-G.
- Automatic Two-Point Buffer Calibration reduces errors.
- Choice of Communication Protocol: HART® or Foundation Fieldbus.
- Non-Volatile Memory retains program settings and calibration data during power failures.
- Solution Temperature Compensation converts measured pH into the pH at 25°C.

Product Specifications for Hart & Fieldbus (242K-PDF)

5081 pH/ORP Operation Manual (2,465K-PDF)

Measurement	Input	Measurement Range	Outputs	Calibration Points	Compatible Sensor(s)	Special Features
pH/ORP	*Single or Dual Channel* – pH/ORP	– 0 to 14 pH (standard) – Fully Scalable from 1 to 13 pH units	– Analog 0-20 mA or 4-20 mA output for pH/ORP/ISE or temperature for each input channel – Optional HART or ProfiBUS Digital Outputs	– 2 point auto buffer recognition for pH for slope determination – 1 point user defined pH standardize calibration to correct for offset (drift)	– Any Suitable ASTI pH/ORP Sensor with 100 or 1000 Ohm Platinum TC – Any Suitable ASTI pH/ORP Sensor with 100 or 1000 Ohm Platinum TC & 1056 compatible preamplifier	– Excellent option for severe service pH & ORP measurement in areas with flammable gas and corrosive environments.
Contacting Conductivity	*Single or Dual Channel* – Conductivity Cell	– Cell from 0.01 to 10.0, user selectable – Ranges from 0-200 microSiemens (0.01/cm) to 0-200 milliSiemens (10.0/cm) as mates with cell	– Analog 0-20 mA or 4-20 mA output for Conductivity or temperature for each input channel – Optional HART or ProfiBUS Digital Outputs	– Zero Calibration (Capitance) – Cell Constant calibration tofFind exact effective (apparent) cell constant in standard solution or process media	– Any Suitable Contacting Conductivity Sensor with 1000 Ohm Platinum TC	– Support for displaying in concentration units of acids, bases and electrolytes as well as salinity – Special ultrapure water temperature compensation and support for display in resistivity units

Toroidal Conductivity (Contactless Inductive)	*Single or Dual Channel* – Toroidal Conductivity Sensor	– Range from 0.050 to 2,000 milliSiemens (2 Siemens)	– Analog 0-20 mA or 4-20 mA output for Conductivity or temperature for each input channel – Optional HART or ProfiBUS Digital Outputs	– Zero Calibration (Capitance) – Cell Constant calibration to find exact effective (apparent) cell constant in standard solution or process media	– Any Suitable Toroidal Conductivity Sensor with 20/20 Windings and 1000 Ohm Platinum TC	– Support for displaying in concentration units of acids, bases and electrolytes as well as salinity – Excellent choice for strong acid, strong base and strong electrolyte solutions at elevated temperatures