

# **SP21** Pressure Transmitter

The SP21 pressure transmitters are designed to measure the pressure of liquids and gases.

They feature MEMS (Micro-Electro-Mechanical Systems) Technology, 316SS piezoresistive silicon chips, polarity protection and excellent long term stability. These highly reliable sensors are available with Gauge or Absolute pressure ranges, a variety of signal outputs (0.5 to 4.5Volts, 1 to 5Volts, 0 to 5Volts or 4 to 20mA), are fully temperature compensated and can be powered from 8 to 30Vdc.

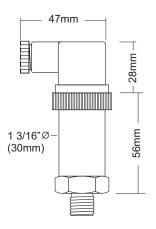
# Technology:

As pressure increases within a vessel, a displaced electrical charge accumulates on the opposing surface of the piezoresistive cell. This generates an output signal, which is converted to a standardized Voltage or 4-20-mA (2 wire) signal that is directly proportional to the pressure applied.

Standard connections are 1/4", 1/2" (BSP or NPT), but separate adaptors can be ordered to conform to individual process requirements.



## **Dimensions**



# **Wiring Diagram**

# Output: 4...20mA Power Supply 8...30Vdc Pressure Transmitter 1 4 ... 20 mA

**DIN 43650 Connector** 

# **Specifications**

### **SP21**

Application: Pressure measurement for liquid and gas

Power Supply: 8...30Vdc

Current Consumption: Max.: 22mA Output: 4...20mA (2 wires) Load Resistance (Zin):  $500\Omega$ 

Precision / Stability / Linearity:  $\pm~0.25\%$ 

**Resolution:**  $100\mu$ A

Type of Sensor: 316 Stainless Steel piezoresistive

Pressure Range: 0.1 to 1000 Bar

Electrical Connection: DIN 43650 Connector Process Connection: 1/4" BSP or NPT Body Material: 304 Stainless Steel Storage Temperature: -40 to +125°C Operating Temperature: -40 to +120°C Compensated Temperature: -10 to +70°C

Over Pressure: 3 x F.E. Vibration: 2g /20 - 500Hz

Protection: Reverse polarity / Electromagnetic Interference

Class Protection: IP65 (NEMA 4)

## Note:

Documentation available:

- Certificate of Guarantee/Conformity
- Installation/Operation Manual