

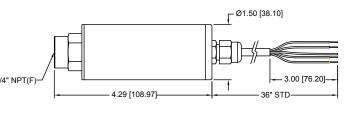
# INDUSTRIAL

### **MODEL M-SPIKE, V-SPIKE, C-SPIKE** SPIKE SERIES PRESSURE TRANSDUCER



#### STANDARD WIRING

| WIRE   | M-SPIKE | V-SPIKE  | C-SPIKE  |    |
|--------|---------|----------|----------|----|
| 1/RED  | +EXC    | +EXC     | +EXC/SIG | 1  |
| 2/GRN  | +SIG    | +SIG     | N/C      |    |
| 3/WHT  | -SIG    | N/C      | N/C      |    |
| 4/BLK  | -EXC    | -EXC/SIG | -EXC/SIG |    |
| 5/BLU  | N/C     | N/C      | N/C      | Ι. |
| 6/BRN  | N/C     | N/C      | N/C      | 1/ |
| SHIELD | OPEN    | OPEN     | OPEN     | 1  |



Inches (mm)

#### **PRODUCT OVERVIEW:**

The Spike Series from GP:50 is a family of pressure transducers, specifically designed to withstand high-amplitude, high-frequency spikes that commonly occur in hydraulic pressure sensing applications. A proprietary sensor design provides increased over pressure protection as high as 10x.

#### REF DIMENSIONS ONLY. CONSULT FACTORY FOR ACTUAL DIMENSIONS.

#### **FEATURES:**

- 0 to 100 PSI thru 0 to 15K PSI (7 BAR to 1,034 BAR)
- 3X FSO proof pressure or 22.5K (1,551 BAR), whichever is less
- mV/V, Vdc & 4-20 mA outputs
- Ruggedized, welded, stainless steel construction
- Standard accuracy of ±0.20 % FSO

#### **APPLICATIONS:**

- Die casting
- Injection molding
- Stamping presses
- Hydraulic test stands
- Compressors and pumps

#### **OPTIONS:**

- mV/V, Vdc & 4-20 mA outputs
- Zero & span adjustments
- 80% and 100% shunt calibration
- Alternate connectors & pressure ports



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## **GP:50 MODEL M-SPIKE, V-SPIKE, C-SPIKE**

#### **REFERENCE SPECIFICATIONS**

### Standard configurations shown, consult factory for other options

| ELECTRICAL          | LECTRICAL  |  |  |
|---------------------|--|--|--|
| Output Signal:      | (M-Spike) 3 mV/V (Amplified Output)<br>(V-Spike) 0 to 5 Vdc, 0 to 10 Vdc (alternate<br>outputs available)<br>(C-Spike) 4-20 mA |  |  |
| Excitation Voltage: | (M-Spike) 3.5 to 15 Vdc excitation<br>(C-Spike & V-Spike) 4-20 mA , 9.0 to 36 Vdc<br>excitation                                |  |  |
| Bridge Resistance:  | M-Spike Only: 4K-6K Ω (Amplifier on output stage)  |  |  |
| Circuit Protection: | RFI, EMI & Reverse polarity protected  |  |  |
| Response Time:      | <5 ms 10% to 90%   |  |  |

| MATERIALS OF CONSTRU | IALS OF CONSTRUCTION                        |  |  |
|----------------------|---|--|--|
| Wetted Parts:        | 17-4 PH stainless steel (options available) |  |  |
| Housing:             | 316 stainless steel                         |  |  |

| ACCURACY (Non-Linearity & Repeatability @ + 70 °F (BFSL)) |                             |
|---|-----------------------------|
| Standard:   | ±0.2% FSO                   |
| Improved:   | ±0.1% FSO                   |
| Zero & Span Balance:                                      | ±1% FSO at + 70 °F for each |

| MECHANICAL             |   |  |  |  |
|------------------------|---|--|--|--|
| Process Connection:    | ½″ NPT (F)  |  |  |  |
| Electrical Connection: | 36" Long, 24 AWG, 4 conductor PVC<br>jacketed cable                         |  |  |  |
| Proof Pressure:        | 5X-10X FSO (Range Dependant) or 22.5K<br>PSI (1,551 BAR), whichever is less |  |  |  |
| Burst Pressure:        | 10X FSO or 22.5K PSI max. (1,551 BAR), whichever is less                    |  |  |  |
| Approximate Weight:    | 10 oz. (0.3 kg) nominal   |  |  |  |

#### PRESSURE RANGES

0 to 100 PSI thru 0 to 15K PSI (0 to 7 BAR thru 0 to 1,034 BAR)

| THERMAL SPECIFICATIONS |                                      |  |
|------------------------|--------------------------------------|--|
| Operating Range:       | -20 °F to +190 °F (-29 °C to +88 °C) |  |
| Compensated Range:     | 0 °F to +180 °F (-17.7 °C to +82 °C) |  |
| Storage Ambient:       | -65°F to +250 °F (-53 °C to +121 °C) |  |
| Effect on Zero/Span:   | ±1.0% FSO/100 °F                     |  |

