DESCRIPTION
The Series 639 Pressure Transmitters offer outstanding performance for critical applications with an accuracy of 0.08% F.S. Best Straight Line for combined effects of non-linearity, hysteresis, and repeatability. Ideal for industrial environments, sensor resists effects from shock and vibrations. Zero and span trim pots located on the rear of the transmitter body can be independently adjusted. Transmitters feature RFI and EMI, reverse polarity, and over voltage protection. Units are supplied with a 3 foot (1 m) integral cable with stripped ends for easy installation.

INSTALLATION
Electrical Connections
The Series 639 Pressure Transmitter is a true 2-wire, 4-20 mA current output device. Electrical connections are made via the 3 foot (1 m) integral cable with stripped ends as shown below.
- Red wire: +Ve Signal
- Blue wire: -Ve Signal
- Black wire: Case ground

Application Notes
1. The power supply must be between 9 and 30 volts d.c. applied to the transmitter body. Care should be taken when selecting this voltage to ensure that with the load resistance and line resistance together the transmitter is operating within the areas as indicated on the Load vs. Power graph. The output signal appearing across the load resistor selected can therefore vary within the confines of the operating area.

2. Zero and Span adjustments can be carried out using the trim pots on the rear of the body. To gain access to trim pots remove backend assembly as follows:
   a. Loosen the two mounting screws.
   b. Gently pull and rotate until assembly comes loose.
   c. Set zero and span with known pressures.
   d. Reverse a. and b.
3. Grounding to be carried out dependent upon application.

PHYSICAL DATA
Service: Liquid, gas or vapor.
Output: 4-20 mA, 2-wire.
Supply Voltage: 9 to 30 VDC.
Loop Resistance: 750Ω @ 24VDC.
Overrange: 300% upper range limit.
Accuracy: ±0.08% F.S. Best Straight Line, (includes non-linearity, hysteresis and non-repeatability).
Stability: 0.1% F.S./yr.
Zero Offset and Span Setting: ±5% adjustable by sealed, non-interacting potentiometers.
Thermal Effect: (includes zero and span) 0.005% F.S./˚F, -5 to 175˚F (-20 to 79˚C).
Wetted Parts: 316 SS, Hastelloy C.
Ambient Operating Temperature: -5 to 175˚F (-20 to 79˚C).
Process Interface Temperature: -20 to 250˚F (-29 to 121˚C).
Storage Temperature: -40 to 250˚F (-40 to 121˚C).
Fill Fluid: Silicone oil.
Electrical Connections: 3 ft (1 m) integral cable with stripped ends.
Pressure Connection: ¼" NPT(F).
Intrinsic Safety: Certified for use with barrier systems to CSA Certification Class I, Groups A, B, C and D with a T4 temperature code.
RFI Protection: Conforms with IT8839 requirements from 10 kHz to 500 MHz.
Voltage Spike Protection: Units will withstand 600 Volt spike test to IEC 60-2 form without damage, applied between excitation lines or excitation line and case.
Weight: 1.1 lbs (0.50 kg).

STOCKED MODELS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Pressure Range</th>
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<tbody>
<tr>
<td>639-0</td>
<td>0 to 1.5 psig (0 to 0.1 bar)</td>
</tr>
<tr>
<td>639-1</td>
<td>0 to 10 psig (0 to 0.7 bar)</td>
</tr>
<tr>
<td>639-2</td>
<td>0 to 30 psig (0 to 2 bar)</td>
</tr>
<tr>
<td>639-3</td>
<td>0 to 100 psig (0 to 7 bar)</td>
</tr>
<tr>
<td>639-4</td>
<td>0 to 300 psig (0 to 20 bar)</td>
</tr>
</tbody>
</table>

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