MODEL 543

FEATURES:

- Pressure and temperature in a single device
- Reduces I/O points
- Compact 1-inch (25.4 mm) diameter
- Rugged all-welded stainless steel design
- CANbus SAE J1939 or CANopen protocol
- Standard ranges from 0-50 PSI thru 0-10K PSI (3.5 thru 690 bar)
- Temperature ranges from -40°F to +300°F (-40°C to 150°C)

APPLICATIONS:

- Oilfield vehicle engine oil and transmission monitoring
- Oil rig topside controls
- Automotive test stands
- Process skids
- Medical equipment
- Laboratory R&D

PRODUCT OVERVIEW:

The Model 543 series from GP:50 is an all-stainless steel, dual pressure and temperature CANbus output transmitter. Its compact design reduces I/O and insertion points where size and weight are considerations. Units are available in a variety of pressure and temperature ranges, with support for both CANbus J1939 and CANopen protocols.

FIELD OPTIONS:

- Field adjustable zero & span
- Adjustable message addresses, bit rate and custom streaming
  Optional extended CAN 2.0B 29-bit CAN identifiers
- Alternate probe lengths, process ports and electrical connections
  Optional improved temperature specifications available. Please consult factory.
**ELECTRICAL**

Supply Voltage:
- Standard: 9-32 Vdc
- Optional Expanded: 4.5 to 32 Vdc

Output Signal: CANbus SAE J1939

Current Draw: 40 mA

Standard Resolution: 18-bit

Zero Balance: ±0.2% FSO at +70 °F

Standard Messaging:
- Pressure, temperature & raw sensor signals
- (Up to four messages can be streamed)

Standard CAN Protocol:
- 11-bit CAN identifiers
- (Optional Extended CAN 2.0B 29-bit CAN identifiers)

Connection: 6-pin Bendix connector

**MATERIALS OF CONSTRUCTION**

- Wetted Parts: 17-4 PH stainless steel
- Housing: 300 series stainless steel

**STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)**

Standard: ±0.5% FSO

Improved: ±0.2% FSO or ±0.1% FSO

**DIMENSIONAL DRAWING**

All dimensions are in inches (mm)

**PRESSURE RANGES**

- 0-50 thru 0-10K PSI (3.5 thru 690 BAR)
- gauge, sealed gauge, absolute

**THERMAL SPECIFICATIONS (FOR PRESSURE OUTPUT)**

- Compensated: +30 °F to -185 °F (-1 °C to -120 °C)
- Operating Ambient: -40 °F to +185 °F (-40 °C to +85 °C)
- Operating Process: -40 °F to +250 °F (-40 °C to +120 °C)
- Storage: -65 °F to +250 °F (-55 °C to +120 °C)
- Effect on zero/span: < ±0.5 % FSO/100 °F

**TEMPERATURE MEASUREMENT**

- Ranges: -40 °F to +300 °F (-40 °C to +150 °C)
- Standard Accuracy: ±0.5 °C from -70 °F to +260 °F (-55 °C to +125°C)
- Expanded Accuracy: ±1.0 °C from -40 °F to +400 °F (-40 °C to +205 °C)
- Standard Resolution: 32 °F (0.06 °C), 33 °F (0.5 °C) expanded

**MECHANICAL**

- Process connection: ½” NPT (M) with 0.75” temperature probe
- Proof Pressure: 2X FSO (optional 5X)
- Burst Pressure: 5X FSO
- Optional ports and probe lengths available

**REFERENCE SPECIFICATIONS**

© 2015 GP:50 NY Ltd.

<table>
<thead>
<tr>
<th>PIN</th>
<th>MODEL 543</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/1</td>
<td>+EXC</td>
</tr>
<tr>
<td>B/2</td>
<td>-EXC</td>
</tr>
<tr>
<td>C/3</td>
<td>CASE GND</td>
</tr>
<tr>
<td>D/4</td>
<td>CANBUS HI</td>
</tr>
<tr>
<td>E/5</td>
<td>CANBUS LOW</td>
</tr>
<tr>
<td>F/6</td>
<td>N/C</td>
</tr>
</tbody>
</table>

L = 0.50 TO 7.00 INCH PROBE LENGTH

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.

© 2015 GP:50 NY Ltd.  |  2770 Long Rd, Grand Island, NY 14072 USA
Tel: +1.716.773.9300    Fax: +1.716.773.5019  Email: sales@gp50.com    Web: www.gp50.com