



HIGH-ACCURACY DIGITAL PRESSURE TRANSDUCER



Model 741
High-Accuracy
Digital Pressure Transducer

MODEL 741

FEATURES:

- RS485 (TIA 485) serial communication standard
- Supports MODbus RTU and ASCII Protocols
- 4000 ft max data transmission
- EMI resistant
- High accuracy $\pm 0.05\%$ FSO
- -40 to +180 °F (-40 to 82 °C) compensation
- Compact, lightweight, all stainless steel design

APPLICATIONS:

- Industrial Control Systems
- Data Acquisition Systems
- Programmable Logic Controllers
- Automotive and Jet Engine Test Stands

PRODUCT OVERVIEW:

GP:50 model 741 provides RS485 digital data transmission used in serial communication protocols standard for Industrial Control Networks and Data acquisition systems. High static accuracy, thermal performance and lack of EMI makes the 741 ideal for the auto and aircraft manufacturing floor.

FIELD OPTIONS:

- Modbus RTU or ASCII serial communication protocol
- Adjustable Baud Rate
- System Output Re-Zero and Digital Shunt

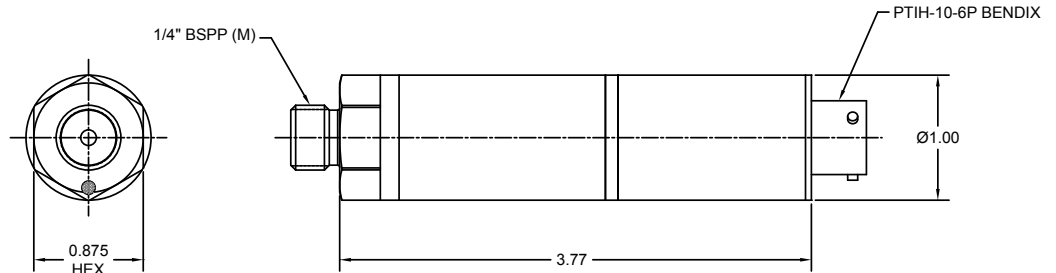
*The following specifications provide a broad facet of this model.
Please contact GP:50 for your specific application.*

GP:50 MODEL 741

DIMENSIONAL DRAWING

All dimensions are in inches (mm)

WIRING CONFIGURATION	
PIN	DESCRIPTION
1	+EXC
2	+RS485
3	-RS485
4	-EXC
5	N/C
6	N/C



REFERENCE SPECIFICATIONS

ELECTRICAL	
<ul style="list-style-type: none">• Supply Voltage: 10-32 Vdc• Digital Output: RS-485 (TIA-485)• Conversion Rate: 4.8 KHz• Current Draw: 40 mA• Standard Resolution: 18 Bit• Zero Balance: +/-0.1% FSO @ 70 °F• Standard Messaging: Pressure, Temperature (optional)• Protocol: Modbus ASCII, or RTU• Connection: 36" long PVC Jacketed cable, or 6-Pin Bendix connector	
MATERIALS OF CONSTRUCTION	
<ul style="list-style-type: none">• Wetted Parts: 316 or 17-4 PH SST• Housing: 300 series stainless steel	
STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)	
<ul style="list-style-type: none">• Standard: ±0.1% FSO; ±0.05 % FSO available• Zero/Span Balance: ±0.25% FSO	
MECHANICAL	
<ul style="list-style-type: none">• Process connection: 1/4" NPT (M) (options available)• Proof Pressure: 2X FSO (optional 5X)• Burst Pressure: 5X FSO	
PRESSURE RANGES	
<ul style="list-style-type: none">• 0 to 1 thru 0 to 40,000 PSI (0.069 thru 2758 BAR) gauge, sealed gauge, absolute	
THERMAL SPECIFICATION	
<ul style="list-style-type: none">• Compensated: 0 °F to +180 °F (-18 °C to +82 °C)• Effect on zero/span: ±0.5% FSO/100 °F each (±1.0% FSO/100 °F from -40 to 185 °F / (-40 °C to +8 °C))• Operating Temp: -40 °F to +180 °F (-40 °C to +82 °C)• Improved Temperature Performance: ±0.25% FSO/100 °F (-40 °F to +250 °F (-40 °C to +121 °C))	

**Standard configurations shown.
Please consult factory for other options.**

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.