

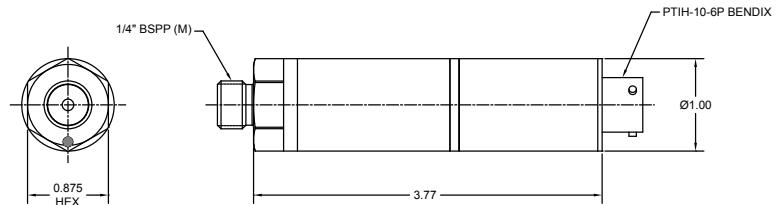


## MODEL 741

### HIGH-ACURACY RS485 / DIGITAL PRESSURE TRANSDUCER



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



Inches (mm)

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

#### 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.

#### 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

#### OPTIONS:

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

# GP:50 MODEL 741

## REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

ELECTRICAL	
Digital Output: (Output Signal)	RS-485 (TIA-485)
Excitation Voltage:	10 to 32 Vdc
Conversion Rate:	4.8 KHz
Current Draw:	40 mA
Standard Resolution:	18 Bit
Standard Messaging:	Pressure
Protocol:	Modbus ASCII, or TRU
Baud Rate:	115200

MATERIALS OF CONSTRUCTION	
Wetted Parts:	316 or 17-4 PH SST
Housing:	316 Series Stainless Steel
Internal Fill:	≤2000 PSI Silicone Oil (Fomblin optional)

ACCURACY (RSS): Hysteresis, Non-Linearity & Repeatability @ +70 °F)	
Standard:	±0.15% FSO
Improved:	±0.05% FSO
Zero & Span Balance:	±0.5% FSO

MECHANICAL	
Process Connection:	1/4" NPT (M) (Options available)
Electrical Connection:	PTIH-10-6P connector (Options available)
Proof Pressure:	2X FSO (Optional 5X)
Burst Pressure:	5X Typ (2X for ranges ≥20K PSI)
Approximate Weight:	8 oz (0.23 kg)

PRESSURE RANGES	
0 to 1 thru 0 to 15,000 PSI (0.069 thru 1035 BAR) (Some specs may be affected above 8,000 PSI - consult factory)	
Gauge, Sealed Gauge, Absolute or Vacuum	

THERMAL SPECIFICATIONS	
Operating Range:	-40 °F to +180 °F (-40 °C to +82 °C)
Compensated Range:	0 °F to +180 °F (-18 °C to +82 °C)
Effect on Zero/Span:	±0.5% FSO/100 °F (±1.0% FSO/100 °F from -40 to +185 °F / (-40 °C to +85 °C))
Improved Compensated Range:	±0.25% FSO/100 °F (-40 °F to +180 °F (-40 °C to +82 °C))
Storage Ambient:	-40 °F to 250 °F (-40 °C to +121 °C)

