



Pressure, Level & Temperature Transmitters & Transducers

AEROSPACE / GROUND SUPPORT PRECISION PRESSURE TRANSDUCER / TRANSMITTER

Models 142, 242, 342

Developed specifically for the harsh operating environments encountered in ground support testing, these units feature the latest blend of mechanical and circuit technology to achieve superior ruggedness, accuracy, and fatigue life. When you need assistance with your pressure application, call GP:50 Aerospace.

FEATURES:

- Accurate to $\pm 0.1\%$ FSO
- Environment proof
- All-welded, hermetically sealed, stainless steel
- Indestructible - totally encapsulated electronics
- Wide temperature operating range
- RFI/EMI protection to Mil std 461

PRESSURE RANGES:

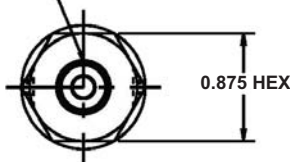
- From 0-15 psi to 0-15,000 psi

ACCURACY:

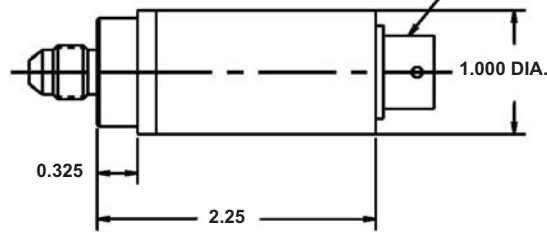
- From 0.2% to 0.1%



7/16-20
 UNJF-3A THREAD



BENDIX PTIH-10-6P
 (OR EQUIV.) CONNECTOR



Some options will affect dimensions. Consult factory if important.

WIRING CODE

	142	242	342
A/1	+ EXC.	+ EXC.	+ EXC./SIGNAL
B/2	+ SIGNAL	+ SIGNAL	NC
C/3	- SIGNAL	NC	NC
D/4	- EXC.	- EXC./SIGNAL	- EXC./SIGNAL
E/5	NC OPTION GH	NC OPTION GH	NC OPTION GH
F/6	NC OPTION GH	NC OPTION GH	NC OPTION GH

GP:50 reserves the right to make product improvements and amendments to the product specifications stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.



Specifications reflect standard product, improved performance/mechanical options available. Modifications may alter specs, consult factory for more information.

Accuracy		Within ±0.2% FSO, RSS (includes the effects of non-linearity, hysteresis, non-repeatability) ±0.1% FSO, RSS Available	
Full Scale Output (FSO) *	(Model 142) 3.0 mV/V ±0.5% FSO at 70°F	(Model 242) 5.0 Vdc ±0.5% FSO at 70°F	(Model 342) 20 mA ±0.5% FSO at 70°F
Wetted Parts		Types 316 and 15-5 PH stainless steel	
Temperature Limits			
Compensated	-40°F to +250°F		
Operating	-65°F to +275°F		
Temperature Compensation			
Zero	Within ±0.0075% FSO/°F		
Span	Within ±0.0075% FSO/°F		
Electricals	(Model 142)	(Model 242)	(Model 342)
Excitation Voltage	3.5-15 Vdc	9-40 Vdc	9-36 Vdc
Output at 70° F	3 mV/V ±0.5% FSO	0-5 Vdc ±0.5% FSO	4-20 mA ±0.5% FSO
Input Impedance, Load Impedance,	5,000 ohms, nominal 50,000 ohms minimum, for less than 0.1% FSO		1350 ohms maximum at 36 Vdc
Zero Balance*	0.0 mV/V 0.5% FSO at 70°F	0.0 Vdc 0.5% FSO at 70°F	4.0 mA 0.5% FSO at 70°F
Input Current, Output Current		10 mA, nominal 2.0 mA, maximum for less than 0.1%FSO attenuation	
Mechanicals			
Proof Pressure*	2 times full scale pressure range		
Burst Pressure	5 times full scale pressure range or 22,500 psi, whichever is less		
Case Materials		316 Stainless steel	
Weight	5oz. nominal		
Identification		Etched stainless steel nameplate welded to body	
Connections			
Pressure*	MS33656-4 (7/16-20 male thread)		
Electrical	Bendix PTIH-10-6P connector or equiv.		

* See modifications on ordering guide.

ORDERING GUIDE:

Ordering: Specify model, and pressure range and indicate modifications or accessories required.
 Use the following codes to identify desired item. Example: 142-C-RD-6-CM

MODEL	SERIES	RANGE	TYPE	OPTIONS
●	-	●	-	●/●

MODEL

142 3 mV/V
 242 0 - 5 Vdc
 342 4 - 20 mA

ACCURACY (Series)

C 0.2% FSO
 D 0.1% FSO

PRESSURE RANGE (PSI)

PP 15	RK 750
PR 20	RM 1,000
PT 30	RO 1,500
PV 50	RR 2,000
PX 75	RT 3,000
PZ 100	RV 5,000
RB 150	RX 7,500
RD 200	RZ 10,000
RE 0-250	SB 15,000
RF 300	SZ Other
RH 500	

PRESSURE TYPE

3 Absolute
 6 Sealed Gauge

OPTIONS

CONNECTORS

AA PTIH-10-6P (Std)
 CI D38999/27YB98PN
 CM PTIH-8-4P
 DB D38999/27YA35PN

PRESSURE PORT

AA MS33656-4 (7/16-20 male thread for 1/4" tubing) Std.
 FA MS33656-4 (7/16-20)(F)
 FJ 1/4" NPT male thread
 FL 1/8" NPT male thread
 LT SAE-4 (M) 7/16-20 UNF
 LH SAE-6 (M) 9/16-18 UNF

GENERAL

GB Alternate electronic output, specify zero and span output values
 GG Alternate shunt calibration signal
 GH Internal shunt calibration, to 100% ±0.5% FSO
 GS 0-10 Vdc FSO output (requires 16-40 Vdc excitation)
 HL RFI Protection (increases length by 0.5")
 MK 350 ohm strain gauge bridge