

LOW POWER PRESSURE TRANSDUCER

Model 211 Low Power

(Use Option Code NF for Low Power)

GP:50's Model 211 Low Pressure Transducer is specifically designed for applications where only solar or batter power is available. The 11 Series transducers are compact and completely sealed to withstand harsh environments. With a diameter of only 1.5", they are ideal for limited space applications and their light weight allows them to be mounted directly to process piping.

Rugged, all-welded stainless steel construction makes the 11 Series ideal for corrosive environments. Hermetically sealed, with no adjustment controls, they are airtight, watertight, and maintain an Explosion Proof design at all times. The O-ring free design ensures reliability with corrosive media. Hastelloy, Inconel, and 316 SS wetted parts are available for the most corrosive environments.

APPLICATIONS:

- Battery Power
- Solar Power
- Natural Gas Pipelines
- Gas Compressors
- Water Treatment
- Offshore Oil Rigs



FEATURES:

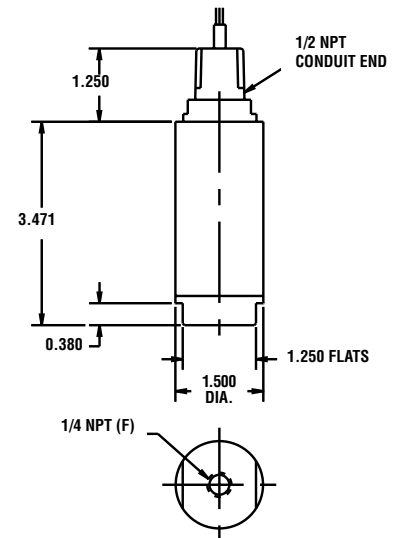
- <1mA current consumption
- 1-5 Volt output (use option code MA)
- Rugged, all-welded stainless steel construction
- Option for submersible operation from 10 psi
- FM Explosion Proof approved
- Bonded strain gauge, full bridge construction for temperature stability and pressure transient and increased fatigue life
- Special engineering options including flush mounting, temperature extremes, and connector options


PRESSURE RANGES:

- From 0 - 5 through 0 - 15,000 psi
- From 0 - 1 through 0 - 1,000 bar
- (See ordering guide)

ACCURACY:

- From 0.5% to 0.1% FSO



MODEL	OUTPUT @ 70° F	EXCITATION
211	1 - 5 Vdc	7 - 24 Vdc **
211X	1 - 5 Vdc	7 - 24 Vdc **
 PENDING	Explosion Proof Class I, II, III, Division I, II Groups A, B, C, D, E, F, & G	

* Output with MA option

** Excitation with QL option

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

SPECIFICATIONS

Unless otherwise stated, these specifications are the standards to which the units are normally constructed. Alterations may be easily and readily accomplished by the standard modification code or by discussion with the factory. We invite your inquiry.

Pressure Type		Electricals	
Gauge	0-5 thru 0-299 psi standard 0-10 thru 0-500 psi (submersible)	Input Current	< 1 mA nominal
Sealed Gauge, nonhermetic	0-300 thru 0-20,000 psi standard 0-100 thru 0-299 psi optional	Output Current	2.0 mA maximum for less than 0.1% FSO attenuation
Sealed gauge, hermetic	0-5 thru 0-20,000 psi optional	Zero Balance	0.0 Vdc ± 2% FSO at 70°F & 24 Vdc excitation
Vacuum	0-5 thru 0-15 psi	Insulation Resistance	Greater than 10 megohms at 50 Vdc and 70°F
Absolute	0-5 thru 0-20,000 psi	Mechanicals	
Elevated (suppressed zero)	Range to be not less than 20% of the full scale pressure	Proof Pressure	
Compound	15 psiv to any gauge pressure	Gauge, Sealed Gauge, Absolute	2 times full scale pressure range (or URL) or 22,500 psi, whichever is less
Wetted Material		2 times full scale pressure range in gauge	
Gauge pressure reference vent	316 & 15-5 PH stainless steel	Burst pressure	
	Clean dry gas only	Gauge, Sealed Gauge, Absolute	5 times full scale pressure range (or URL) or 23,000 psi, whichever is less
Accuracy (Static error band includes non-linearity, hysteresis and repeatability)		5 times full scale pressure range in gauge	
Series B	± 0.5% BFSL	Vacuum	5 times full scale pressure range in gauge
Series C	± 0.2% BFSL	Pressure Response	Less than 5 ms 10% to 90%
Series D	± 0.1% BFSL	Weight	
Resolution		Gauge, Sealed Gauge, Vacuum, Absolute	10 oz. nominal, options may increase weight
	Infinite	Standard Connections	
Temperature Limits		Pressure	1/4" NPT (F)
Compensated	0-180°F	Electrical	
Operating	-20°F to +190°F, (-20°F to +176°F for IS)	Cable (24 AWG Standard)	Belden 8723, 4 conductor, 36" long (or equivalent)
Storage	-65°F to +250°F	Connection	Red + Excit. Black - Excit. / - Signal Green Case Ground White + Signal
Temperature Compensation			
Zero	Less than ± 2% FSO/100°F at full scale pressure range and/or upper range limit		
Span	Less than ± 2% FSO/100°F at full scale pressure range and/or upper range limit		

ORDERING GUIDE

Only shaded codes and options are available with explosion proof ratings.

MODEL	SERIES	RANGE	PRESSURE TYPE	OPTIONS
●	—	●	—	● / ● / ●

Use the following codes to identify desired item. Example: 211-C-PZ-2-QL-MA

MODEL

211 5 Vdc
211X 5 Vdc

SERIES (Accuracy)

B 0.5% FSO (Std.)
C 0.2% FSO
D 0.1% FSO

PRESSURE TYPE

2 Gauge (Direct, 0-299 psi and lower)
3 Absolute (All Ranges)
4 Vacuum
6 Sealed Gauge (hermetic, 0-100 psig and higher)
7 Gauge (non-hermetic seal, 0-300 psi and higher)
8 Elevated (suppressed zero)
9 Other
10 Compound (vacuum & gauge pressure)

PRESSURE RANGE

psi		bar	
PJ - 5	RF - 300	UJ - 1	UX - 75
PL - 7.5	RH - 500	UK - 1.5	UY - 100
PN - 10	RJ - 600	UL - 2	UZ - 150
PP - 15	RK - 750	UM - 3	VA - 200
PQ - 3-15	RM - 1000	UN - 5	VB - 300
PR - 20	RO - 1500	UP - 7.5	VC - 350
PS - 3-27	RR - 2000	UQ - 10	VD - 500
PO - 25	RS - 2500	UR - 15	VE - 700
PT - 30	RT - 3000	US - 20	VF - 750
PV - 50	RV - 5000	UT - 30	UA - 1000
PX - 75	RX - 7500	UV - 50	
PZ - 100	RZ - 10,000		
RB - 150	SB - 15,000		
RD - 200	SZ - Other (0-10,000)		
RE - 250			

OPTIONS

Alternate Connector or Cable

Note: Explosion Proof rated models are only provided with 1/2" NPT(M) conduit thread, (option CF).

CA Bendix PTIH-10-6P (Mate PT06E-10-6S (SR) not supplied), or equal
CB Bendix CF3102E-14S-6P (Mate CF3106E-14S-6S not supplied), or equal

CC Bendix PC02E-12-8P (Mate PC06A-12-8S (SR) not supplied), or equal
CD Cannon WK6-32S (Mate WK6-21C not supplied)
CE Terminal Block
CF 1/2" NPT(M) thread with 36" potted leads
CG MS3102R-14S-6S (Mate MS3106F-14S-6P not supplied)
CH Vented cable, 8' long (NEMA 4 termination)
CJ DIN 43650 (includes mate) (Hirschmann type)
CK Lumberg RSF-3/12 mm
CL 1/2" NPT(M) thread w/ 36" vented cable (for ranges less than 299 psi)
CM Bendix PTIH-8-4P, or equal
CN Bendix MS3102A-14S-5P, or equal
CO Junction Box (thermocouple type) with terminal block
CP Cannon WK4-32S
CQ Cannon WKA7-32S
CR 36" cable with armored jacket
CT 36" Teflon jacket cable (high temperature)
CU 1/2" NPT(F) conduit thread with 36" pigtail
CZ Other

Alternate Pressure Port

FA MS33649-4 (1/4 AN-10050, female)
FC 3/8" NPT(F)
FD MS33656-4 (7/16-20 UNF-3A, for 1/4" tube)
FH 1/8" NPT(F)
FJ 1/4" NPT(M)
FL 1/8" NPT(M)
FM Autoclave Engineering Type F-250-C (high-pressure)
FN 1/2" NPT(M)
FO 1/4" BSPP (M)
LC VCR fitting for 1/4" tubing
LG SAE-4 (F) O-ring seal thread
LH SAE-6 (M) O-ring seal straight thread (with O-ring)
LP 1/4" BSPP(F)
LT SAE-4 (M) O-ring seal straight thread (with O-ring)
FE Bullet nose for cavity protection with submersible option GM, 316 stainless steel
LJ Tapered inlet, sludge level
LX Tapered inlet w/ standoff plate
LY 1-1/2" tube size Tri-Clover fitting
LZ 2" tube size Tri-Clover fitting
FZ Other

General

GA Standardized output to ± 0.5% FSO
GB Alternate full scale outputs. Set to ± 2% FSO
GC Special calibration of a standard range (i.e. 5-10 point).
GD Pressure overload increased to 10x rated range, or 22,500 psi, whichever is less. Not available with options GM, CW, GY, GF, GP, HX, JP, GR.
GE Improved temperature compensation to ± 0.5% FSO/100°F for zero and span respectively.
GF Expanded temperature range, -65 to +250°F (Compensated to ± 2% FSO/100°F)
GG Alternate calibration signal
GH Internal calibration resistor, set to 100 ± 0.5% FSO unless otherwise specified.
GJ Add zero and span controls. (Approximately ± 20% FSO adjustment)
GK Inconel Pressure cavity.
GL Cleaning for oxygen service.
GM Submersible housing, 8' polyurethane jacket vented cable, 316SS sensor, neoprene grommet and 1/2" NPT(M) conduit fitting (0-500 psi max).
GY Type 316SS pressure cavity. (Option GD not available)
HE ± 0.5% FSO zero balance (Std. w/ "D" accuracy), ranges ≥ 30 psi only
HK NEMA 4 rating, non-vented units only.
HL RFI protection (for unit in proximity to radio transmitter.)
HR ± 15 Vdc excitation
JJ High response (500 microsecond).
JK Barometric pressure, 23-35" Hga
JS Internal damping as specified by customer.
MA 1-5 Vdc FSO.
MD Add zero and span controls for explosion proof models.
CW Submersible housing, 8' polyurethane jacket non-vented cable, neoprene grommet and 1/2" NPT(M) conduit fitting (0-500 psi max. For non-vented units only.)
GZ Customer special
NF Low Power, less than 1 mA with no load.