

series 217
bonded strain gage

TELEDYNE® Pressure Transducers

PRESSURE RANGES: 0-100, 0-200 psig or psia

specifications

PRESSURE MEDIA: Most gases and liquids including liquid oxygen, strong alkalis, and corrosive media such as red fuming nitric, nitrogen tetroxide, hydrazine, UDMH.

PRESSURE RANGES (psig or psia): 0-100, 0-200.

MAXIMUM PERMISSIBLE STATIC PRESSURE: 3 times full scale pressure may be applied without damage or necessitating recalibration. (5 and 10 times full scale pressure capabilities available on special order.)

COMPENSATED TEMPERATURE RANGE: -30°F to $+170^{\circ}\text{F}$ (other ranges on special order at additional cost).

OPERATING TEMPERATURE RANGE: -100°F to $+225^{\circ}\text{F}$. The Series 217 may be operated for short periods of time at temperatures in excess of those listed above. (For example, -320°F to $+300^{\circ}\text{F}$.) The unit mass is such that a heat sink is provided and protection afforded the sensing element.

ELECTRICAL ZERO: Maximum unbalance shall not exceed ± 0.02 mv/v at $+70^{\circ}\text{F}$ (psig units zero balanced at an atmospheric pressure of 14.7 psi).

SENSITIVITY: 3.0 mv/volt or greater full scale open circuit output. Calibration factors of from 2.00 mv/v to 3.00 mv/v, for use in precalibrated systems, available on special order. Also available with output to 5.00 VDC.

THERMAL ZERO SHIFT: Not to exceed 0.01% of full scale per degree Fahrenheit while operating within the compensated temperature range.

THERMAL SENSITIVITY SHIFT: Not to exceed $\pm 0.005\%$ of FS output per degree Fahrenheit while operating within the compensated temperature range.

BRIDGE INPUT VOLTAGE: 18 volts AC/DC maximum for 350 ohm strain gage bridge. Taber laboratory calibration values are based on an input voltage of 10 VDC.

ACCELERATION: These instruments are insensitive to acceleration in all planes except axial. Axial plane sensitivity is less than 0.04% full scale per G for the 0-100 psi range and not greater than 0.02% full scale per G for the 0-200 psi range. *Bonded strain gages limit* spurious response from shock and vibration.

HYSTERESIS: Not to exceed $\pm 0.25\%$ of FS output at any given point.

LINEARITY: Deviation not to exceed $\pm 0.25\%$ of FS output from a straight line function.

INSULATION RESISTANCE: Greater than 10,000 megohms at 50 VDC and 70°F from any receptacle pin to case.

PRESSURE CAVITY VOLUME:

Pressure Range (psi)	At Zero Pressure	Increase from Zero To Full Scale Pressure
100	.0756 cu. in.	.0111 cu. in.
200	.0756 cu. in.	.0111 cu. in.

RESOLUTION: Infinite.

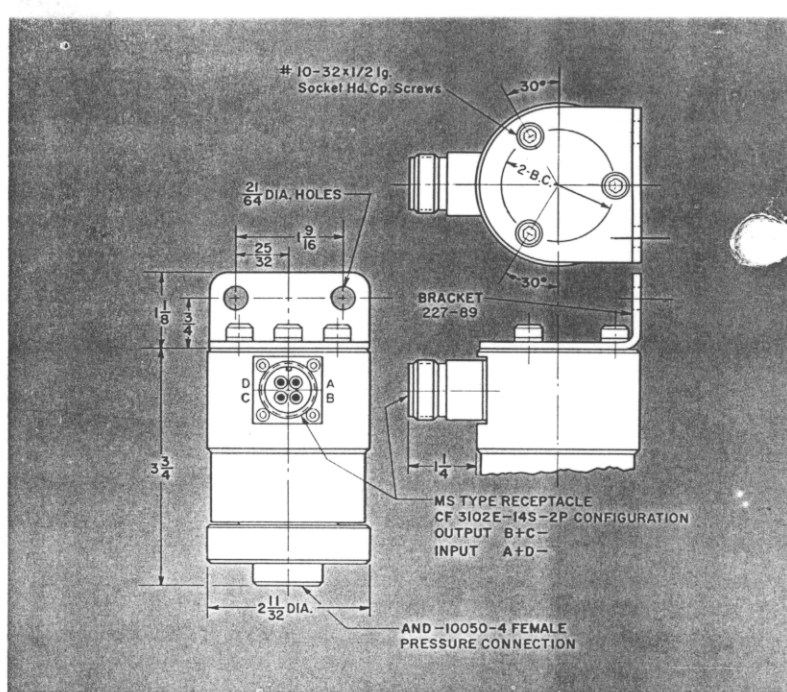
REPEATABILITY: Within 0.1% of FS output under identical conditions.

PRESSURE CONNECTION: Internal thread AND-10050-4 is standard. Available on special order with $\frac{1}{4}$ -inch NPT or external thread MS 33656-4.

ELECTRICAL RECEPTACLE: Stainless Steel MS Type CF 3102E-14S-2P configuration is standard. Other receptacles available on special order.

ENCLOSURE: Entire housing and pressure cavity are of high quality stainless steels. All electrical components are hermetically sealed against adverse environmental conditions.

WEIGHT: 3 lb. 4 oz.



	Model No. Cat. No.	Price
TELEDYNE Pressure Transducer — Standard — Without Mounting Bracket. Calibration certificate supplied with each instrument giving millivolt output at 6 points throughout the range of the instrument. RANGE: 0-100, 0-200 psig or psia	217	Refer to Price List PL-100
TELEDYNE Pressure Transducer — May be sensitivity adjusted to 3.00 ± 0.015 mv/v by the Shunted Output Method at no additional cost. Sensitivity Adjustment by the Shunted Output Method to a value or tolerance other than that specified above additional cost Sensitivity Adjustment by the R_C Method (The application of a standard resistor across the two negative terminals will produce a simulated output of a specific pressure)..... additional cost	217-SA	Refer to Price List PL-100
Bracket for Panel Mounting — Complete with screws and lockwashers.	227-89	Refer to Price List PL-100
External Thread Pressure Cap per MS 33656-4.	P-217-73A	
Mating Electrical Plug	10-72614-2S	

how to order

When ordering, be sure to specify the following: (1) Model number. (2) Pressure range. (3) Pressure connection. (4) Electrical receptacle and wiring. (5) Sensitivity adjustment (if any). (6) Specifications: If standard specifications so state; if deviate from standard, list specific deviations. (7) List accessories (if any) such as diaphragm replacement set, mounting bracket, mating electrical plug as separate items.

NOTE: Complete ordering information is necessary to permit prompt and efficient processing of order and insure that the order is filled correctly.

warranty

Taber Instrument warrants all parts and equipment supplied by it to be free from defects in workmanship or material under normal use and service. All such parts and equipment supplied subject to this warranty, and the Company's obligation thereunder is limited to repairing or replacing at its factory any part thereof which shall be returned, transportation charges prepaid, within one year from date of shipment, and which our examination shall disclose to our satisfaction to have been thus defective. This warranty is expressly in lieu of all other warranties expressed or implied, and of all obligations or liabilities on its part for damages following the use or misuse of the articles supplied. Any unauthorized disassembly or attempt at repair shall void this warranty. No agent is authorized to assume for it any liability except as set forth above.

Warranty specifications and qualitative calibration data, as supplied with each transducer, are based on tests performed on and values obtained with N.B.S. traceable laboratory standards and test equipment of the Taber Instrument Corporation.

service information

A complete department is maintained for recalibrating, repairing or rebuilding TELEDYNE Pressure Transducers. Instruments should be carefully packed and forwarded with a letter describing the malfunction to TABER INSTRUMENT CORPORATION, 107 Goundry St., North Tonawanda, N. Y., U.S.A.