

series 2101

bonded strain gage

TELEDYNE® Pressure Transducers

PRESSURE RANGES: 0-150, 0-200, 0-300, 0-500, 0-750, 0-1000, 0-1500, 0-2000, 0-2500, 0-3000, 0-3500, 0-4000, 0-5000 psis or psia

specifications

PRESSURE RANGES: 0-150, 0-200, 0-300, 0-500, 0-750, 0-1000, 0-1500, 0-2000, 0-2500, 0-3000, 0-3500, 0-4000, 0-5000 psia or psis.

MEASURAND FLUIDS: All fluids compatible with 17-4PH Stainless Steel.

FULL SCALE OUTPUT: 3.0 ± 0.015 mv open circuit per volt excitation. Calibrated at 10.00 V DC excitation.

ZERO BALANCE: 0.00 ± 0.03 mv per volt at $+77^\circ\text{F}$.

ENDPOINT LINEARITY:

0-150 PSI Range within $\pm 0.45\%$ FSO.

0-200 PSI Range within $\pm 0.35\%$ FSO.

0-300 PSI Range within $\pm 0.25\%$ FSO.

0-500 and 0-750 PSI Ranges within $\pm 0.20\%$ FSO.

0-1000 thru 0-5000 PSI Ranges within $\pm 0.15\%$ FSO.

HYSTERESIS: Less than 0.10% FSO.

REPEATABILITY: Within 0.10% FSO.

RESOLUTION: Infinite.

PROOF PRESSURE: Application of 1.5 times rated FS pressure will not cause changes in transducer performance characteristics.

BURST PRESSURE RATING: Greater than 2.5 times rated FS pressure.

COMPENSATED TEMPERATURE RANGE: -30°F to $+170^\circ\text{F}$.

OPERATING TEMPERATURE RANGE: -100°F to $+225^\circ\text{F}$.

THERMAL SENSITIVITY SHIFT: Less than 0.5% FSO per 100°F over compensated temperature range.

THERMAL ZERO SHIFT: Less than 0.5% FSO per 100°F over compensated temperature range.

MECHANICAL SHOCK: Mounted with body strap. 1000 g's for one millisecond duration or 100 g's for 11 millisecond duration, any axis.

ACCELERATION ERROR: Less than $\pm 0.005\%$ FSO per g along most sensitive axis.

VIBRATION ERROR: Less than $\pm 0.005\%$ FSO per g, any axis 30 g peak 50 to 2000 Hz or 1.0 inch DA from 5 Hz to 50 Hz.

EXCITATION: 10 volts DC or AC recommended. 18 volts DC or AC maximum.

INPUT IMPEDANCE: 350 ± 3.5 ohms resistive at $+70^\circ\text{F}$. Input circuitry symmetrical.

OUTPUT IMPEDANCE: 350 ± 5.0 ohms resistive.

INSULATION RESISTANCE: Greater than 10,000 megohms at 50V DC between all terminals in parallel and the transducer case, at a temperature of $+70^\circ\text{F}$.

SHUNT RESISTOR CALIBRATION: Shunt to pressure calibration is available.

NATURAL FREQUENCY:

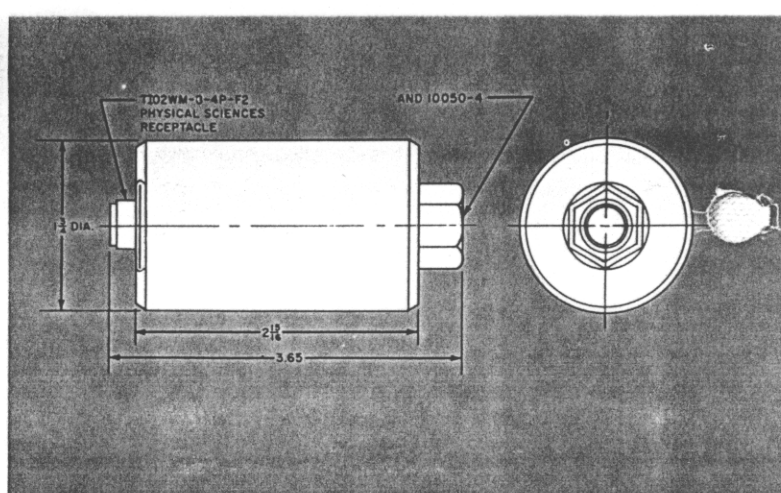
0-150 PSI Range 2.5 kHz 0-1000 PSI Range 20 kHz 0-3000 PSI Range 40 kHz
0-200 PSI Range 3.5 kHz 0-1500 PSI Range 26 kHz 0-3500 PSI Range 42 kHz
0-300 PSI Range 7.0 kHz 0-2000 PSI Range 30 kHz 0-4000 PSI Range 45 kHz
0-500 PSI Range 12 kHz 0-2500 PSI Range 35 kHz 0-5000 PSI Range 50 kHz
0-750 PSI Range 16 kHz

PRESSURE CONNECTION: 7/16-20 external thread per AND10050-4.

ELECTRICAL RECEPTACLE: Physical Science Type TI02WM-8-4P-F2 is standard. Other receptacle configurations available.

ENCLOSURE: Entirely welded and hermetically sealed 17-4PH stainless steel.

WEIGHT: Less than 12 ounces.



Taber Instruments reserves the right to make changes without notice at any time in colors, materials, specifications, and models, and to discontinue models.

	Model No. Cat. No.	Price
TELEDYNE Pressure Transducer — Standard — Calibration certificate supplied with each instrument giving millivolt output, at 6 points throughout range of instrument. Ranges: 0-150, 0-200, 0-300, 0-500, 0-750, 0-1000, 0-1500, 0-2000, 0-2500, 0-3000, 0-3500, 0-4000, 0-5000 psis or psia.	2101	Refer to Price List PL-100
TELEDYNE Pressure Transducer — Sensitivity Adjustment with input circuitry symmetrical, for double shunt calibration and common mode rejection to a value or tolerance other than that specified as standard additional cost Sensitivity Adjustment with input circuitry split, in order that output from standard single shunt calibration resistor set will track actual or theoretical Full Scale output through compensated temperature range additional cost	2101	Refer to Price List PL-100
Mating Electrical Plugs — To mate with Physical Science No. TI02WM-8-4P-F2.	PCS06E-8-4S (SR)	Refer to Price List PL-100

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 configuration. (6) Specifications: If standard specifications so state; if deviate from standard, list specific deviations. (7) List accessories (if any) such as 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 Taber Instruments.

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 INSTRUMENTS, 455 Bryant St., North Tonawanda, N. Y. 14120, U.S.A.