

Model 2105

Bonded Strain Gage Pressure Transducer

Specifications:

<i>Measurand Fluids</i>	All fluids compatible with 347 and Carpenter 20 stainless steel. 347 stainless steel diaphragm is replaceable.																		
<i>Full Scale Output</i>	3.00 \pm 0.015 mV open circuit per volt excitation. Calibrated at 10.00 Vdc excitation.																		
<i>Zero Balance</i>	0.00 \pm 0.03 mV per volt at +70°F (+21°C).																		
<i>End Point Linearity</i>	Within \pm 0.25% FSO for 0-3000 thru 0-4000 PSI ranges. Within \pm 0.20% FSO For 0-5000 thru 0-7500 PSI ranges. Within \pm 0.10% FSO for 0-10,000 thru 0-20,000 PSI ranges.																		
<i>Hysteresis</i>	Within 0.20% FSO.																		
<i>Repeatability</i>	Within 0.10% FSO.																		
<i>Resolution</i>	Infinite.																		
<i>Natural Frequency</i>	<table><thead><tr><th>Range (PSI)</th><th>Frequency (kHz)</th></tr></thead><tbody><tr><td>0-3000</td><td>50.0</td></tr><tr><td>0-3500</td><td>57.0</td></tr><tr><td>0-4000</td><td>67.0</td></tr><tr><td>0-5000</td><td>75.0</td></tr><tr><td>0-7500</td><td>95.0</td></tr><tr><td>0-10,000</td><td>113.0</td></tr><tr><td>0-15,000</td><td>137.0</td></tr><tr><td>0-20,000</td><td>150.0</td></tr></tbody></table>	Range (PSI)	Frequency (kHz)	0-3000	50.0	0-3500	57.0	0-4000	67.0	0-5000	75.0	0-7500	95.0	0-10,000	113.0	0-15,000	137.0	0-20,000	150.0
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<i>Proof Pressure Rating</i>	Application of 1.5 times FS pressure will not cause any change in performance characteristics.																		
<i>Burst Pressure Rating</i>	Greater than 2.0 times rated FS pressure.																		
<i>Compensated Temperature Range</i>	-30°F to +170°F (-34°C to +77°C). Options available.																		
<i>Operating Temperature Range</i>	-100°F to +300°F (-73°C to +149°C).																		
<i>Thermal Sensitivity Shift</i>	Less than \pm 0.005% FSO per °F over compensated temperature range (\pm 0.009% FSO per °C).																		
<i>Thermal Zero Shift</i>	Less than \pm 0.010% FSO per °F over compensated temperature range (\pm 0.018% FSO per °C).																		
<i>Triaxial Mechanical Shock</i>	30 G's applied for 11 milliseconds will not cause change in performance characteristics.																		
<i>Acceleration Error</i>	Less than \pm 0.0015% FSO/G.																		
<i>Excitation</i>	10 volts dc or ac rms recommended. 15 volts dc or ac maximum.																		
<i>Input Resistance</i>	350 \pm 3.5 ohms at +70°F (+21°C). Input circuitry symmetrical.																		
<i>Output Resistance</i>	350 \pm 5.0 ohms at +70°F (+21°C).																		
<i>Insulation Resistance</i>	Greater than 10k megohms at 50 Vdc between all terminals in parallel and case at +70°F (+21°C).																		
<i>Pressure Connection</i>	0-3000 thru 0-10,000 PSI ranges....7/16-20 internal thread per MS33649-4. 0-15,000 thru 0-20,000 PSI ranges....AE F250-C*, 9/16-18 UNF thread. Options available.																		
<i>Pressure Cavity Volume</i>	0.07 in ³ (1.15 ml) excluding MS33649-4 fitting or AE F250-C* fitting.																		

Electrical Receptacle

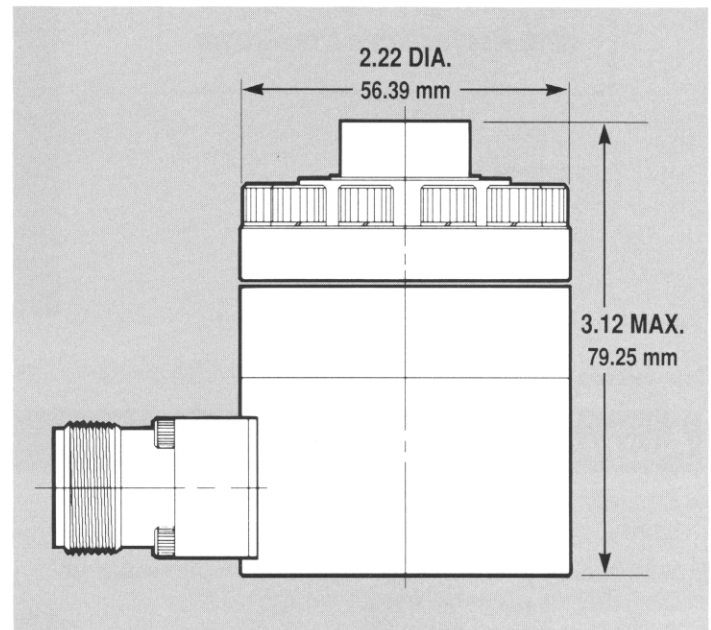
Stainless steel receptacle to mate with MS3106-14-2S. Standard wiring: Excitation +A, -D; Signal +B, -C. Options available.

Enclosure

Entire housing and pressure cavity of stainless steel. All electrical components sealed against adverse environmental conditions.

Weight

Approximately 48 ounces (1.4 kg).



Warranty:

Teledyne Taber, herein after designated as the Company, warrants that any part or parts of the product which, under normal operating conditions in the plant of the original purchaser thereof, proves defective in material or workmanship within one year from the date of shipment by the Company, as determined by an inspection by the Company, will be repaired or replaced free of charge provided that the original purchaser promptly sends to the Company the defective material, transportation charges prepaid, with notice of the defect and establishes that the product has been properly installed, maintained and operated within the limits of rated and normal usage. Replacement parts will be shipped F.O.B. the Teledyne Taber plant. The terms of this Warranty do not in any way extend to part or parts of the product thereof which has a life, under normal usage, inherently shorter than the one year indicated above. Said Warranty in respect to replacement of defective parts and any such additional warranties express or implied, including any implied warranty of merchantability, or fitness for any particular purpose.

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

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