

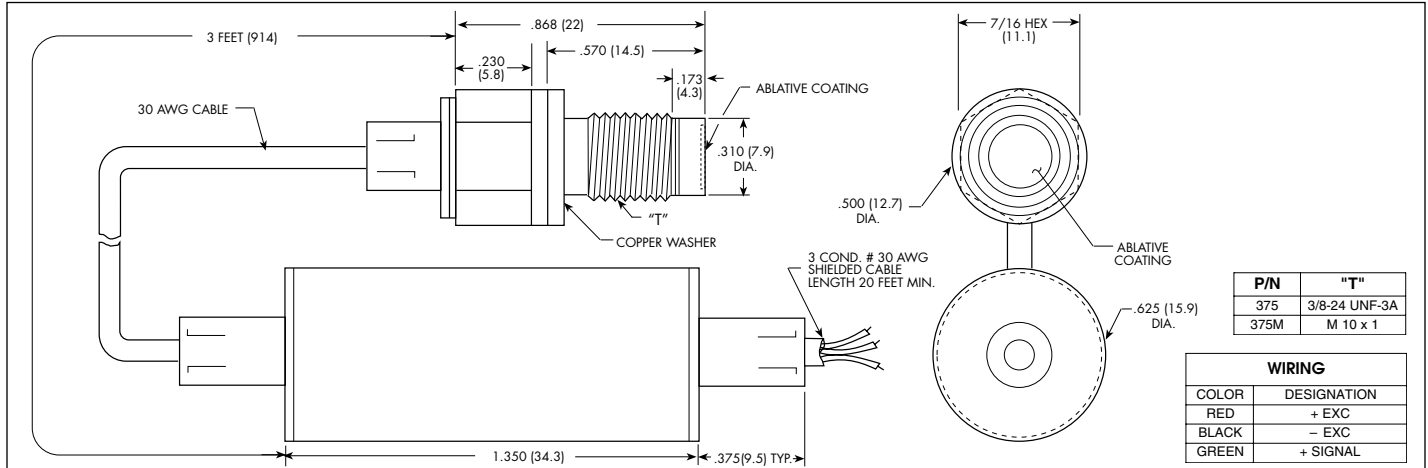


HIGH PRESSURE 5VDC OUTPUT RUGGEDIZED IS[®] PRESSURE TRANSDUCER

ETS-1A-375 (M) SERIES

- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- Very High Natural Frequency
- Designed For Pressure Blast Applications
- Flat Response From DC to 150KHz

Designed for high pressure, high shock environments, this range of transducers is widely used in both military and commercial applications, now mated with an external in-line amplifier for a high level 5 Volt DC output



INPUT	70	140	350	700	1400	2100 BAR
Pressure Range	1000	2000	5000	10000	20000	30000 PSI
Operational Mode	Sealed Gage					
Over Pressure	100	210	510	1000	1700	2450 BAR
	1500	3000	7500	15000	25000	35000 PSI
Burst Pressure	210	420	840	1400	2100	2800 BAR
	3000	6000	12000	20000	30000	40000 PSI
Pressure Media	Any Liquid or Gas Compatible With 15-5 PH or 316 Stainless Steel					
Rated Electrical Excitation	12 ± 4 VDC or 28 ± 4 VDC					
Maximum Electrical Current	25 mA					
OUTPUT						
Output Impedance	200 Ohms (Max.)					
Full Scale Reading	5 VDC ± 150mV					
Bandwidth (-3dB)	DC Up to 150 KHz					
Residual Unbalance	200 mV ± 50 mV					
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.)					
Resolution	Infinitesimal					
Natural Frequency (KHz) (Typ.)	720	900	1120	1350	1600	1800
Acceleration Sensitivity % FS/g Perpendicular	6.2x10 ⁻⁵	2.7x10 ⁻⁵	1.5x10 ⁻⁵	1.3x10 ⁻⁵	8.6x10 ⁻⁶	6.0x10 ⁻⁶
Transverse	4.3x10 ⁻⁶	2.4x10 ⁻⁶	1.5x10 ⁻⁶	1.3x10 ⁻⁶	1.0x10 ⁻⁶	8.0x10 ⁻⁷
Insulation Resistance	100 Megohm Min. @ 50 VDC					
ENVIRONMENTAL						
Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)					
Compensated Temperature Range	0°F to +212°F (-18°C to +100°C)					
Thermal Zero Shift	± 1% FS/100°F (Typ.)					
Thermal Sensitivity Shift	± 1% FS/100°F (Typ.)					
Linear Vibration	100g Peak, Sine Up to 5000 Hz					
Altitude	-150 ft. to +70,000 ft. Will Not Damage Sensor					
Humidity	100% Relative Humidity					
Mechanical Shock	100g half Sine Wave 1 msec. Duration					
PHYSICAL						
Electrical Connection	3 Conductor 30 AWG Shielded Cable 24" Long					
Weight	10 Grams (Nom.) Excluding Cable and Amplifier					
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon					
Mounting Torque	80-120 Inch-Pounds (Max.)					
Diaphragm Coating	Ablative Coating Standard					

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.. Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (C)

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