Dynamic Pressure Sensors

Model 567M7

The Model 567M7 High Intensity Acoustic Sensor (Microphone) is designed for the measurement of gas-borne sound in industrial applications. The sensor was designed for use in corrosive environments that are compatible with the type 316 stainless steel diaphragm. Model 567M7 incorporates a 2-pin MIL-C-5015 connector interface. When combined with its all-welded construction, the sensor provides a true hermetic seal.

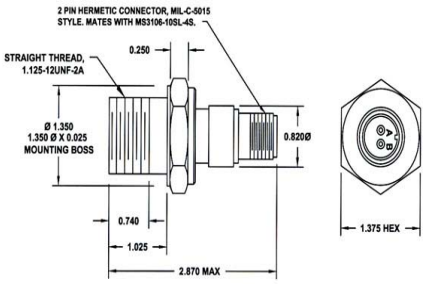
Electrically, this device comprises sensing elements of piezoceramic material in a balanced and floating configuration to provide enhanced rejection of electrical noise associated with many industrial environments. Optimum performance is achieved when used with a true differential input amplifier. ***Consult the factory for customized versions of this sensor.***

- **High Sensitivity (1100 pC/psi)**
- **High Temperature To +500 Deg F**
- **Electrically Isolated**

Specifications

Transfer / Electrical	567M7
Charge Sensitivity	1100 +/-100 pC/psi
Frequency Response	5.2 Hz To 5,000 Hz
Dynamic Range	0.28 x 10^{-4} to 10 psi (191 dB SPL Max.)
Avg Temp Coeff of Sensitivity	0.08% / Deg F Nominal
Transducer Capacitance	10,000 pF +/-10%
Insulation Resistance	100 Megohms Min., 50 VDC Test
Isolation Resistance	100 Megohms Min., 50 VDC Test
Dielectric Strength	550 Vrms, 60 Hz, Element to Housing
Environmental	
Vibration Limit	100 g Max. (Sine)
Shock Limit	1,000 g Max., 0.25 mSec
Temperature Range	-10 To +500 Deg F (-23 To +260 Deg C)
Humidity[1]	0 To 100% R.H.
Static Pressure	550 psi Max. (Diaphragm)
Electromagnetic Sensitivity	0.005 g (Equiv / 100 Gauss)
Physical	
Configuration	Balanced Floating Compression
Size	1.375 In. Hex. x 2.87 In. H (35.0 mm Hex. x 53.34 mm H)
Weight	7.0 Oz (200 Gm)
Material Body & Diaphragm	Type 316 Stainless Steel
Electrical Interface	2-Pin MIL-C-5015 Style Connector
Mounting	1.125 – 12 UNF-2A Straight Thread

NOTES:
[1] With Connector Mated or Protected, Unit is Hermetically Sealed.



Accessories Supplied:

(1) Standard Calibration Data
(1) Manufacturer's Certificate of Compliance
(1) Hardwood Storage Case

Columbia Research Laboratories, Inc. 1925 Mac Dade Blvd. Woodlyn, PA 19094 USA
Phone: 1.800.813.8471 / Fax: 610.872.3882 / email: sales@columbiaresearchlab.com