



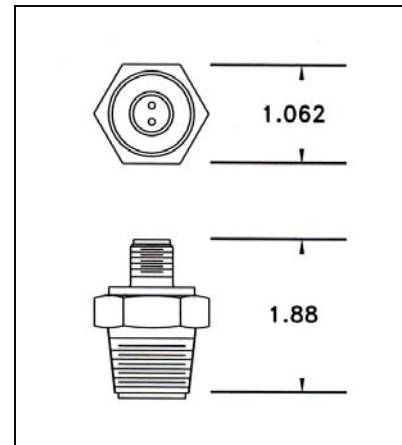
The Columbia Model 938 High Intensity Acoustic Sensor (Microphone) is designed for the measurement of gas-borne sound in the frequency range of 2 Hz to 15KHz in industrial applications requiring operation up to +500 Degrees Fahrenheit. The unit is constructed for use in corrosive environments which are compatible with the type 316 stainless steel diaphragm. The stainless steel MIL-style connector combined with the all-welded construction provides a true hermetic seal.

Electrically, the Model 938 transducer 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 differential input amplifier. *Consult the factory for customized versions of this sensor.*

- High Sensitivity
- Wide Frequency Response
- High Temperature To +500 Deg F
- Electrically Isolated
- 2-Pin Connector

Specifications

Transfer / Electrical	938
Charge Sensitivity	800 pC/psi +/-15%
Frequency Linearity	+/-6 dB, 2Hz To 15,000 Hz
Dynamic Range	0.28 x 10 ⁻⁴ To 10 psi
Avg Temp Coeff of Sensitivity	0.08% / Deg F
Transducer Capacitance	8100 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	2,000 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	1.062 In. Hex. x 1.88 In. H (26.9 mm Hex x 50.8 mm H)
Weight	3.9 Oz (110 Gm)
Material	Type 316 Stainless Steel
Body & Diaphragm	Type 316 Stainless Steel
Electrical Interface	2-Pin MIL-C-5015 Style Connector
Mounting	Standard 3/4 In. NPT Male Thread



Output Connector Pin Functions:

Pin A = + Out
Pin B = - Out

Accessories Supplied:

- (1) Mating Connector
- (1) Hardwood Storage Box
- (1) Standard Calibration Data.

NOTES:

¹ With Connector Mated or Protected, Unit is Hermetically Sealed.