



## Dynamic Pressure Sensors

### Model 100-P

The Columbia Model 100-P High Intensity Acoustic Sensor (Microphone) is designed for measuring exceptionally wide pressure ranges in applications requiring fast rise times and broad frequency response. This sensor is extremely sensitive allowing very low pressure measurements to 0.005 psi as well as high pressure transient measurements to 5,000 psi at temperatures up to +150 Degrees C.

The Model 100-P sensor is small, lightweight and very ruggedly constructed with a stainless steel case, O-ring seal and flush diaphragm. Its small size, broad frequency response and low cost designates this unit an excellent choice for a wide range of applications. *Consult the factory for customized versions of this sensor.*

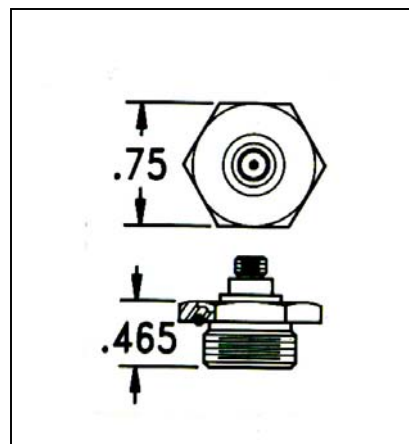
- Fast Pressure Variations, Surges & Dynamic Blasts
- Very Low & High Pressure
- Small Size / Lightweight
- Low Cost

#### Specifications

Transfer / Electrical	100-P
Charge Sensitivity	150 pC/psi
Pressure Range	0.005 To 5,000 psi
Pressure Overload (without damage)	10,000 psi Max.
Frequency Response	2 To 12,000 Hz
Resonant Frequency	60 KHz
Amplitude Linearity	+/-2%
Capacitance	500 pF
Output Resistance	1 x 10 <sup>11</sup> Ohms
Grounding	Case Grounded
<b>Environmental</b>	
Temperature Range (Less than +/-10% Variation)	-65 To +300 Deg F (-54 To +150 Deg C)
Humidity <sup>1</sup>	0 To 100% R.H.
<b>Physical</b>	
Size	0.75 In. Hex. x 0.465 In. H (19 mm Hex x 11.8 mm H)
Weight	0.55 Oz (15.5 Gm)
Material	
Body & Diaphragm	Type 316 Stainless Steel
Electrical Interface	#10-32 Coaxial Connector
Mounting	9/16-24 Straight Thread

#### NOTES:

<sup>1</sup> With Connector Mated or Protected, Unit is Hermetically Sealed.



#### Accessories Supplied:

- (1) Cable Assembly, LNHT-3 Ft.
- (1) Hardwood Storage Box
- (1) Standard Calibration Data.