Dynamic Pressure Sensors

The Models 954M2 and 954M5 Integrated Dynamic Pressure Gages are designed for the measurement of dynamic pressure events, such as explosive blasts and high level pressure pulses in the frequency range of 1 Hz to 15KHz. The pressure sensing area will sustain continuous operating temperatures up to +535 degrees F. Sufficient cooling must be provided such that the connector area will not exceed +280 Deg F.

The unit is machined from 300 Series stainless steel, utilizes a stainless steel hermetic connector, and is of all-welded construction. The integral electronic buffer provides a low impedance output when used with constant current sources of 2 to 20mADC. *Consult the factory for customized versions of this sensor.*

- Models 954M2 954M5
- High Pressure Gage
- Low Output Impedance
- Choice of Sensitivities
- Wide Frequency Response
- High Temperature To +535 Deg. F

Specifications

Transfer / Electrical	954M2	954M5
Charge Sensitivity	2.0 mV/psi +/-10%	5.0 mV/psi +/-10%
Frequency Linearity	+/-1 dB, 1 Hz To 15,000 Hz	
Full Range Output	+/-5V Pk into 10 Kilohms Min.	
Output Impedance	50 Ohms Nominal	
Linearity	1% / 1,000 psi (B.F.S.L.)	2% / 1,000 psi (B.F.S.L.)
Output Bias Voltage	10.25 +/-1 VDC	
Avg Temp Coeff of Sensitivity	0.03% / Deg F (Nominal)	
Power Requirement ¹	4.0 mA DC Nominal, 18 To 30 VDC	
Isolation Resistance	50 Megohms Min.	
Environmental		
Vibration Limit	100 g Max. (Sine)	
Shock Limit	2,000 g Max., 0.25 mSec	
Temperature Range	-40 To +535 Deg F (-40 To +280 Deg C)	
Humidity ²	0 To 100% R.H.	
Static Pressure	3,500 psi Max. (Diaphragm)	3,000 psi Max. (Diaphragm)
Electromagnetic Sensitivity	2.0 psi (Equiv / 100 Gauss)	
Physical		
Configuration	Double-Ended Compression	
Size	0.875 In. Dia. x 10.13 In. L (22.2 mm Dia. x 257.3 mm L)	
Weight	16 Oz (454 Gm)	
Material	Type 304 / 316L Stainless Steel	
Electrical Interface	2-Pin Hermetic MIL-C-5015 Style Connector	
Mounting	0.875-14 UNF Straight Male Thread	
Operating Life	5 x 10 ⁹ Ops Full Range Pulsations	

NOTES:

¹ Unit must be powered with 2 to 10 mA DC Current Source having a

compliance voltage of 18 to 30 VDC.

² Unit is Hermetically Sealed.





Accessories Supplied:

- (1) Mating Connector
- (1) Hardwood Storage Case
- (1) Standard Calibration Data