

Columbia Research Laboratories, Inc. General Purpose Accelerometers

Models 3024 & 3024-HT 3028 & 3028-HT

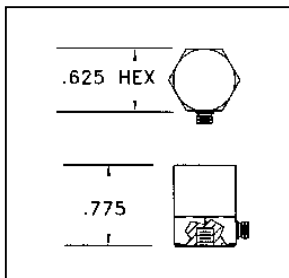
*Vibration & Shock

*Sensitivity 12 pC/g

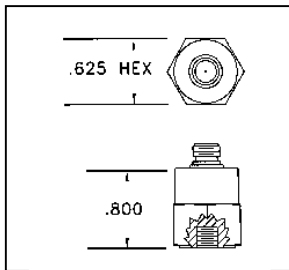
*Low Base Strain Sensitivity

*Top or Side Connector

*10-32 Mounting



Model 3024



Model 3028

Accessories Supplied:

- (1) Miniature Cable Assy, LNHT-10'
- (1) 10-32 x 0.375"L Mounting Stud, St Stl
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

The Models 3024 and 3028 piezoelectric accelerometers exhibit a nominal transfer sensitivity of 12 picoCoulombs/g and are ideal for low to medium level vibration measurements. The internal construction of the piezoelectric seismic system ensures that the units have no discernible spurious response to mounting torque, body strains, cable vibration, cable whip, pressure variations and most heat transients.

The units incorporate a shear crystal-mass assembly, which ensures that the sensor is insensitive to environmental inputs such as base bending and thermal transients. The units differ in their connector positions (side or top) and isolation resistance. Each model is supplied with a 10' low-noise coaxial cable. High temperature units will operate in environments up to +500 Deg. F. *Consult the factory for customized versions of these sensors.*

Specifications

Transfer / Electrical	3024 & 3024-HT		3028 & 3028-HT	
Charge Sensitivity ¹	12 +/-10 pC/g			
Capacitance	450 +/-50 pF			
Frequency Linearity ²	+/-5% Max 2 Hz To 5,000 Hz			
Mounted Resonant Frequency	30 KHz, Nom.			
Transverse Sensitivity	5% Max			
Amplitude Linearity	+/-1.0% (BFSL) / 500g			
Insulation Resistance	20,000 M Ohm Min, 50 VDC Test			
Isolation Resistance	0 (Case Grounded)		100M Ohm Min.	
Environmental				
Vibration Limit	1,000 g Max (Sine)			
Shock Limit	5,000 g Max			
Temperature Range				
Models 3024 & 3028	-100 To +350 Deg F (-73 To +175 Deg C)			
Models 3024-HT & 3028-HT	-100 To +500 Deg F (-73 To +260 Deg C)			
Humidity	0 To 98% R.H. (Non-Condensing)			
Base Strain Sensitivity	0.01 g/uE Typical			
Electromagnetic Sensitivity	0.01 g (Equiv / 100 Gauss)			
Physical				
Configuration	Shear			
Size	0.625 In. Hex x 0.780 In. H 15.9 mm Hex x 19.8 mm H		0.625 In. Hex x 0.820 In. H 15.9 mm Hex x 21 mm H	
Weight	0.8 (23 Gm)		0.9 Oz (26 Gm)	
Case Material	18-8 Stainless Steel			
Electrical Interface	Coaxial 10-32 Thread (Side)		Coaxial 10-32 Thread (Top)	
Mounting	10-32 Tapped Base			

NOTES:

¹ At +75 Deg F, 10g Peak, 100Hz; Lower Frequency Limit is Determined by Associated Electronics

² Referenced to Sensitivity @ 100 Hz.

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