

**BEST OF
CLASS**



The LCF-2530 utilizes Jewell's newest technology providing superior stability over temperature and time. The design of the LCF-2530 was optimized to provide the high accuracy and superior repeatability, and reliability of low g acceleration and utilizes Jewell's rugged, fluid damped, flexure suspension servo technology in a small convenient package for applications requiring a compact dual axis solution. This accelerometer provides better than 1 μ g (micro g) resolution and Jewell's new sensor technology and is ideal for applications where EMI is of concern compared to other sensors available on the market utilizing traditional closed-loop sensor technology.

LCF-2530 Inclinometer Specifications

Performance

Input Range, g:	± 0.25	± 0.5	± 1.0	± 2.0	± 5.0
Full Range Output (FRO) ¹ , Volts, $\pm 1\%$:	± 5.0	± 5.0	± 5.0	± 5.0	± 5.0
Nonlinearity, % FRO ² , maximum:	0.02	0.02	0.02	0.05	0.10
Scale Factor, volts/g, nominal:	20.0	10.0	5.0	2.5	1.0
Scale Factor Temp Sensitivity, PPM/ $^{\circ}$ C maximum:	100	60	60	100	100
Bias, g, maximum:	0.001	0.002	0.004	0.005	0.005
Bias Temp Sensitivity, Volts/ $^{\circ}$ C, maximum:	0.001	0.0005	0.0003	0.0003	0.0003
Bandwidth (-3 dB) ³ , Hz, nominal:	30	30	30	30	30
Transverse Axis Misalignment, $^{\circ}$, maximum:	± 0.50	± 1.00	± 1.00	± 1.00	± 1.00
Resolution and Threshold, μ g:			1		

Electrical

Input Voltage, VDC:	± 12 to ± 18
Input Current, mA, nominal:	30
Noise, Vrms, maximum:	0.002

Environmental

Operating Temp Range:	-40 to $+80^{\circ}$ C
Survival Temp Range:	-60 to $+90^{\circ}$ C
Vibration:	20grms
Shock:	1000g, 1msec, $\frac{1}{2}$ sine
Seal:	MIL-STD-202, Method 112
Weight:	8oz

¹ Full Range is defined as "from negative to positive full input angle."

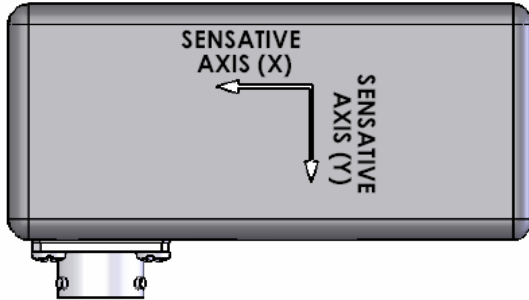
² Nonlinearity is specified as deviation of output referenced to a best fit straight line, independent of misalignment.

³ Custom bandwidth available. Consult factory for additional options.

Applications

- Satellite Nutation Sensing
- Train Banking and Braking
- Performance Testing
- Attitude Heading and Reference Systems
- Autopilot

Output Polarity



PIN-OUT	
1	+12 to +18 VDC
2	-12 to -18 VDC
3	COMMON
4	OUTPUT SIGNAL, X AXIS
5	OUTPUT SIGNAL RTN, X AXIS
6	OUTPUT SIGNAL, Y AXIS
7	OUTPUT SIGNAL RTN, Y AXIS
8-13	N/C

Outline Diagram

