

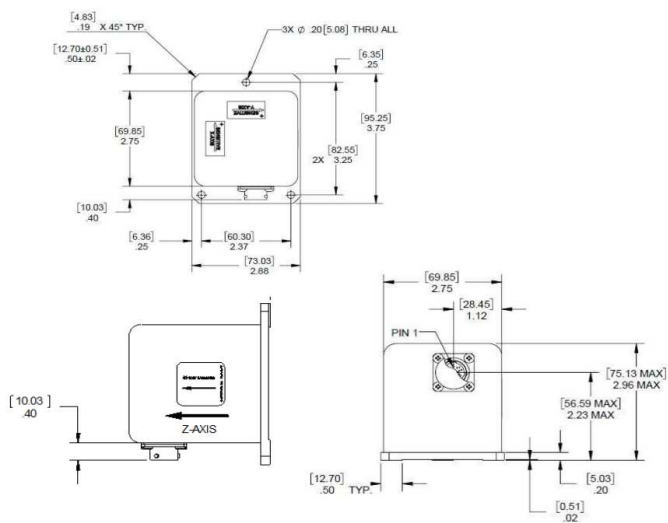
LCF-3500

Tri-Axial Accelerometer

The Jewell LCF-3500 Series Flexure Suspension Fluid Damped Tri-Axial Accelerometer is a $\pm 0.5G$ to $\pm 5G$ device designed for applications where high levels of shock and vibration are present. LCF units are characterized by excellent turn on repeatability and very low hysteresis.

FEATURES:

- $\pm 0.5g$ to $\pm 5.0g$ Full Range
- Filtering 5 to 100 Hz
- Bandwidth Available
- Exceptional Bias & Scale Factor
- High Level ± 5 Vdc Output
- 1,000g Shock Capability
- Tri-Axis



APPLICATIONS:

- Geophysical Testing
- Railcar Acceleration Control
- Railcar Deceleration Control
- Ocean Buoy Acceleration Sensing
- Aircraft Stability Control
- Aircraft Flight Testing
- Vehicle Roadway Profiling
- Tri-Axis Acceleration Applications
- Aircraft Flight Data Recorder



Performance Specifications

PERFORMANCE

INPUT RANGE (g)	±0.5	±1.0	±2.0	±5.0
FULL RANGE OUTPUT (VDC) ¹	±5.0			
NONLINEARITY (% FRO) ² max	0.02	0.05		
SCALE FACTOR (V/g) nominal	10.0	5.0	2.5	1.0
SCALE FACTOR TEMP SENSITIVITY (PPM/ ° C max)	60	100		
BANDWIDTH (-3dB) Hz, nominal	30			
NATURAL FREQUENCY Hz, min ³	30			
INPUT AXIS MISALIGNMENT, ° max	±1.00			
BIAS, g RANGE	±0.01	±0.005		
BIAS TEMP. SENSITIVITY (micro g/ ° C) max	50			
RESOLUTION & THRESHOLD (micro g) max	10			

NOTES:

1. Full range is defined as "from negative full input angle to positive full input angle."
2. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment.
3. Output phase angle = -90°.

*Specifications subject to change without notice on account of continued product development

ELECTRICAL

NUMBER OF AXES	3
INPUT VOLTAGE RANGE (VDC)	±12 to ±18
INPUT CURRENT (mA, max)	65
OUTPUT IMPEDANCE (Ohms) nominal	100
NOISE (Vrms, max)	0.005

ENVIRONMENTAL

OPERATING TEMP. RANGE	-40° to +80°C
STORAGE TEMP. RANGE	-60° to +90°C
VIBRATION	20 grms
SHOCK	1000g, 1 msec, ½ sine

ENCLOSURE

WEIGHT	16 oz
SEAL	MIL-STD-202, Method 112, IP65

PIN OUTS

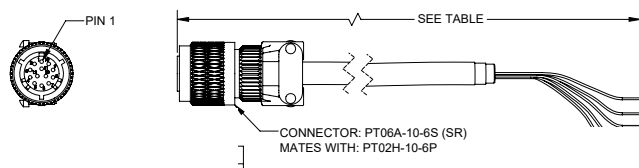
1	+15 VDC
2	-15 VDC
3	POWER COMMON
4	X-AXIS OUTPUT
5	Y-AXIS OUTPUT
6	Z-AXIS OUTPUT
7-13	N/C

OPTIONS

- Unit Power Connections can be easily adapted for operations from single-ended, floating power supplies of 24 to 36 Volts DC
- Internal Temperature Sensor
- 4-20 mA output

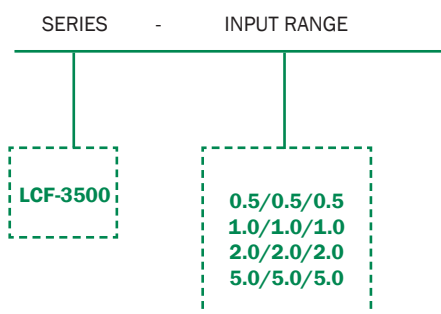
MATING CONNECTOR AND CABLE ASSEMBLIES

CONNECTOR CABLE



PART #	MODEL #	LENGTH m (ft)
847774-002	13-Pin Mating Connector	-
879605-009	DSI-CBL-02M-2	2 (6.56)
879605-010	DSI-CBL-03M-2	3 (9.84)
879605-0XX	DSI-CBL-05M-2	5 (16.4)
Contact manufacturer for custom lengths		

LCF-3500 SERIES ORDERING INFORMATION



	MODEL #	PART #
±0.5g	LCF-3500-.5g/.5g/.5g	02550309-001
±1.0g	LCF-3500-1.0g/1.0g/1.0g	02550309-002
±2.0g	LCF-3500-2.0g/2.0g/2.0g	02550309-003
±5.0g	LCF-3500-5.0g/5.0g/5.0g	02550309-004

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