

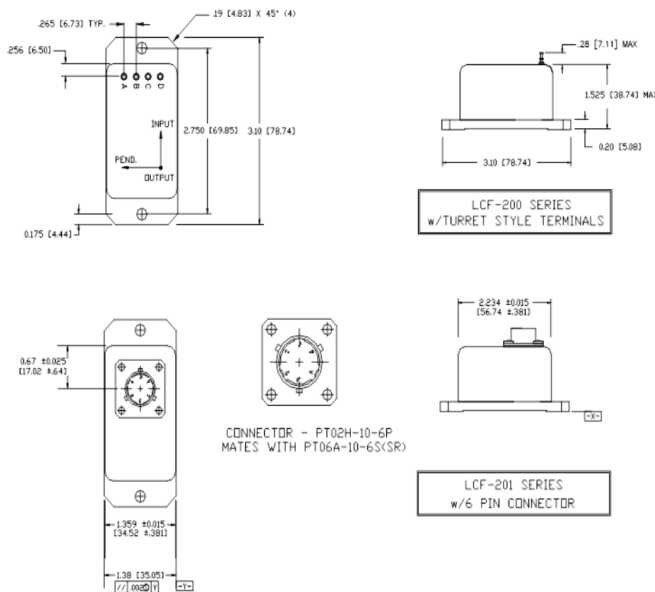
LCF-200

Single-Axis Analog Inclinometer

The Jewell LCF-200 Series Flexure Suspension Fluid Damped 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
- Exceptional Bias & Scale Factor
- High Level \pm Vdc Output
- 1,500g Shock Capability



Dimensions: in [mm]



APPLICATIONS:

- Geophysical Testing
- Railcar Acceleration Control
- Railcar Deceleration Control
- Ocean Buoy Acel Sensing
- Aircraft Stability Control
- Aircraft Flight Testing
- Vehicle Roadway Profiling

PIN OUT:

A	+12 to +18 VDC
B	-12 to -18 VDC
C	Power/Sig Common
D	Eo [Volts/g]

PERFORMANCE SPECIFICATIONS

PERFORMANCE

INPUT RANGE (°)	±1.0	±14.5	±30.0	±90.0
FULL RANGE OUTPUT VDC (FRO ± 0.5%) ¹	±5.0			
SCALE FACTOR (V/g, nominal)	10	5	2.5	1
SCALE FACTOR TEMP. SENSITIVITY (PPM/°C, max)	100			
NATURAL FREQUENCY (Hz, nominal) ²	30.0			
BANDWIDTH (-3db, Hz, nominal)	30.0			
TRANSVERSE AXIS MISALIGNMENT (° max)	0.71			
BIAS (g range)	±0.005			
BIAS TEMPERATURE SENSITIVITY (µg/°C, max)	50			
RESOLUTION & THRESHOLD (µradian) max	1			

ELECTRICAL

NUMBER OF AXES	1
INPUT VOLTAGE RANGE (VDC) ⁴	±12 to ±18
INPUT CURRENT (mA, max)	15
OUTPUT IMPEDANCE (Ohms, nominal)	100
NOISE (Vrms max)	0.001

ENVIRONMENTAL

OPERATING TEMPERATURE RANGE	-40° to +80°C
STORAGE TEMPERATURE RANGE	-40° to +90°C
SHOCK	1000g, 1 msec, 1/2 sine
VIBRATION	20 grms
WEIGHT	4 oz
Seal	MIL-STD-202, Mtd. 112

NOTES:

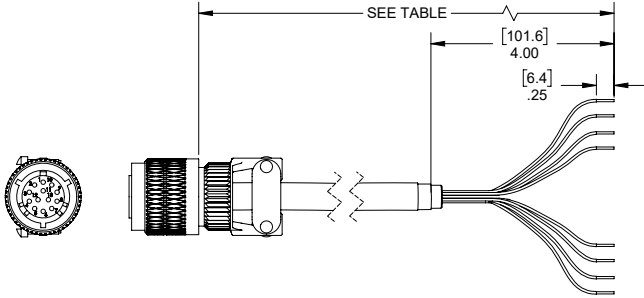
1. Full range is defined as "from negative full input angle to positive full input angle." The Inclinometer output is proportional to the sine of the tilt angle.
2. Referenced to best-fit straight line independent of misalignment.

Specifications are subject to change without notice due to continued product development



ACCESSORIES

CONNECTOR CABLE



PART #	MODEL #	LENGTH m (ft)
62101011-001	6-Pin Mating Connector	-
879605-007	DSI-CBL-02M-1	2 (6.56)
879605-008	DSI-CBL-03M-1	3 (9.84)
879605-020	DSI-CBL-05M-1	5 (16.4)
Contact manufacturer for custom lengths		

ORDERING INFORMATION

HOW TO ORDER

	MODEL #	PART #
±0.5	LCF-200-.5g	458200-001
±1.0	LCF-200-1.0g	458200-002
±2.0	LCF-200-2.0g	458200-003
±5.0	LCF-200-5.0g	458200-004

850 Perimeter Road Manchester, NH 03103 USA

SENSORS: 800.227.5955
 www.jewellinstruments.com | sensors@jewellinstruments.com

© Jewell Instruments 2020

