

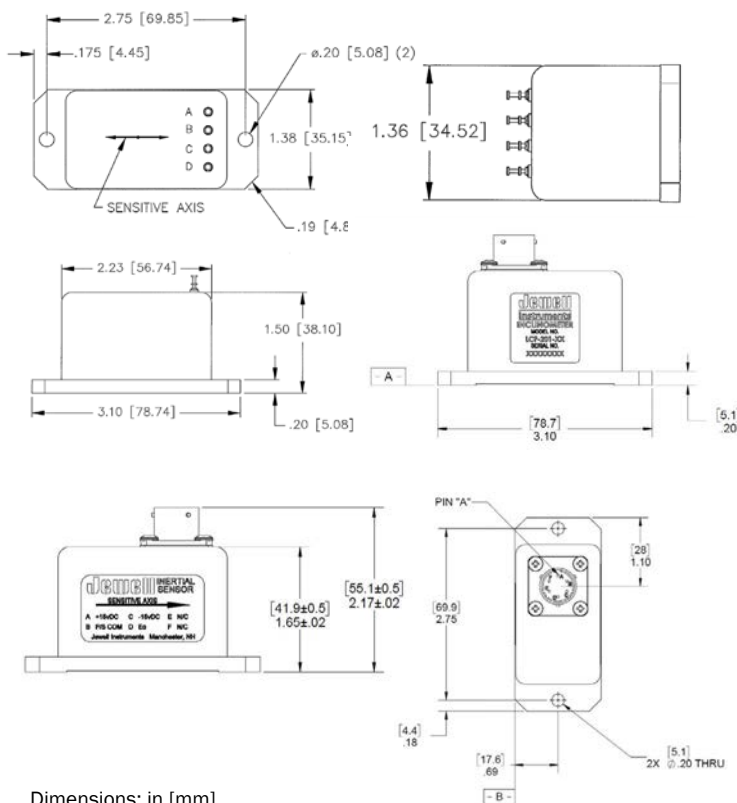
LCF-200/201

Single-Axis Analog Accelerometer

The Jewell LCF-200 (pin terminal) and LCF-201 (connector type) 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
- Exceptional Bias & Scale Factor
- High Level $\pm V_{dc}$ Output
- 1,000g Shock Capability



APPLICATIONS:

- 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 (g)	±0.5	±1	±2	±5
FULL RANGE OUTPUT VDC (FRO ± 0.5%) ¹	±5.0			
NONLINEARITY (% FRO max) ²	0.05	0.05	0.05	0.1
SCALE FACTOR (V/g, nominal)	10	5	2.5	1
SCALE FACTOR TEMP. SENSITIVITY (PPM/°C, max)	100			
NATURAL FREQUENCY (Hz, nominal) ³	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)	±12 to ±18
INPUT CURRENT (mA, max)	15
OUTPUT IMPEDANCE (Ohms, nominal)	100
NOISE (grms 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:

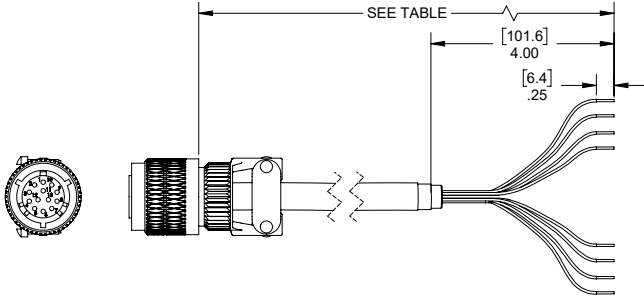
1. Full range is defined as "from negative full input angle to positive full input angle"
2. Referenced to best-fit straight line independent of misalignment.
3. Output phase angle = -90°

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



ACCESSORIES

CONNECTOR CABLE



Exclusively for the LCF-201

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

LCF-200 (Pin Terminal)

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

LCF-201 (Connector Type)

	MODEL #	PART #
±0.5	LCF-201-5g	458201-001
±1.0	LCF-201-1.0g	458201-00X
±2.0	LCF-201-2.0g	458201-00X
±5.0	LCF-201-5.0g	458201-003