

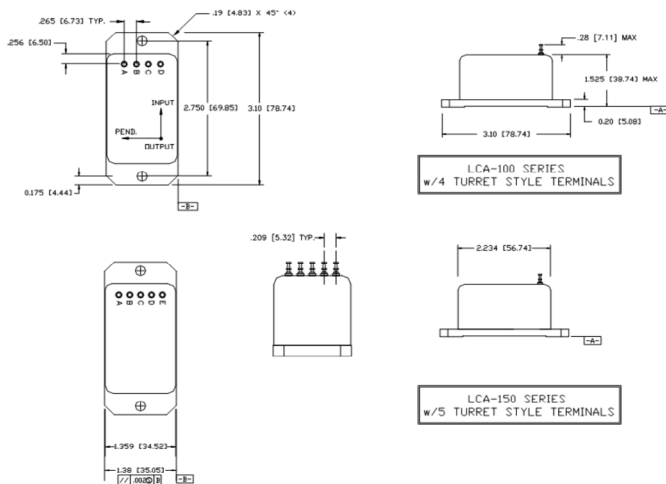
LCA-100

Single-Axis Analog Accelerometer

The LCA-100 Series is a single axis accelerometer that is ± 12 to ± 18 Vdc. The Jewell LCA-100 Series Accelerometer is a general-purpose $\pm 0.5g$ to $\pm 5g$ device designed for industrial, commercial and aerospace sensing requirements.

FEATURES:

- Filtering Available
- Available in 28V Aircraft Input
- 0.20% 10-year Scale Factor Stability
- Wide Bandwidths for Higher Range Applications



Dimensions: in [mm]



APPLICATIONS:

- Aircraft Flight Controls
- Aircraft Fatigue Monitoring
- Train Performance Testing
- Aircraft Autopilot System Input
- Aircraft Winds-shear Detection
- Double Integrated Railcar Position
- Rail Automated Train Controls

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	±1.0	±2.0	±5.0
FULL RANGE OUTPUT VDC (FRO ± 0.5%)¹	±5.0			
SCALE FACTOR (V/g, nominal)	10.0	5.0	2.5	1.0
SCALE FACTOR TEMP. SENSITIVITY (PPM/°C, max)	180			
NATURAL FREQUENCY, Hz nominal²	60.00			
BANDWIDTH (-3db, Hz, nominal)	60.00			
TRANSVERSE AXIS MISALIGNMENT (° max)	0.71			
BIAS, g RANGE	±0.5	±0.1	±0.1	±0.05
BIAS TEMPERATURE SENSITIVITY, (µg / °C max)	100			
RESOLUTION & THRESHOLD (µg) max	10			

ELECTRICAL

NUMBER OF AXES	1
INPUT VOLTAGE RANGE (VDC)⁴	±12 to ±18
INPUT CURRENT (mA, max)	25
OUTPUT IMPEDANCE (Ohms, nominal)	1
NOISE (Vrms max)	0.005

ENVIRONMENTAL

OPERATING TEMPERATURE RANGE	-55° to +80°C
STORAGE TEMPERATURE RANGE	-60° to +90°C
SHOCK	100g, 0.011 sec, 1/2 sine
VIBRATION	0 grms
WEIGHT	4 oz
SEAL	MIL-STD-202, Mtd. 112

NOTES:

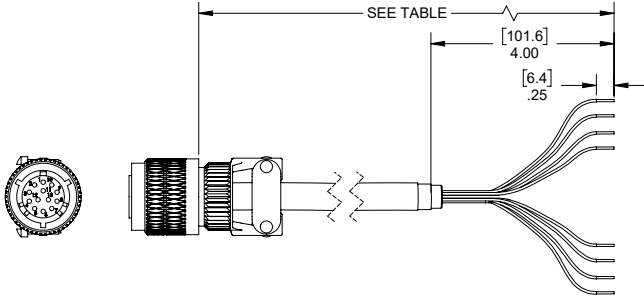
1. Full Range is defined "from negative full input acceleration to positive full input acceleration."
2. Output Phase angle = - 90°.

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	LCA-100-0.5g	451040-006
±1	LCA-100-1g	451040-004
±2	LCA-100-2g	451040-001
±5	LCA-100-5g	451040-002