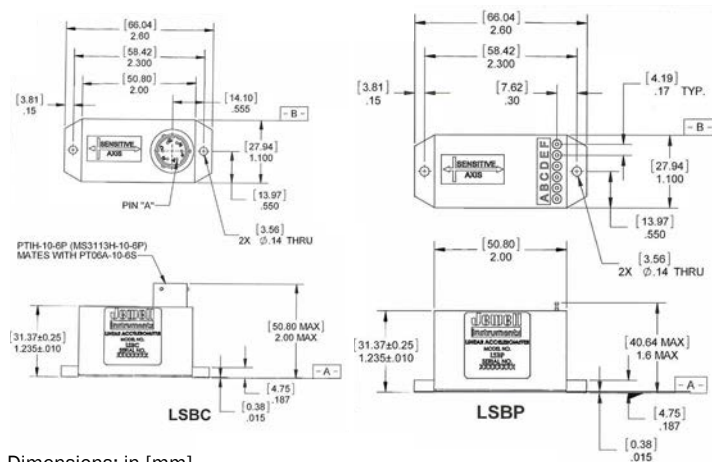


LSBC/LSBP Series Accelerometer

The Jewell LSB Series Accelerometer is a general purpose $\pm 0.5G$ to $\pm 20G$ device designed for rail, commercial, and aerospace sensing requirements.

FEATURES:

- $\pm 0.5g$ to $\pm 20.0g$ Full Range
- Bandwidth up to 200 Hz
- Satellite Application Reliability
- Better than 20 μg Res at 10g Full Scale
- Available with 1g Bias Options
- $-55^{\circ}C$ to $+95^{\circ}C$ Operating Temp Range
- Standard for Train Control for more than 30 years



Dimensions: in [mm]



APPLICATIONS:

- Train Braking & Banking
- Train Performance Testing
- Acceleration Control
- Automotive Performance Testing
- Active Damping
- Rail Car Monitoring
- Lateral Acceleration Sensing
- Tilt Train Controls
- Super-elevation Measurement
- Rail Car Vibration Testing
- Wind shear Detection
- Autopilot
- AHARS
- Wind Turbine Control

BLOCK:

PIN A	+12 to +18 VDC
PIN B	Power/Sig Common
PIN C	-12 to -18 VDC
PIN D	Eo [Volts/g]
PIN E	Current Output
PIN F	Self-Test

PERFORMANCE SPECIFICATIONS

PERFORMANCE

INPUT RANGE (g)	±0.5	±1.0	±2.0	±5.0	±10.0	±20.0
FULL RANGE OUTPUT (FRO V_{±1.0%})	±5.0					
NON LINEARITY (%FRO max)	0.05	0.05	0.05	0.10	0.10	0.25
SCALE FACTOR (V/g, nom)	10.0	5.0	2.5	1.0	0.5	0.25
SCALE FACTOR TEMP. SENSOR (ppm/°C, max)	200					
BIAS (g, max)	0.050	0.010	0.010	0.010	0.020	0.050
BIAS TEMPERATURE (µg/°C)	50	50	50	100	100	200
NATURAL FREQUENCY (Hz, nom)	70	100	140	100	140	160
BANDWIDTH (-3db, Hz, nom)	70	100	140	100	140	160
INPUT-AXIS MISALIGNMENT (° max)	±1.0					
RESOLUTION & THRESHOLD (µg)	10	10	10	10	20	50

ELECTRICAL

INPUT VOLTAGE RANGE (VDC nom)	±12 to ±18					
INPUT CURRENT (mA, nom)	10.0					
OUTPUT IMPEDANCE (Ohms, nom)	10.0K	5.0K	2.5K	5.0K	2.5K	2.5K
NOISE (mV, rms max)	0.005					

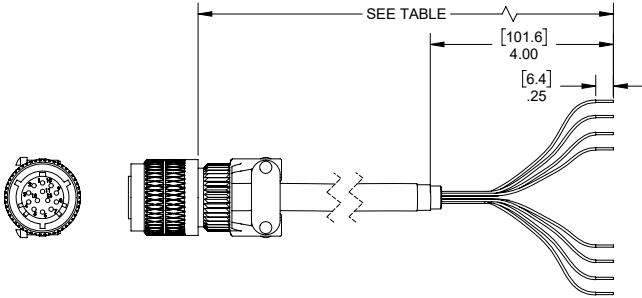
ENVIRONMENTAL

OPERATING TEMPERATURE RANGE	-55° to +95°C
SURVIVAL TEMPERATURE RANGE	-65° to +105°C
SHOCK	100 g - 0.011 sec, 1/2 sine
SEAL	MIL-STD 202, Method 112



MATING CONNECTOR AND CABLE ASSEMBLIES

CONNECTOR CABLE



PART #	MODEL #	LENGTH m (ft)
62101011-001	6-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		

ORDERING INFORMATION

HOW TO ORDER

	PIN OR CONNECTOR	MODEL #	PART #
±0.5	PIN	LSBP-0.5g	02550275-001
	CONNECTOR	LSBC-0.5g	02550275-006
±1.0	PIN	LSBP-1g	02550275-002
	CONNECTOR	LSBC-1g	02550275-007
±2.0	PIN	LSBP-2g	02550275-003
	CONNECTOR	LSBC-2g	02550275-008
±5.0	PIN	LSBP-5g	02550275-004
	CONNECTOR	LSBC-5g	02550275-009
±10.0	PIN	LSBP-10g	02550275-005
	CONNECTOR	LSBC-10g	02550275-010
±20.0	PIN	LSBP-20g	02550275-000
	CONNECTOR	LSBC-20g	02550275-000