

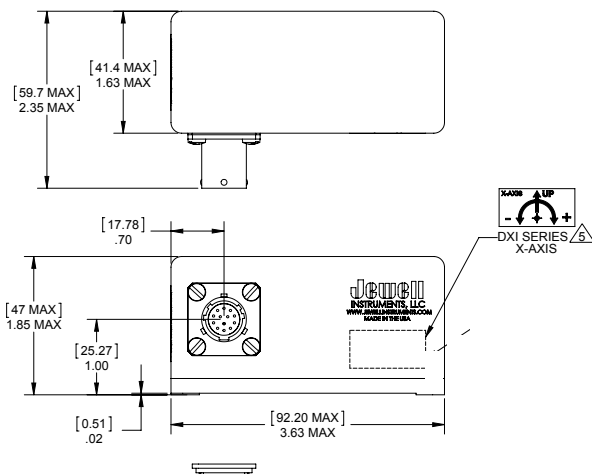
DXA-100/200

Single or Dual Axis Digital Accelerometer

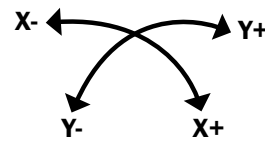
The Jewell DXA-100/200 Series single or dual digital accelerometer takes Jewell's highly accurate analog closed loop sensor technology to the next level.

FEATURES:

- Digital output
- Resolution 8 μg
- Mechanical Shock 1500g 1msec half sine
- Industry Standard EIA-RS485 and EIA-RS422 output
- For use in high shock and vibration environments
- High Precision and Performance
- Low Noise



Dimensions: in [mm]



*Standard DXA-100 includes X-axis only



APPLICATIONS:

- Radar/Antenna Control
- Structural Monitoring
- Linear Acceleration/Deceleration Measuring
- Automatic Train Position Control
- Seismic Monitoring
- Platform Leveling

PERFORMANCE SPECIFICATIONS DXA-100/200

PERFORMANCE

INPUT RANGE (g)	±0.25	±0.50	±0.87	±1.00	±2.00
NON LINEARITY (%FRO max)²	0.02	0.02	0.03	0.05	0.03
SCALE FACTOR TOLERANCE (% max)	0.5				
SCALE FACTOR TEMP. SENSITIVITY (PPM/ °C, max)	100				
BIAS (mg)	±1.00				
BIAS THERMAL SENSITIVITY (mg)	90				
BANDWIDTH (-3dB, Hz, nominal)³	30				
TRANSVERSE AXIS MISALIGNMENT (° max)	0.5				

ELECTRICAL

NUMBER OF AXES	1 or 2	
SUPPLY VOLTAGE RANGE (VDC)	10 to 30	
INPUT CURRENT (mA, max)	Transmitting Not Transmitting	DXA-100 32 mA & DXA-200 50 mA DXA-100 22 mA & DXA-200 40 mA

ENVIRONMENTAL

OPERATING TEMP. RANGE	-40° to +85 °C
STORAGE TEMP. RANGE	-40° to +85 °C
VIBRATION	20 grms
SHOCK	1500g, 1 msec, ½ sine

DIGITAL OUTPUT

INTERFACE	EIA-RS485 (default) EIA-RS422
PROTOCOL	Proprietary (custom)
BAUD RATE⁴	19200, 38400 , 57600, 115200, 230400

ENCLOSURE

HOUSING MATERIAL	Anodized & Alodine Aluminum
WEIGHT	DXA-100 8oz [226.80 g] DXA-200 10oz [283.50 g]
PROTECTION CLASS (per IEC 529)	IP67
NEMA ENCLOSURE RATING	6
SEAL	MILD-STD-202 Method 112
CONNECTOR TYPE	MS27476Y10D35P
RECOMMENDED MATING CONN.	MS27473T10B35S

PIN OUTS

1	N/C	8	N/C
2	N/C	9	N/C
3	CASE GROUND	10	N/C
4	+ SERIAL PORT	11	POWER RETURN
5	- SERIAL PORT	12	+ POWER
6	N/C	13	N/C
7	N/C		

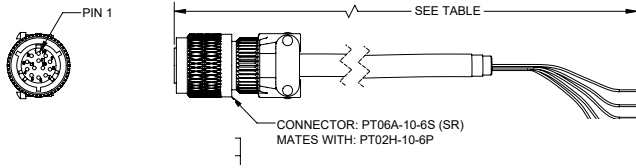
NOTES:

1. Full range is defined as “from negative full input angle to positive full input angle”
2. Non-linearity is specified as deviation of output referenced to a best fit straight line, independent of misalignment.
3. In default condition without averaging enabled.
4. Default Baud Rate is 38400

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

ACCESSORIES

CONNECTOR CABLE



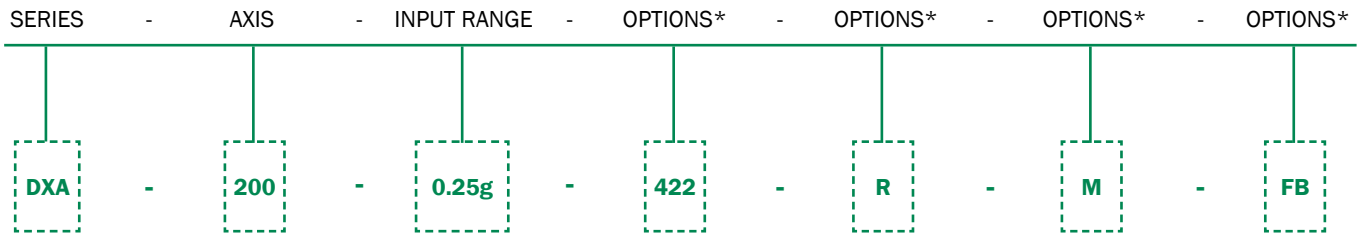
PART #	MODEL #	LENGTH m (ft)
F847774-001	13-Pin Circular Connector	-
879839-02	DXX-CBL-03M-2 (3M)	3 (9.84)
879839-01	DXX-CBL-05M-2 (5M)	5 (16.4)
Contact manufacturer for custom lengths		

ORDERING INFORMATION

HOW TO ORDER

Model Numbers are comprised of the series, the axis, the input range, and options.

EXAMPLE: DXA Series, dual axis, $\pm 30^\circ$ Input, RS422 Output, CENELEC/AREMA certified (R), with metric mounting threads (M), and a flange base (FB).



Standard Version

*Leave options blank if not needed

	AXES	MODEL #	PART #
± 0.25	1	DXA-100-0.25g-FB	02550401-101
	2	DXA-200-0.25g/0.25g-FB	02550401-201
± 0.50	1	DXA-100-0.5g-FB	02550401-102
	2	DXA-200-0.5g/0.5g-FB	02550401-202
± 0.87	1	DXA-100-0.87g-FB	02550401-103
	2	DXA-200-0.87g/0.87g-FB	02550401-203
± 1.00	1	DXA-100-1g-FB	02550401-104
	2	DXA-200-1g/1g-FB	02550401-204
± 2.00	1	DXA-100-2g-FB	02550401-105
	2	DXA-200-2g/2g-FB	02550401-205

*NOTE: Numbers provided are for the standard RS485 digital interface with no additional options.

850 Perimeter Road Manchester, NH 03103 USA

SENSORS: 800.227.5955

www.jewellinstruments.com | sensors@jewellinstruments.com

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