

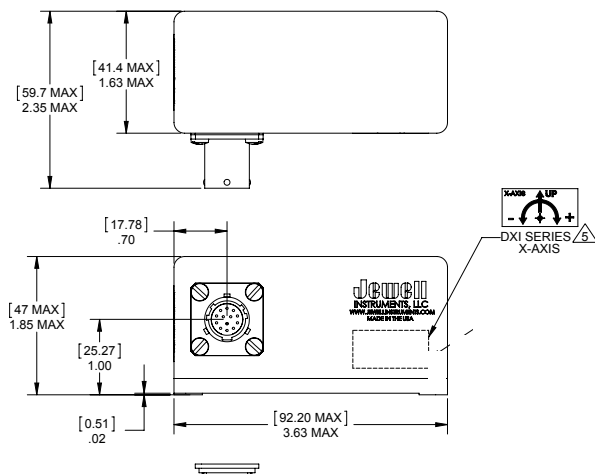
DXA-100/200-R

Single or Dual Axis Digital Inclinometer

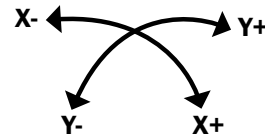
The Jewell DXA-100/200-R Series single or dual digital accelerometer takes Jewell's highly accurate analog closed loop sensor technology to the next level.

FEATURES:

- Digital output
- Resolution 8 μ g
- 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
- Meets CENELEC/AREMA Standards



Dimensions: in [mm]



*Standard DXA-100 includes X-axis only

RAILSTAR

The Jewell Instruments RailStar line offers high performance sensors and control products for the rail transportation industry. Many of the products in this line meet CENELEC and AREMA Standards.

CENELEC AREMA



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		

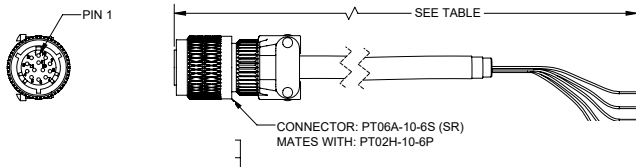
NOTES:

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



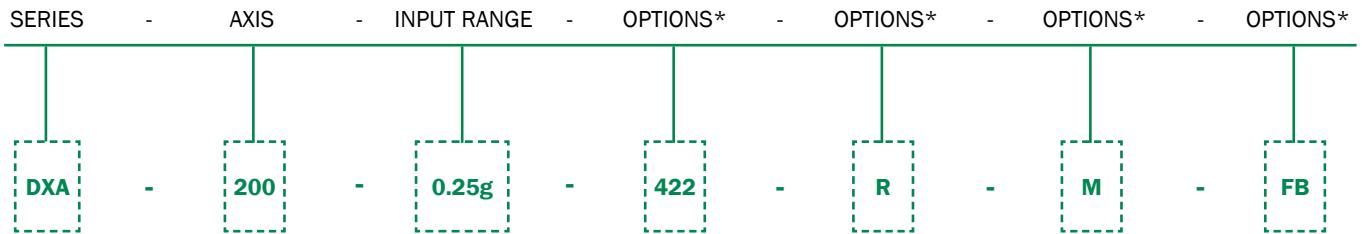
PART #	MODEL #	LENGTH m (ft)
F847774-001	13-Pin Circular Connector	-
879839-02	DXX-CBL-03M-2 (3M)	3 (9.84)
879839-01	DXX-CBL-05M-2 (5M)	5 (16.4)
Contact manufacturer for custom lengths		

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-R	02550341-001
	2	DXA-200-0.25g/0.25g-R	02550342-001
± 0.50	1	DXA-100-0.5g-R	02550341-002
	2	DXA-200-0.5g/0.5g-R	02550342-002
± 0.87	1	DXA-100-0.87g-R	02550341-003
	2	DXA-200-0.87g/0.87g-R	02550342-003
± 1.00	1	DXA-100-1g-R	02550341-004
	2	DXA-200-1g/1g-R	02550342-004
± 2.00	1	DXA-100-2g-R	02550341-005
	2	DXA-200-2g/2g-R	02550342-005

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



CENELEC EN 55022:2010
CENELEC EN 50155:2007
CENELEC EN 61000-4-8:2010

AREMA PART 11.5.1

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ISO9001
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