



**g** DXA-100/200

**Description**

- Digital Output
- Single or Dual Axis
- For a wide variety of applications.



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

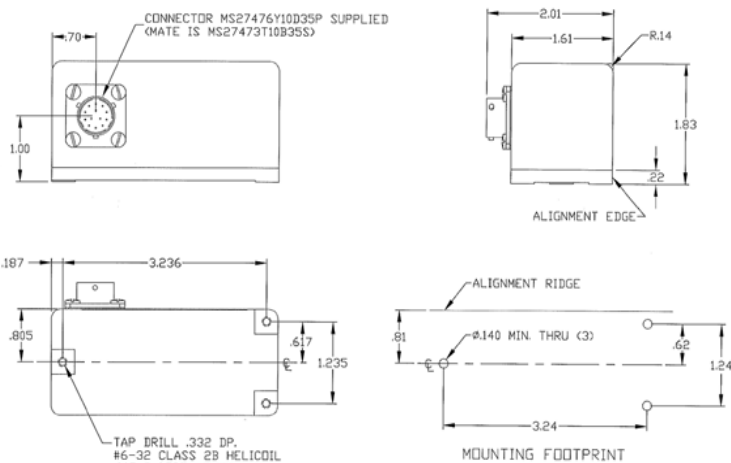
**Features**

- Digital output
- Resolution 8  $\mu$ 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

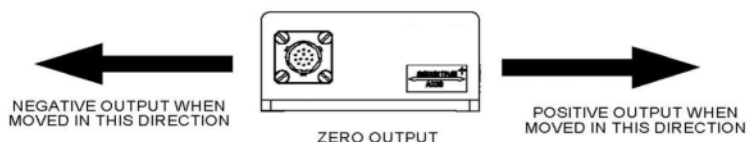
**Applications**

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

**Outline Diagram**

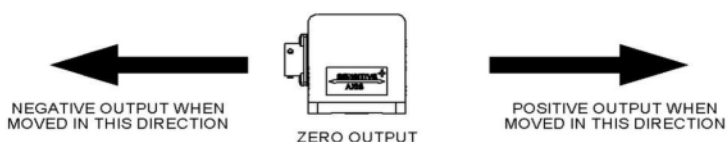


**X-AXIS\***



\*For AADXA-100 series sensitive axis this direction only

**Y-AXIS**



## ■ Performance Specifications

### Performance

Input Range <sup>1</sup> , g	±0.25	±0.50	±0.87	±1.00	±2.00
Number of Axis	1,2	1,2	1,2	1,2	1,2
Non Linearity <sup>2</sup> , %FRO, Max	0.02	0.02	0.03	0.05	0.03
Scale Factor Tolerance, % Max	0.05	0.05	0.05	0.05	0.05
Bias, mg	1.00	1.00	1.00	1.00	1.00
Bias Thermal Sensitivity, mg	90	90	90	90	90
Bandwidth (-3dB), Hz, Nom <sup>3</sup>	30	30	30	30	30
Transverse Axis Misalignment, °, Max	0.5	0.5	0.5	0.5	0.5

### Digital Output

Interface	EIA-RS485 (default)/EIA-RS422				
Protocol	Proprietary (Custom)				
Output Representation	g's				
Baud Rate <sup>4</sup>	19200	38400	57600	115200	230400

### Electrical

Supply Voltage, Volts DC	10 to 30				
Input Current, mA, Max	Transmitting	DXA-100 32mA/DXA-200 50mA			
	Not transmitting	DXA-100 22mA/DXA-200 40 mA			

### Environmental

Operational Temp Range, °C	-40 to +85				
Storage and Temp Range, °C	-40 to +85				
Protection Class per IEC 529	IP67				
NEMA Enclosure Rating	6				
Shock Survival	1500g, 1msec, ½ sine				
Vibration Survival, grms (20Hz to 2 KHz)	20				

### Enclosure

Housing Material	Anodized Aluminum				
Weight	DXA-100 8 oz [226.80 g]/ DXA-200 10 oz [283.50 g]				
Connector Type	MS27476Y10D35P				
Recommended Mating Connector	MS27473T10B35S				

- 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.
  - 4- Default Baud Rate is 38400

## ■ Order code

DXA 100 -.25g	DXA 200 -.25g / .25g
DXA 100 -.5g	DXA 200 -.5g / .5g
DXA 100 -.87g	DXA 200 -.87g / .87g
DXA 100 -1g	DXA 200 -1g / 1g
DXA 100 -2g	DXA 200 -2g / 2g