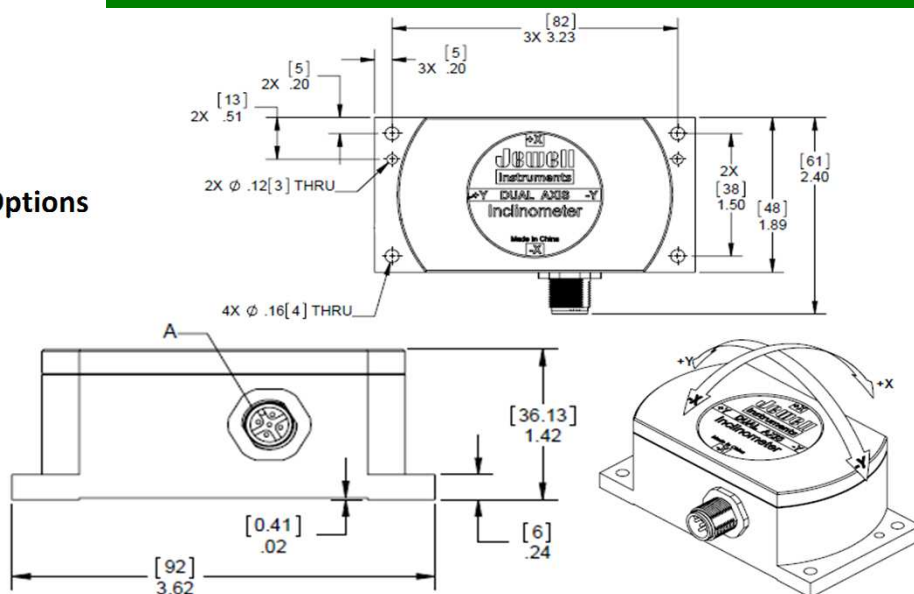


The model AMI is a high precision MEMS inclinometer with built-in thermal compensation. Standard units come with 0-5V, 0.5-4.5V or 4-20mA output options. All AMI series inclinometers are rated IP67 for waterproofing up to 1m. Custom ranges and output types are also available on request.



## Outline Diagram



\*Dimensions in Inches [mm]

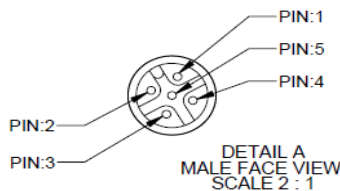
## Features & Benefits:

- Single-Axis and Dual-Axis Available
- Resolution: 0.001°
- Zero Temperature Coefficient:  $\pm 0.002^\circ/\text{C}$
- Analog 0-5V, 0.5-4.5V & 4-20mA Output Options
- -40° to +85°C Operating Range
- High Shock & Vibration Tolerance
- 2m cable whip included

## Applications:

- Geotechnical Monitoring
- Radar & Vehicle Platform Leveling
- Drill Rig Alignment
- Offshore/Subsea Platform Pitch & Roll
- Industrial Measurement & Control
- Railway Track Alignment & Maintenance
- Antenna Position Control

## Pin Out



Pin	Function
1	+VDC 9V~36V
2	X-Axis Out
3	Y-Axis Out
4	Ground
5	Factory Use Only

Rev G

## Performance Specifications

### STATIC/DYNAMIC

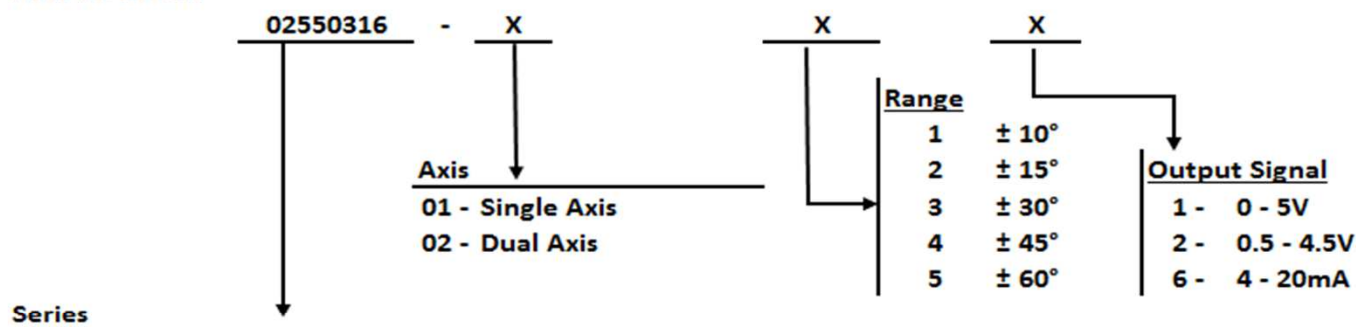
* Angular Range, °	±10°	±30°	±60°
Resolution, °	0.001	0.001	0.001
Hysteresis, °	0.003	0.005	0.008
Zero Tolerance (°)	0.1	0.1	0.1
Zero Temperature Coefficient, °/°C	±0.002	±0.002	±0.002
Scale Factor Tolerance (%)	0.7	1.4	2.8
Scale Factor Temperature Coefficient, ppm/°C	≤50	≤50	≤50
Warm Up, s	0.5	0.5	0.5
Time Constant, s	0.02	0.02	0.02

### ELECTRICAL AND ENVIRONMENTAL

Output	0-5V, 0.5 - 4.5V or 4-20mA
Electromagnetic Compatability	EN61000 and GBT17626
Impact Resistance	100g@11ms, 3 times/axis (1/2 sinusoid)
Vibration Resistance	10grms @ 10-1000Hz
Temperature Rating , Operation	-40 to +85°C
Temperature Rating, Storage	-55 to +100°C
Enclosure	Anodized Aluminum
Seal	IP67
Cables	2m Cable (standard)
Weight	150g (without cable)
Power Requirements	9-36 VDC @ 60mA

Notes: \* - Custom ranges available, please see model number structure below.

### How To Order:



AMI - Analog MEMS Inclinometer

(Resolution: 0.001° & Zero Temp Drift: ±0.0008°, Temp Comp.)

### Example:

02550316-0116

AMI Single Axis, +/- 10 degrees, 4-20 mA output

Note: ATP report is included with every unit

ATP Report Includes: Scale Factor, Axis Misalignment, Bias, Linearity, Input Current, Thermo Data Points.

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