

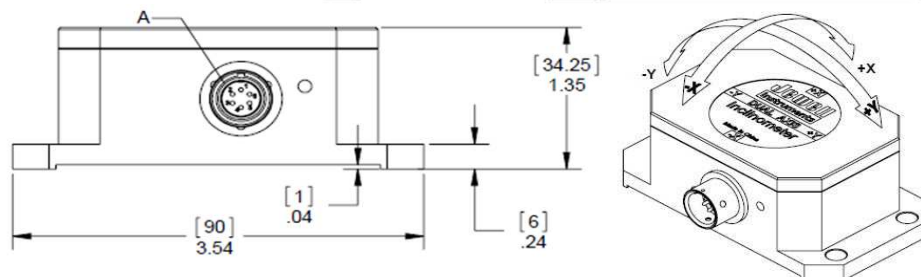
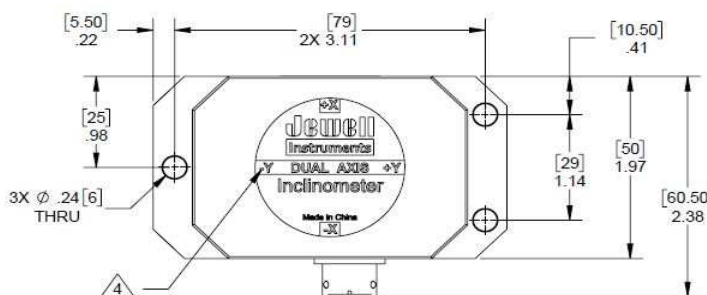
AMH Series - Analog MEMS Inclinometer

Making Sense out of Motion...

The Jewell Instruments model AMH is a high precision MEMS inclinometer. Standard units are available with 0-5V, 0.5-4.5V, or 4-20mA output options. All AMH 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: $\pm 0.006^\circ/\text{C}$
- High Shock & Vibration Tolerance
- Analog 0-5V, 0.5 - 4.5V & 4-20mA Output Options
- -40° to +85°C Operating Range
- 1m 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

Pin Out



3-pin Connector
(Single Axis)



5-pin Connector
(Dual Axis)

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

Performance Specifications

STATIC/DYNAMIC

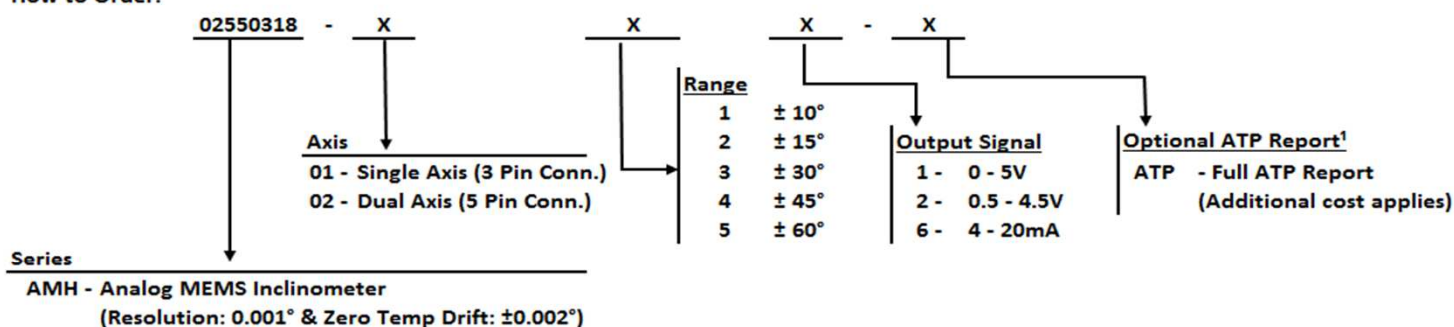
* Angular Range, °	±10°	±30°	±60°
Resolution, °	0.001	0.001	0.001
Hysteresis, °	0.005	0.008	0.01
Zero Tolerance (°)	0.1	0.1	0.1
Zero Temperature Coefficient, °/°C	±0.006	±0.006	±0.006
Scale Factor Tolerance (%)	0.7	1.4	2.8
Scale Factor Temperature Coefficient, ppm/°C	≤200	≤200	≤200
Warm Up, s	0.5	0.5	0.5
Time Constant, s	0.05	0.05	0.05

ELECTRICAL AND ENVIRONMENTAL

Output	0-5V, 0.5 - 4.5V or 4-20mA
Electromagnetic Compatibility	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	1m 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:



Example:

02550318-0121-ATP

AMH Single Axis, +/- 15 degrees, 0-5V Output, Full ATP Report

1 - Note: "ATP" must be added to the end of the part number for a full ATP report. An additional cost will apply.

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