

Models 755 & 756 Miniature Tilt Sensors

High-Gain and Mid-Range

The high-precision sensors in our 500- and 700-Series Tiltmeters are available as standalone modules for applications with size or weight constraints. These

small uniaxial and biaxial modules attach directly to the elements you want to measure, without unbalancing them or affecting their performance.



MINIATURE TILT SENSORS

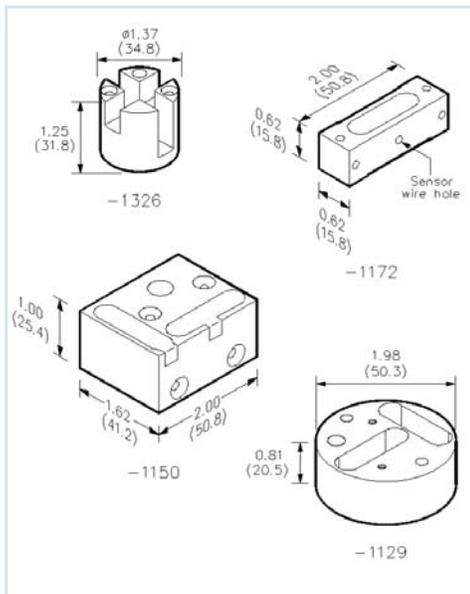
Models -1129, -1150 and -1172 also are available in vacuum-compatible versions that do not outgas. All biaxial units except the vacuum-compatible versions include a temperature sensor.

Miniature Tilt Sensors are operated by a variety of Applied Geomechanics signal conditioners that may be located as far as 100m from the sensors.

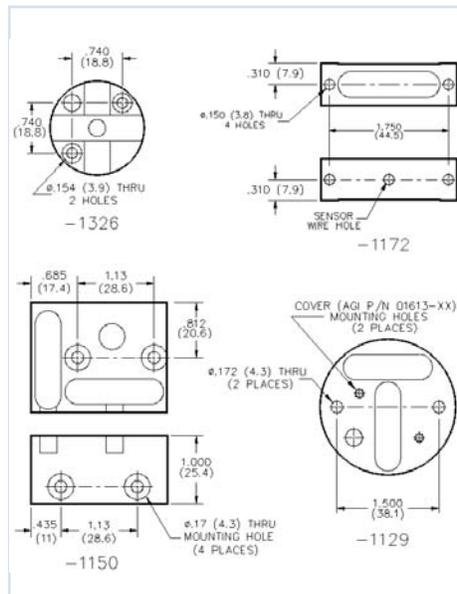


| 755-SERIES HIGH-GAIN TYPE | | 756-SERIES MID-RANGE TYPE |
|-----------------------------|---|--|
| TOTAL RANGE | ±0.9 degree | ±10 degrees |
| RESOLUTION | 0.1 microradian (0.02 arc second) | 1.0 microradian (0.2 arc second) |
| REPEATABILITY | 1 microradian (0.2 arc second) | 2 microradians (0.4 arc second) |
| LINEARITY | 1% of half span, 7% of full span (typical) | 0.5% of half span, 2% of full span (typical) |
| NATURAL FREQUENCY | 0.8 Hz | 1.3 Hz |
| TIME CONSTANT | 0.5 second | 0.4 second |
| TEMPERATURE COEF. (Typical) | Scale Factor: +0.04%/oC, Zero: ±3 μradians/°C | Scale Factor: +0.05%/°C, Zero: ±10 μradians/°C |
| CONNECTIONS | 12-inch (30 cm) wires with tinned ends or mini connectors; 1-meter wires on vacuum-compatible units | |
| ENVIRONMENTAL | -25°C to +80°C operational and storage, wide ranges available; 0 to 100% humidity | |
| MATERIALS | Anodized 6061-T6 aluminum. Vacuum-compatible sensors are 304 stainless steel and have Kapton wires. | |
| SIGNAL CONDITIONING | Model 781 Bench-top Unit, Model 786 Rack Mount Unit, Model 775 Readout/Electronics Unit, Model 84800 Card (1-channel), Model 84828 Card (1-channel) or Model 83162 Card (2-channel) | |

| MODEL | CHANNELS | MOUNTING | DIMENSIONS | WEIGHT |
|-------|---------------------------|--|---|----------------|
| -1129 | 2 tilt, 1 temp. (biaxial) | Horiz. surface or vert. tube; hole dia.= 0.18" (4.4 mm) | 1.98" dia. Cylinder x .75" high (50.3 x 19.1 mm) | 4 oz. (114 g) |
| -1150 | 2 tilt, 1 temp. (biaxial) | Horiz. or vert. surface; hole dia.= 0.18" (4.4 mm) | 1.62" x 2.00" x 1.00" (41.2 x 50.8 x 25.4 mm) | 5 oz. (142 g) |
| -1172 | 1 tilt (uniaxial) | Horiz. or vert. surface; hole dia.= 0.17" (4.3mm) | 2.00" x 0.62" x 0.62" (50.8 x 15.7 x 15.7 mm) | 1.5 oz. (42 g) |
| -1326 | 2 tilt, 1 temp. (biaxial) | Horiz. surface or vert. tube; mounting hole dia.= 0.15" (3.9 mm) | 1.37" dia. cylinder x 1.25" high (34.8 x 31.8 mm) | 2.8 oz. (80 g) |



Miniature Tilt Sensors Dimenions



Mounting Hole Information

ORDER CODES:

- 755-VAC High gain with vacuum compatibility
- 756-VAC Mid range with vacuum compatibility



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