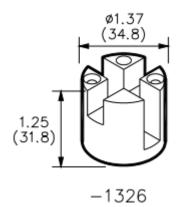
J2UP Instruments

MAKING SENSE OUT OF MOTION

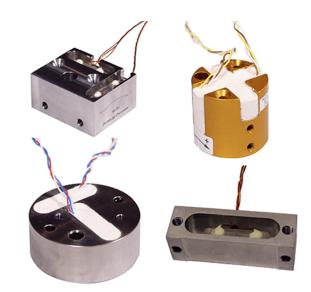
Model 755/756 High-Gain/Mid-Range Miniature Tilt Sensor

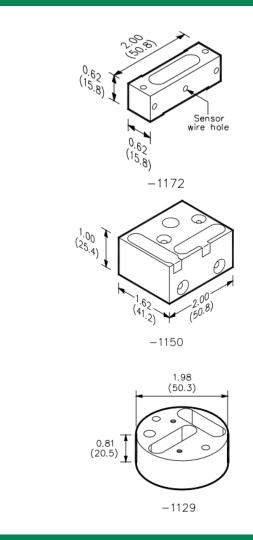
The high-precision sensors in our 500- and 700-Series Tiltmeters are available as standalone modules for applications with size or weight constraints. Small and light, 755- and 756- sensors mount directly to critical system components, and are ideal for precision measurement and control applications where space is limited. Units are also available non-outgassing (-VAC) versions for specialized vacuum applications. Standard biaxial modules also include a LMC35Z temperature sensor (not available for –VAC versions).

For peak performance, use your Miniature Tilt Sensors with Jewell's precision signal conditioning electronics. All Miniature Tilt Sensors include calibration when ordered with Jewell electronics.



Dimensions: in [mm]







PERFORMANCE SPECIFICATIONS

PERFORMANCE

VERSION	755- Series High-Gain Type	756- Series Mid-Range Type
TOTAL RANGE (°) ¹	±0.5°	±10°
LINEAR RANGE (°)	±0.25°	±15°
NONLINEARITY (%FRO) ² max	1% half span (7% full span)	0.5% half span (2% full span)
NONREPEATABILITY	1 µradian (static)	2 µradian (static)
RESOLUTION	<0.1 µradian (0.02 arc sec)	1.0 µradian (0.2 arc sec)
TIME CONSTANT	0.5 sec	0.4 sec
Kz TEMP COEFFICIENT (°/C)	±3 µradians/ °C (typical)	±10 µradians/ °C (typical)
Ks TEMP COEFFICIENT (%/ °C)	0.04%/°C (typical)	0.05%/°C (typical)

ELECTRICAL & ENVIRONMENTAL

NATURAL FREQUENCY	0.8 Hz	1.3 Hz
OPERATING TEMPERATURE RANGE	-25 to +80°C	
STORAGE TEMPERATURE RANGE	-25 to +80°C	
MATERIALS	304 SS (Anodized Al available on request)	

NOTES:

1. Custom ranges available on request

2. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment

Specifications are subject to change without notice due to continued product development

ORDERING CODE

MODEL NO.	DESCRIPTION	
755-1172	High-gain Miniature Tilt Sensor, Uniaxial, 304 SS	
755-1150	High-gain Miniature Tilt Sensor, Biaxial, 304 SS, Square	
755-1129	High-gain Miniature Tilt Sensor, Biaxial, 304 SS, Round	
755-1326	High-gain Miniature Tilt Sensor, Biaxial, Anodized Al, Stacked Assembly	
756-1172	Mid-range Miniature Tilt Sensor, Uniaxial, 304 SS	
756-1150	Mid-range Miniature Tilt Sensor, Biaxial, 304 SS, Square	
756-1129	Mid-range Miniature Tilt Sensor, Biaxial, 304 SS, Round	
756-1326	Mid-range Miniature Tilt Sensor, Biaxial, Anodized AI, Stacked Assembly	

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