

# Application Note

## SP5000 and AU6000 Series Dual Axis Tilt Sensor ñ Settling Time and Boresight Error Graphs

### SCOPE

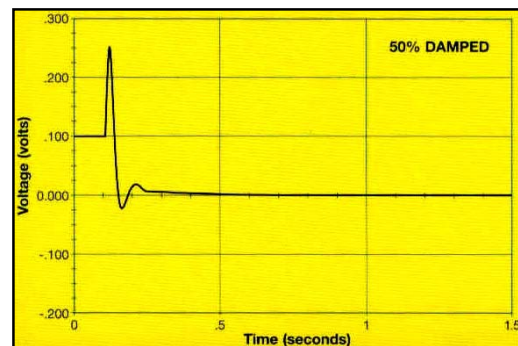
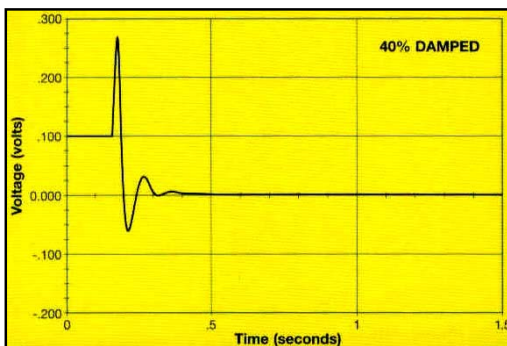
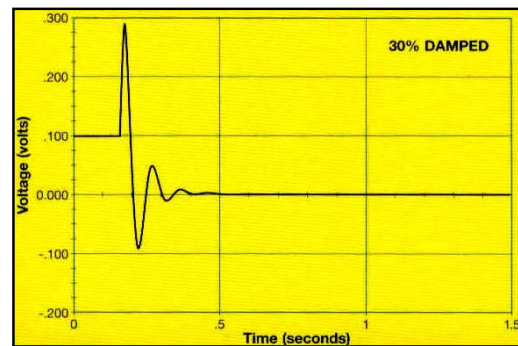
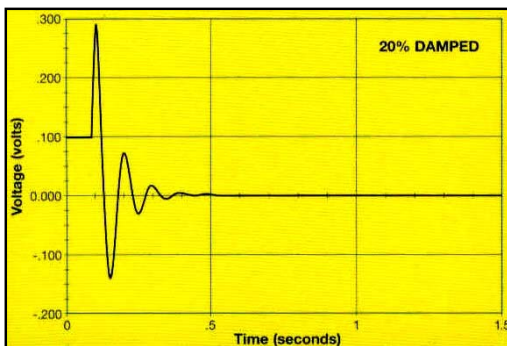
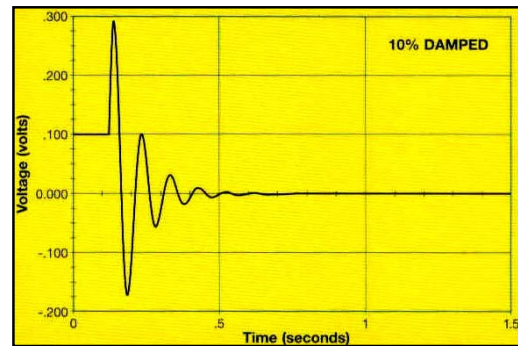
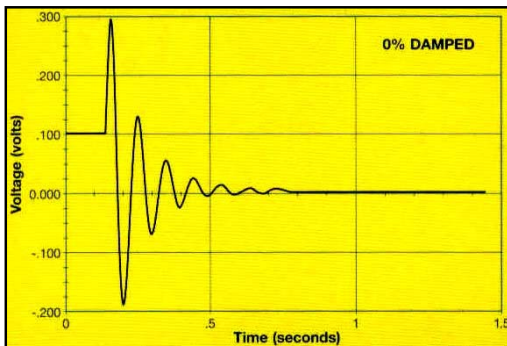
The following graphs and charts depict the typical output, and output response, of the appropriate model sensor, for 'Settling Time' and 'Boresight Error' distribution. Please note that the 'Settling Time' graphs are categorized by the damping percentage (viscosity) of the fluid, and apply to all model/series sensors, while the 'Boresight Error' graphs are model specific.

### DEFINITIONS

**Settling Time** ñ the amount of time it takes for the sensor output to stabilize to within 1% of its quiescent value, after a stepped movement.

**Boresight Error** ñ the deviation of the sensor output from electrical null (zero), when the mechanical base (reference surface) is perpendicular to the gravity vector.

### SETTLING TIME GRAPHS

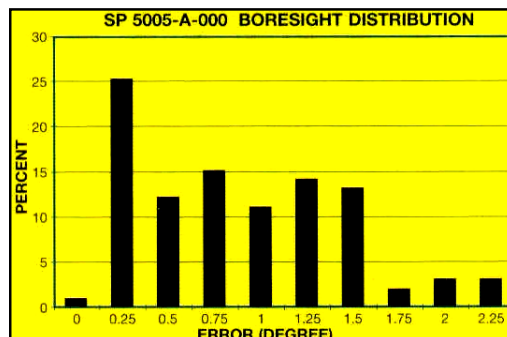
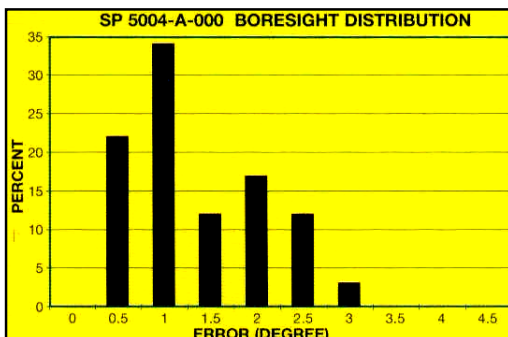
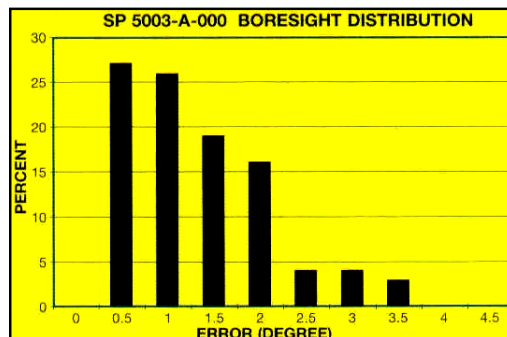
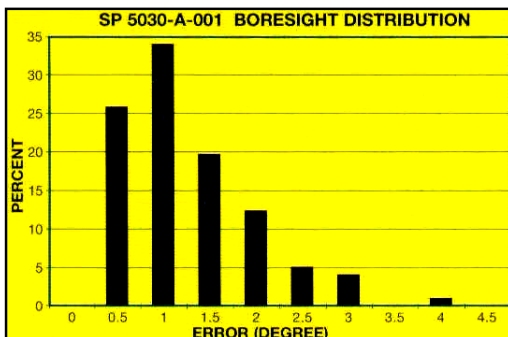
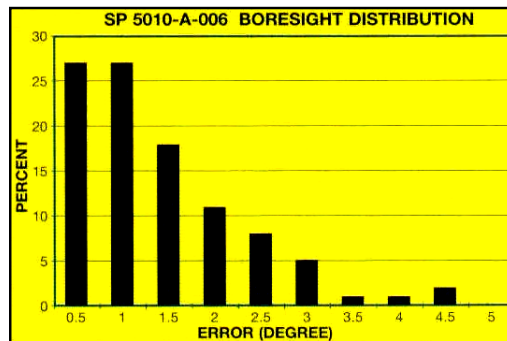
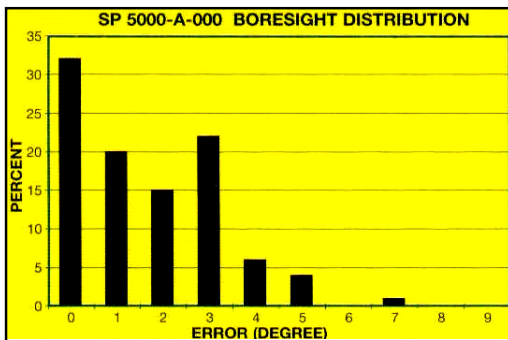
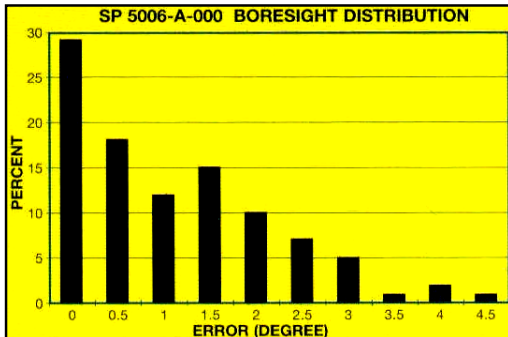


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### BORESIGHT ERROR



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