

# Application Note

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

### SCOPE

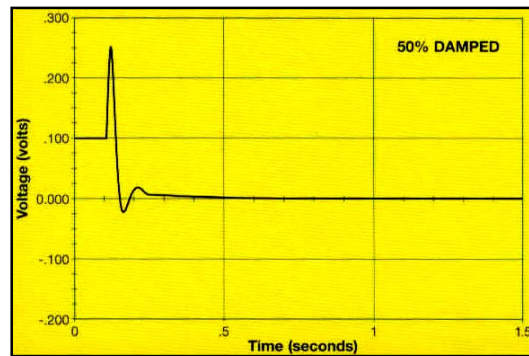
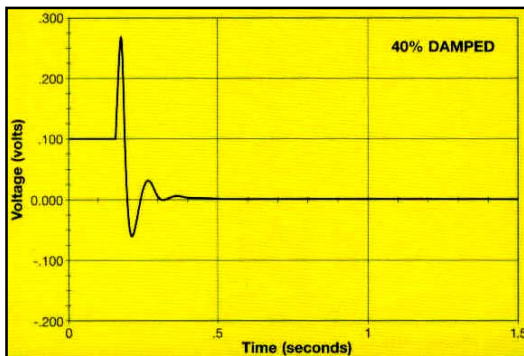
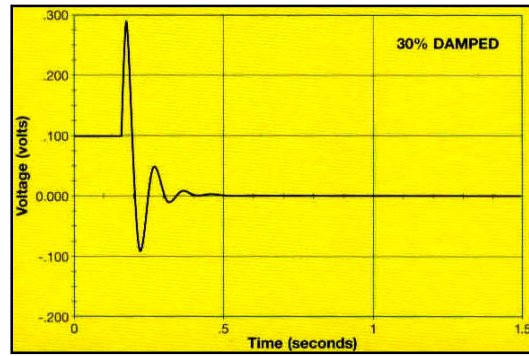
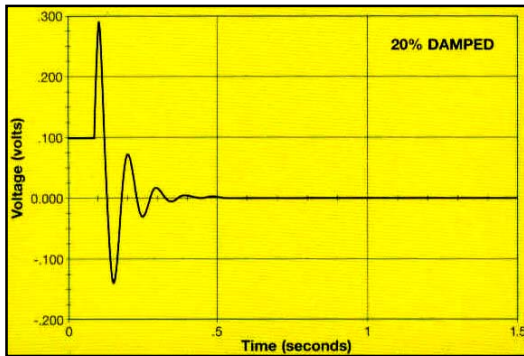
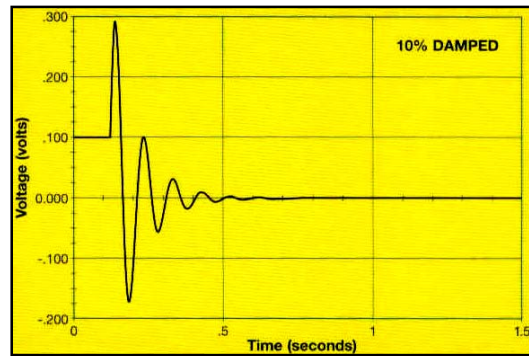
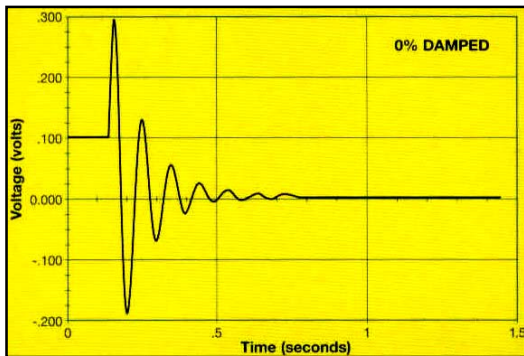
The following graphs and charts depict the typical output, and output response, of the appropriate model sensor, for 'Settling Time' and 'Boresight Error' distribution. Please note that the 'Settling Time' graphs are categorized by the damping percentage (viscosity) of the fluid, and apply to all model/series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

### DEFINITIONS

**Settling Time** – 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** – 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



**SPECTRON GLASS AND ELECTRONICS INC.**

595 OLD WILLETS PATH  
HAUPPAUGE NY 11788  
PHONE: 631 582-5600  
FAX: 631 582-5671



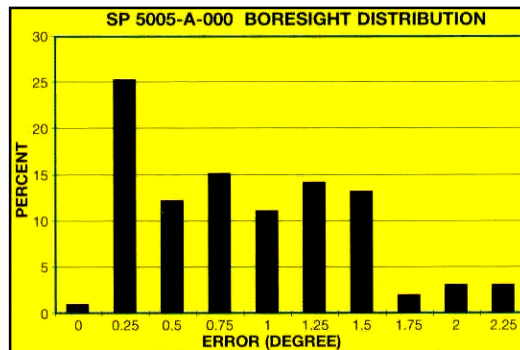
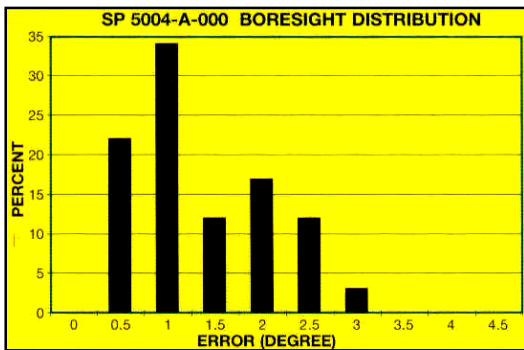
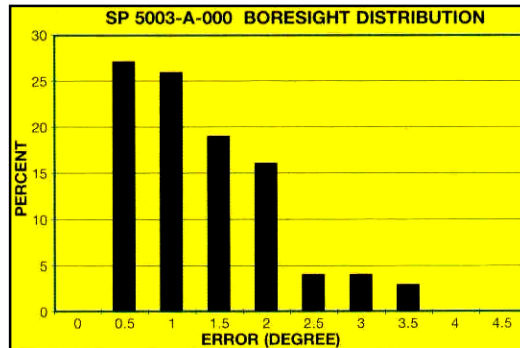
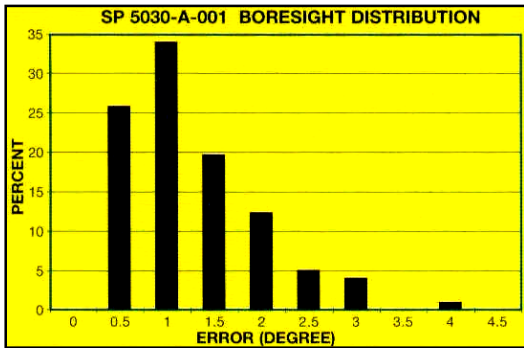
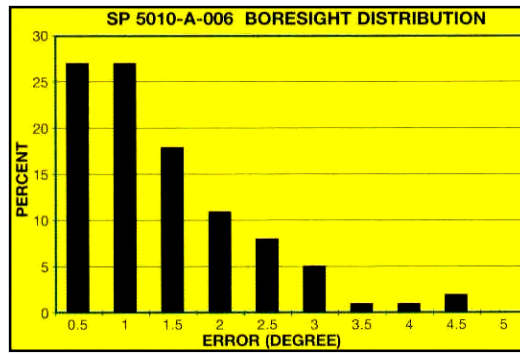
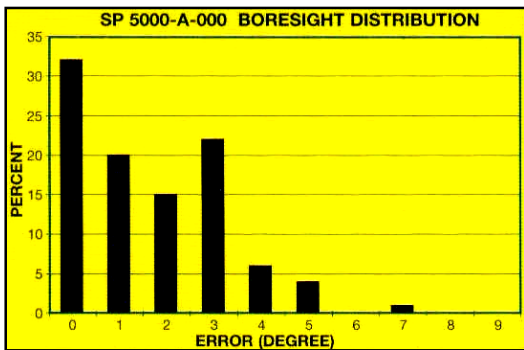
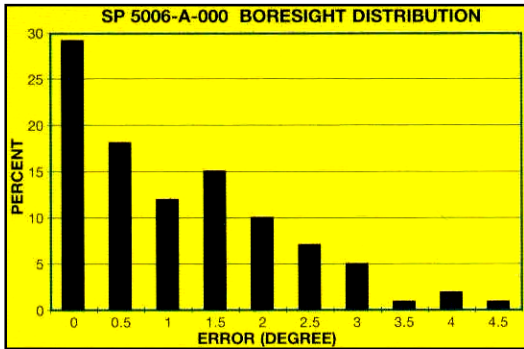
*Specifications are subject to change without notice!*

Doc.# SAN-210-2203

# Application Note

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

### BORESIGHT ERROR



**SPECTRON GLASS AND ELECTRONICS INC.**

595 OLD WILLETS PATH  
 HAUPPAUGE NY 11788  
 PHONE: 631 582-5600  
 FAX: 631 582-5671



*Specifications are subject to change without notice!*

Doc.# SAN-210-2203