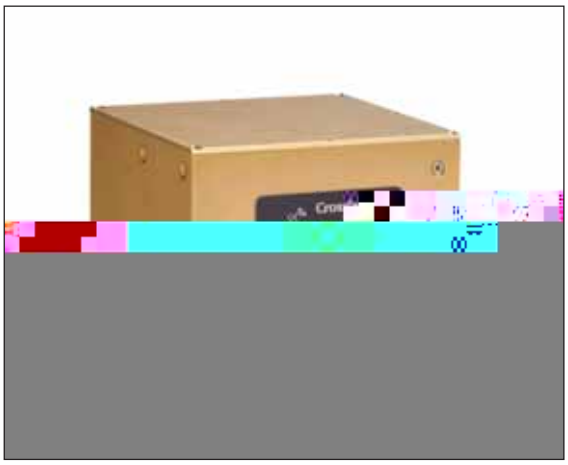
VG700

FIBER OPTIC VERTICAL GYRO SYSTEM

- Fiber Optic Gyro Stability < 20°/hr
- Fully Compensated Angular Rate and Linear Acceleration Outputs
- SAE (Earth Coordinate) Navigation Frame
- Automotive Compatible 10-30 VDC Input Supply



Applications

- Automotive Testing

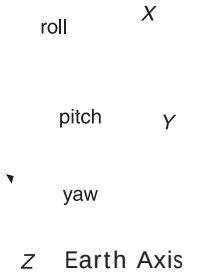
VG700AB

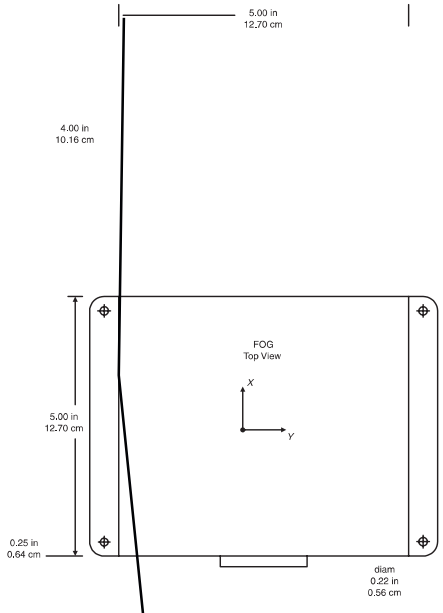
The Crossbow VG700AB is designed specifically for automotive test applications. It combines Crossbow's third generation high performance fiber optic gyros with the latest in silicon micro-machined (MEMS) accelerometer technology to provide a highly accurate dual function Vertical Gyro (VG) and Inertial Measurement Unit. The new third generation FOG sensor provides excellent bias stability of <20°/hr (constant temp.) and low noise.

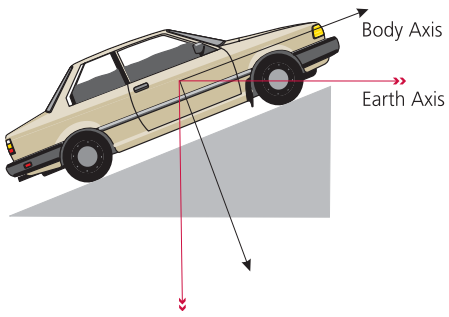
The VG700AB is available in two configurations: earth coordinates or body coordinates. The VG700AB-201 provides roll and pitch angle; roll, pitch and yaw angular rate; and X,Y, Z tangential acceleration (earth coordinate) in accordance with SAE Navigation Frame definition. The VG700AB-202 provides roll and pitch angle; roll, pitch and yaw angular rate; and X, Y, Z body-axis acceleration.

The VG700AB consists of three fiber optic rate gyros, three silicon accelerometers, a high-performance DSP and automotive power supply all packaged in one small (6" x 5" x 4") aluminum housing. Fully compensated angular rate and linear acceleration outputs are provided in addition to the roll and pitch angles. Data is available in both analog and digital (RS-232) formats.

Each Inertial System comes with a User's Manual offering helpful hints on programming, installation, and product information. In addition, Crossbow's GYRO-VIEW software is included to assist you in system development and evaluation, and allows you to perform data acquisition.







Body Axis

inertial systems

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