

Wiring Standards, Axis Definitions, and Signal Polarity

All SensorData sensors are wired according to the recommendations of the Western Regional Strain Gage Committee (Rev May 1960). Unless stated otherwise, SensorData supplies all sensors with a 6-pin PT receptacle, and all sensors, except rotary transformer coupled sensors, are wired according to Fig. 1. SensorData's rotary transformer coupled torque sensors include an internal shunt calibration circuit and are wired according to Fig. 2.

Axis definition standards for all SensorData products comply with the "Axis and Sense Definitions of NAS-938" (National Aerospace Standard Machine Axis and Motion) nomenclature, ASTM Specification F376-73 for wheel and pulley torque nomenclature, and recommendations of the Western Regional Strain Gage Committee. The "Right Hand Rule" for axis definition and standard nomenclature are illustrated in Fig. 3 through Fig. 6.

A positive signal is generated for a force applied in tension to a force sensor capable of operating in both tension and compression. A positive signal is generated for a force applied in compression to a force sensor capable of operating in compression only. A positive signal is generated for a force applied in the clockwise (CW) direction to a torque sensor.

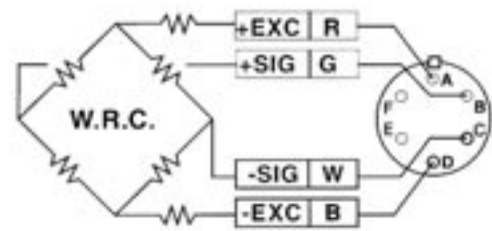


Figure 1.

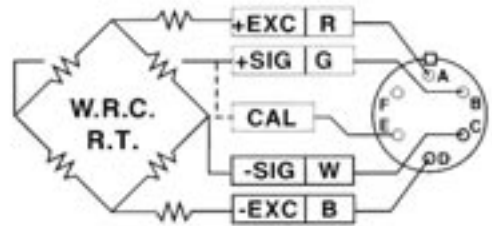


Figure 2.

