

AUTOMOTIVE POSITION SENSOR

Electric Power Steering Compliant Torque and Position Sensor



BI Technologies steering sensors provide high accuracy in challenging environments. BI sensors are designed for today's high performance Electronic Steering Systems to provide critical position and torque loading information. Dual redundant outputs provide added reliability and system diagnostic options. The patent pending BI design allows for independent concentric rotors in the same package. This allows position and torque drive shafts to be non-concentric without over-stressing the sensor or affecting accuracy. BI's expertise in innovative sensor packaging is a key element in the development of solutions for custom applications.

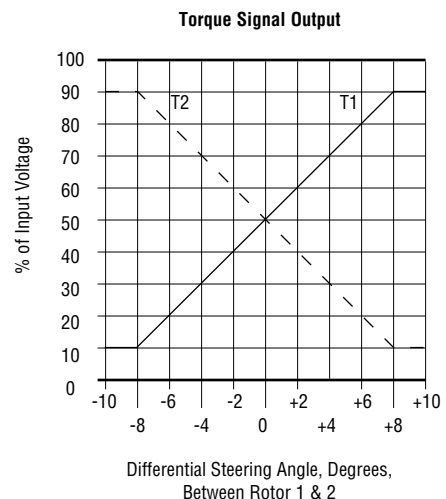
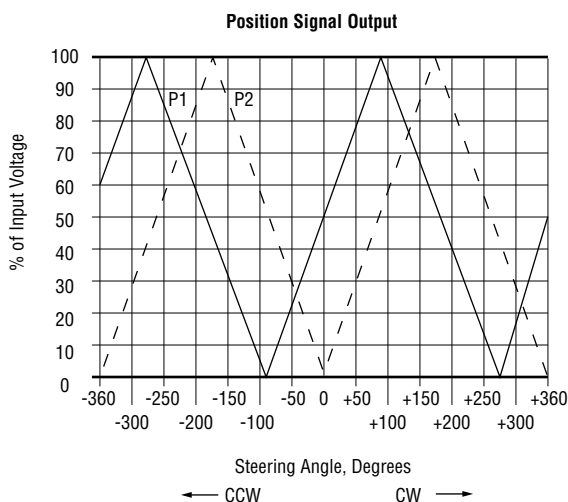
FEATURES & BENEFITS

- Dual output position sensor
- Dual output torque signal
- Dual concentric independent rotors
- BI exclusive floating torque rotor design
- Patent pending low hysteresis design

APPLICATIONS

- Electric power steering
- Active suspension
- Rotary shaft position and torque
- Electro-hydraulic steering system

PERFORMANCE



Specifications subject to change without notice.

ELECTRICAL

| | |
|--|--------------------------|
| Operating Voltage, Maximum | 16 V |
| Accuracy: Position Output | ±1.5% Absolute Linearity |
| Torque Output | ±3.0% Absolute Linearity |
| Dielectric Withstanding Voltage, Maximum | 500 Vdc |

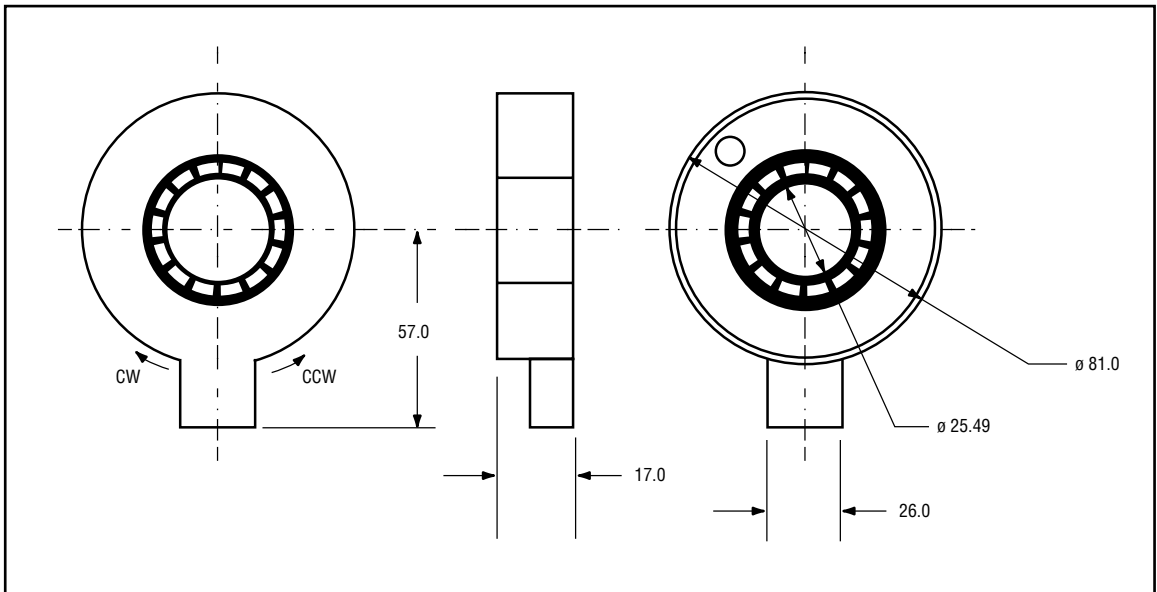
MECHANICAL

| | |
|---------------------------|----------|
| Actuation Torque, Maximum | 0.05 N-m |
| Hysteresis, Maximum | 1% |

ENVIRONMENTAL

| | |
|------------------------------------|---------------------|
| Operating Temperature Range | -40°C to +150°C |
| Shock, Maximum | 10G's |
| Vibration | 10G's |
| Dust Exposure | 8 hours to SAE J726 |
| Dither Life | 75 mil. strokes |
| Rotational Life @ 300 RPM, Maximum | 1 mil. rotations |

OUTLINE DIMENSIONS (Inch/mm)



CONTACT BI

For assistance with your application or price and delivery information contact BI Technologies product marketing at 714/447-2757 or by fax: 714/447-2400 or by email: sales@bitechnologies.com