

# LH3 Torque & Position Sensor

SX-4433



## Features:

- Torque and position output
- Ideally suited for demanding electric power steering systems



## Electrical

Torque Signal Linearity	±3%
Torque Hysteresis	0.5%
Torque Signal Microgradient	±30% of theoretical slope over 0.4° interval
Torque Signal Sensing Angle	±8°
Position Signal Linearity	±1.5%
Position Signal Microgradient	±30% of theoretical slope over 2° interval
Total Resistance	518 Ω ±30%

## Mechanical

Torque Mechanical Travel	±11.4°
Turning Torque (rotor to rotor)	0.03 NM Max.
Turning Torque (position rotor to housing)	0.06 NM Max.
Position Mechanical Travel	Continuous
Weight	95 grams maximum

## Environmental

Operating Temperature Range	-40°C to +85°C
Shock	14 ms half-sine at 300 m/s <sup>2</sup>
Vibration	10 to 55 Hz with 1 mm P-P constant displacement, 120 hours each of 3 planes
Torque Rotational Life	1 million cycles
Position Rotational Life	1 million cycles
Storage Temperature Range	-40°C to +105°C

### General Note

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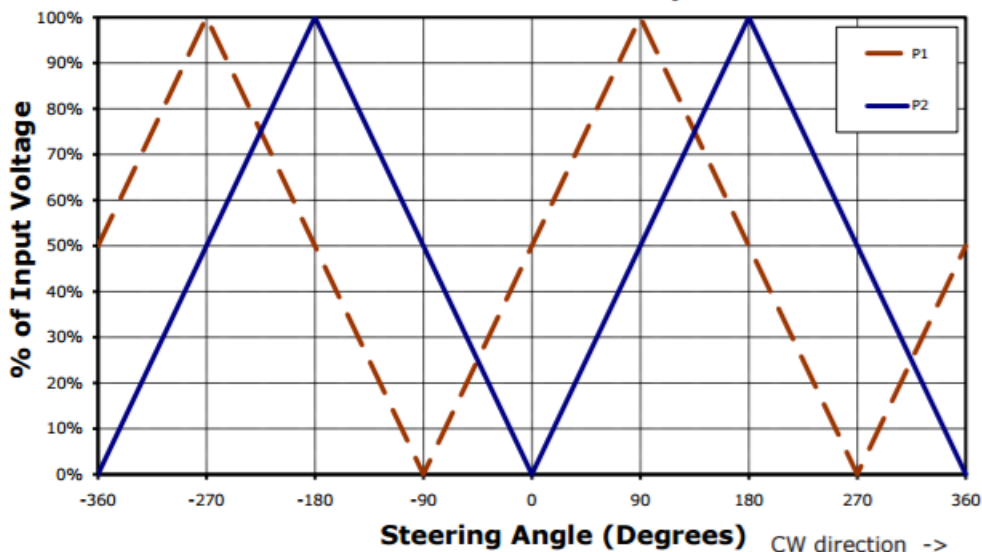
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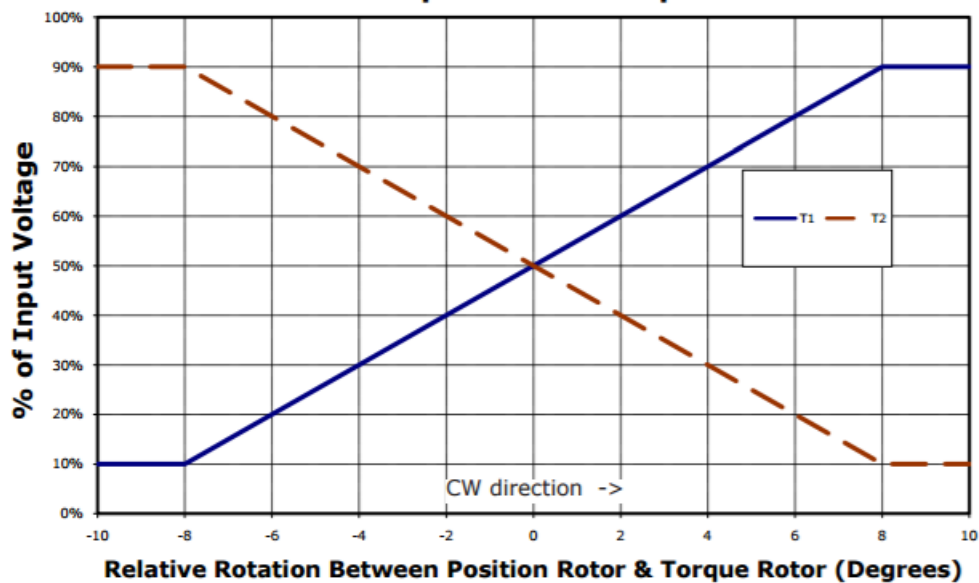
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### Output Charts

#### Position Sensor Output



#### Torque Sensor Output

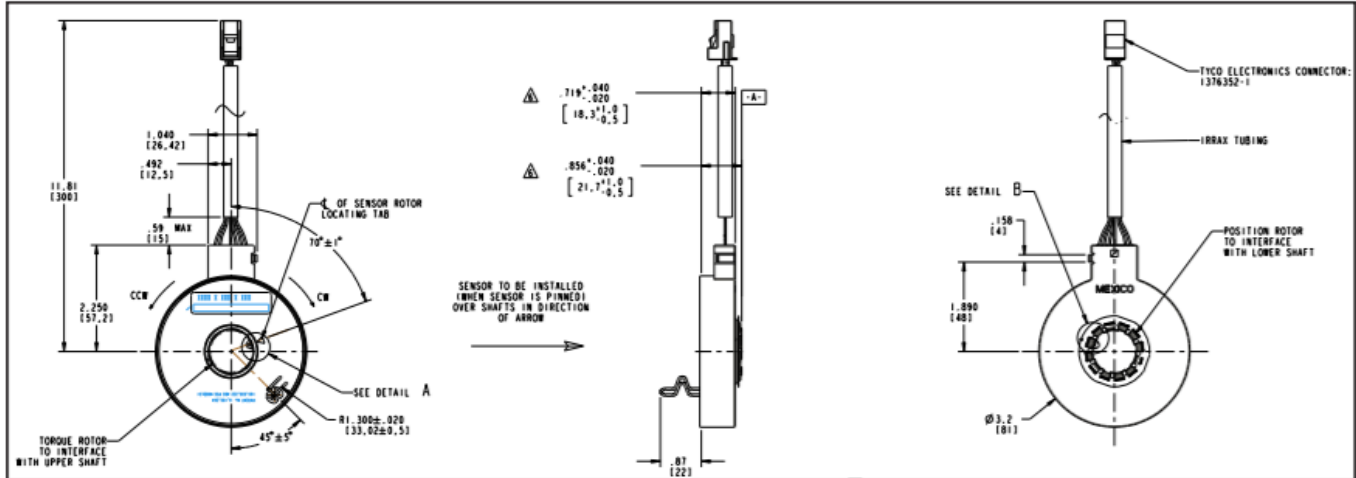


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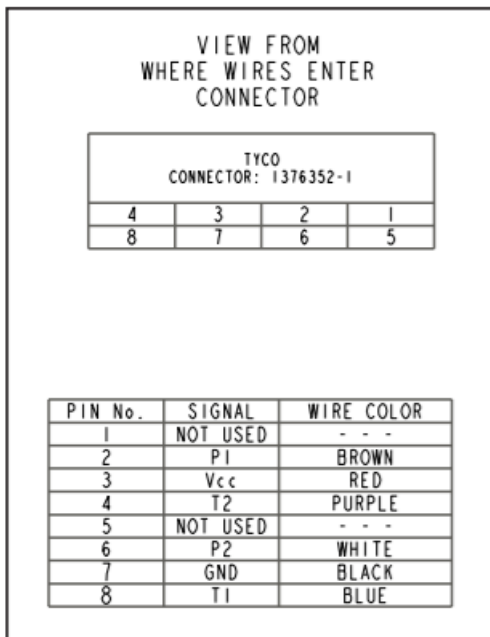


## Outline Drawing

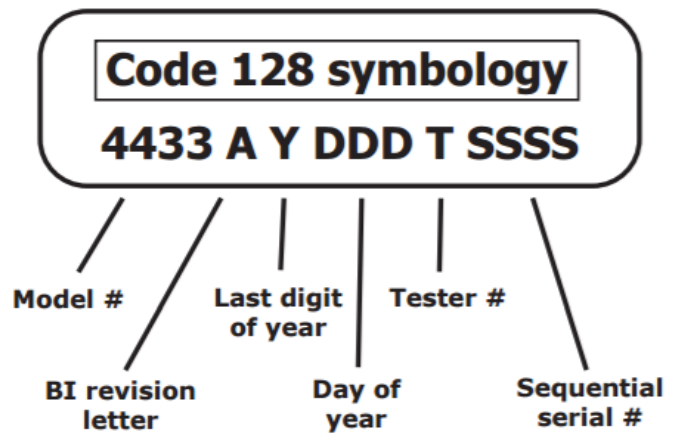


Tolerances ±0.25 mm unless otherwise specified. See drawing # 122-4433-80 for details.

## Pinouts



## Barcode Label



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### Recommended Interface

