

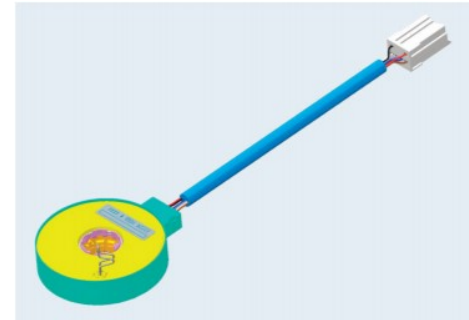
# LH3 Torque & Position Sensor

SX-4414



## Features:

- 5° sensor with 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	±5°
Position Signal Linearity	±1.5%
Position Signal Microgradient	±30% of theoretical slope over 2° interval
Total Resistance	471 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

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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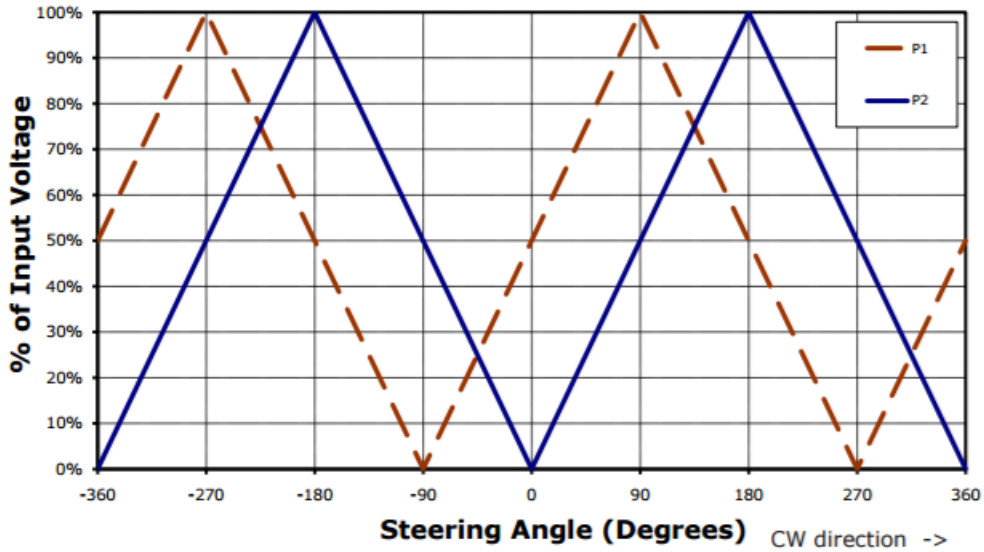
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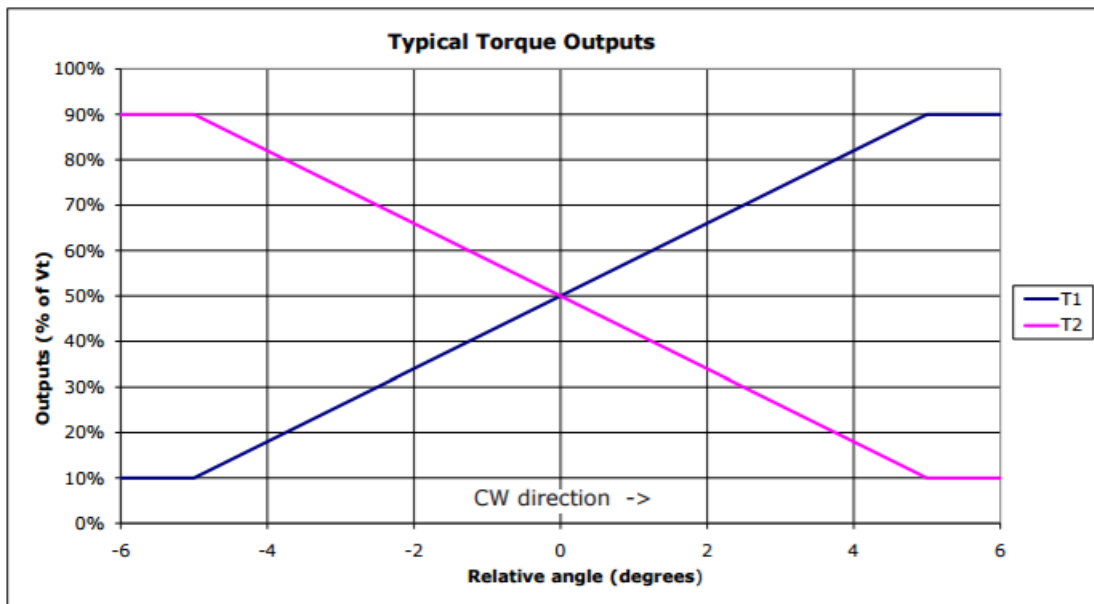
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### Output Charts

#### Position Sensor Output



#### Typical Torque Outputs

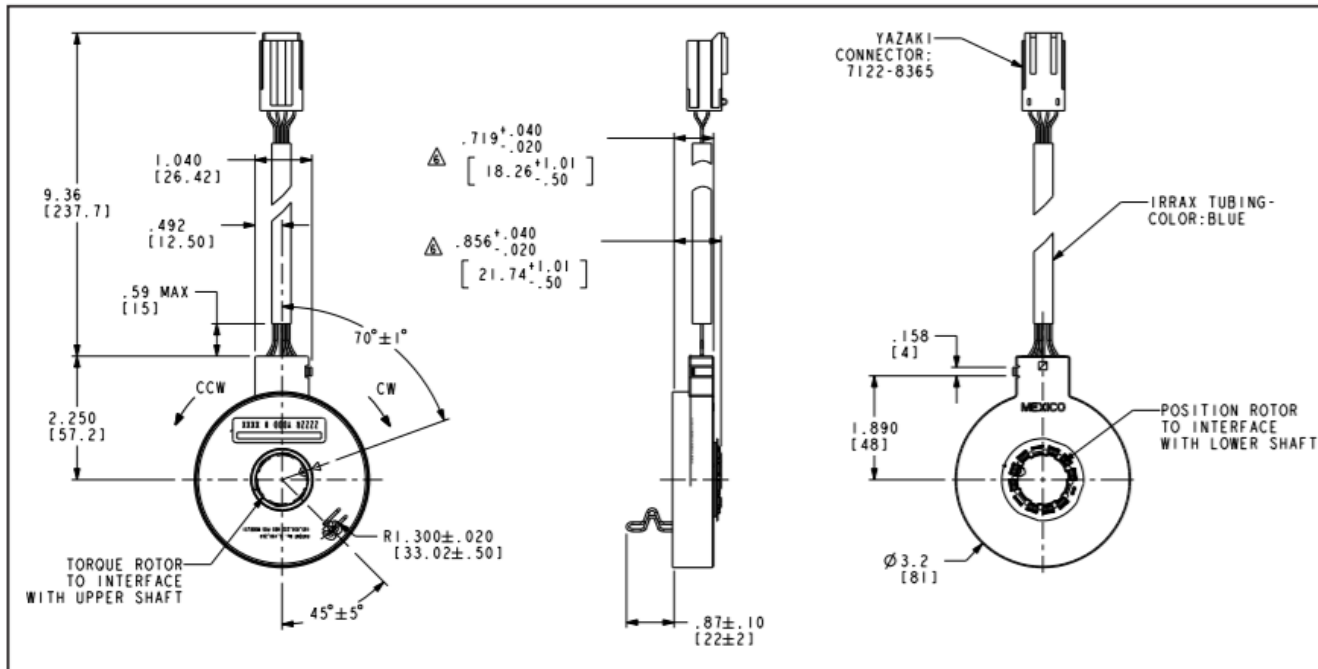


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## Outline Drawing



Tolerances ±0.25 mm unless otherwise specified. See drawing # 122-4414-80 for details.

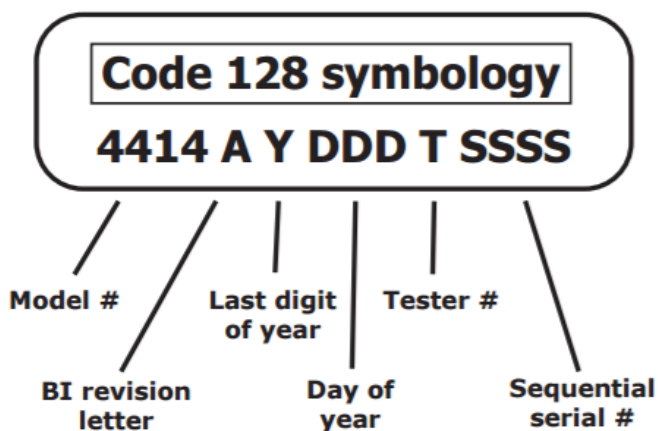
## Pinouts

PIN OUTS-6 PIN CONNECTOR			
YAZAKI CONNECTOR: 7122-8365 TERMINAL: 7114-1470			
2			1
6	5	4	3

(PIN No.'S ARE INDICATED AS WIRES ENTER CONNECTOR END)

PIN No.	SIGNAL	WIRE COLOR
1	Vcc	RED
2	GND	BLACK
3	P1	BROWN
4	T1	BLUE
5	T2	PURPLE
6	P2	WHITE

## Barcode Label



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### Recommended Interface

