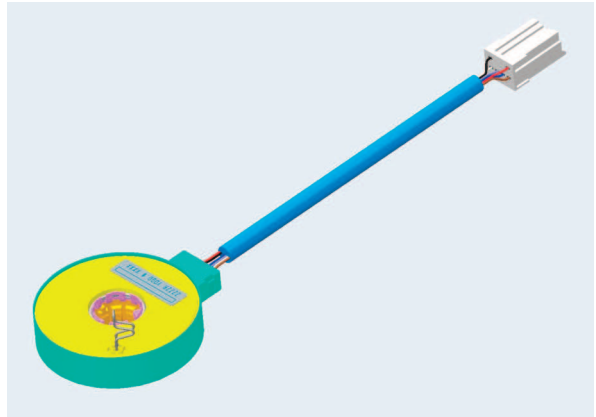


# SX-4414

## 5° LH3 Steering Sensor with Torque and Position Output

The LH3 torque and position sensor is ideally suited for demanding Electric Power Steering systems.



### ELECTRICAL<sup>1</sup>

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

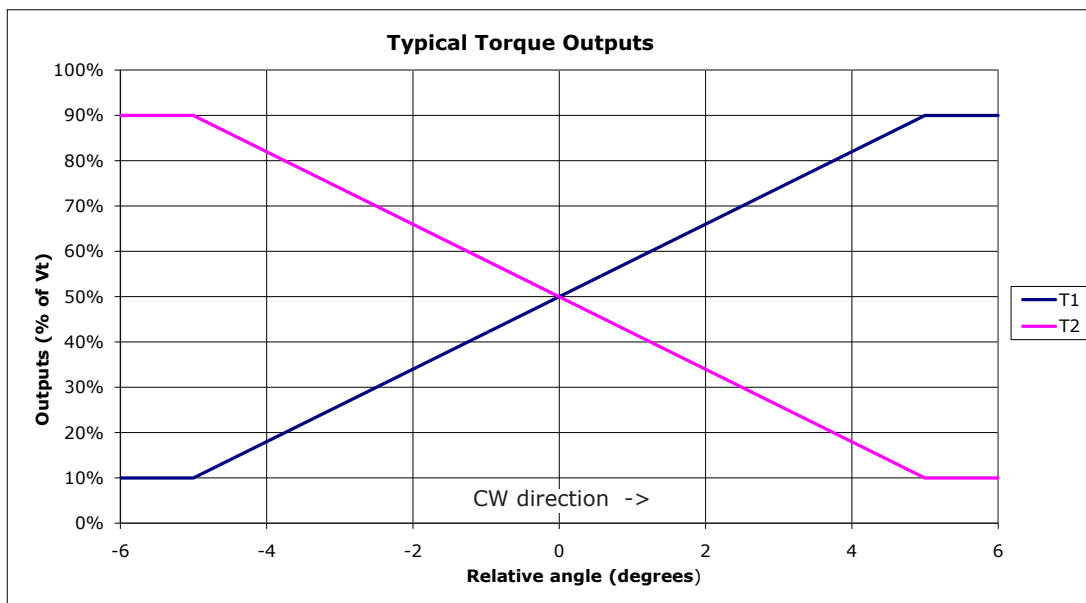
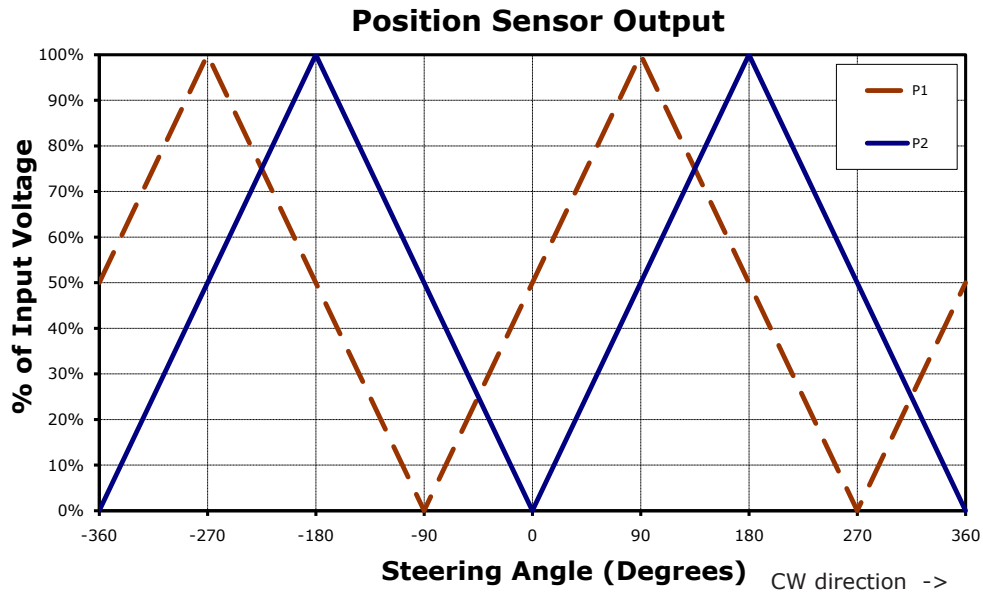
### ENVIRONMENTAL

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

<sup>1</sup> Specifications subject to change without notice. Complete specifications and test methods per BI Technologies specification HEP 32056

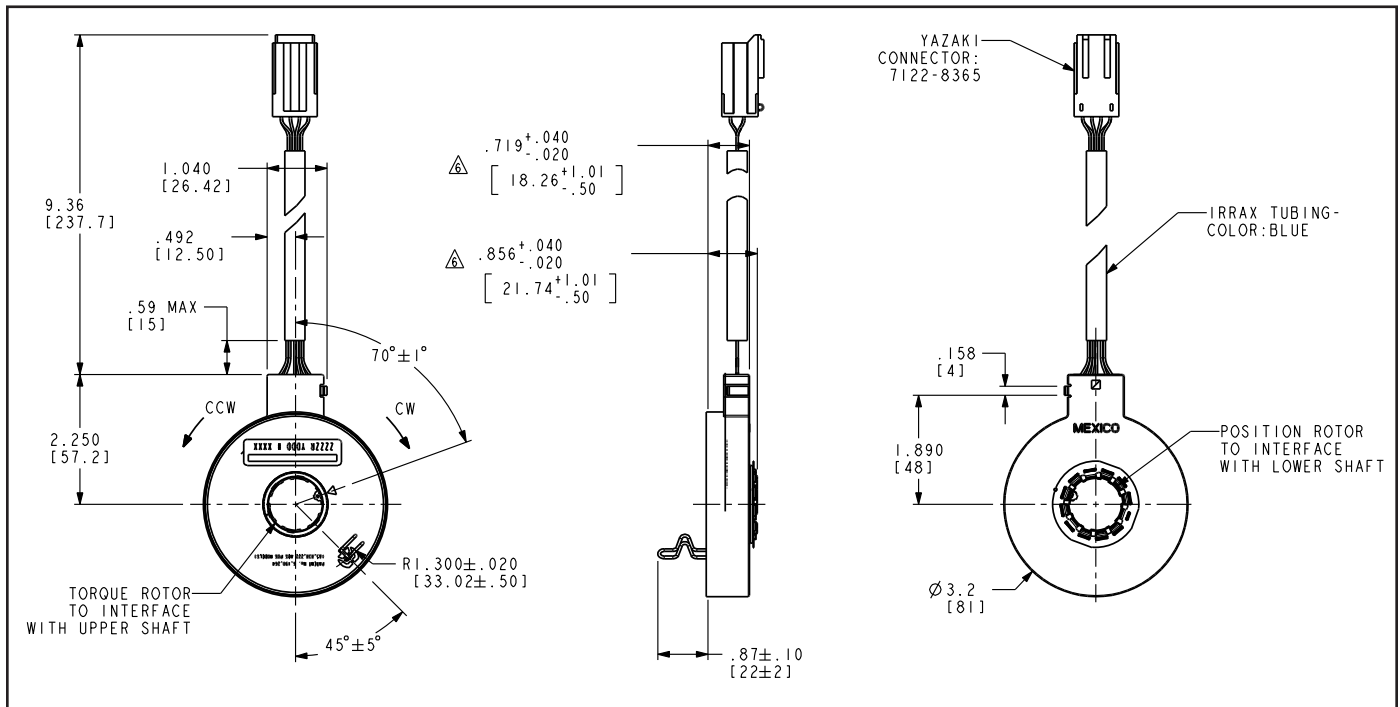
# SX-4414

## OUTPUT CHARTS



# SX-4414

## 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	

# SX-4414

## RECOMMENDED INTERFACE

