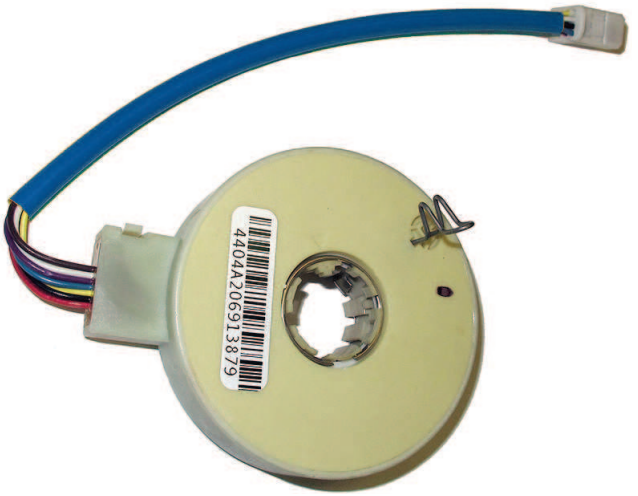
SX-4404

LH3 Steering Sensor with Torque and Multi-turn Position Output



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

ELECTRICAL[1]

Torque Signal Linearity	±3%
Torque Hysteresis	0.5% maximum
Torque Signal Micrograd ient	±30% of theoretical slope over 0.4° interval
Torque Sensed Angle	±5°
Position Signal Linearity (P1, P2)	±1.5%
Position Signal Micrograd ient (P1, P2)	±30% of theoretical slope over 2° interval
Multi-turn Position Accuracy (P3)	±3%
Multi-turn Position Sensed Angle	±720°
Total Resistance	471 Ω ±30%

MECHANICAL

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

ENVIRONMENTAL

Operating Temperature Range	-40°C to +85°C
Shock	14 ms half-sine at 300 m/s^2
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

[1] *Specifications subject to change without notice. Complete specifications and test methods per BI Technologies specification HEP 32054*

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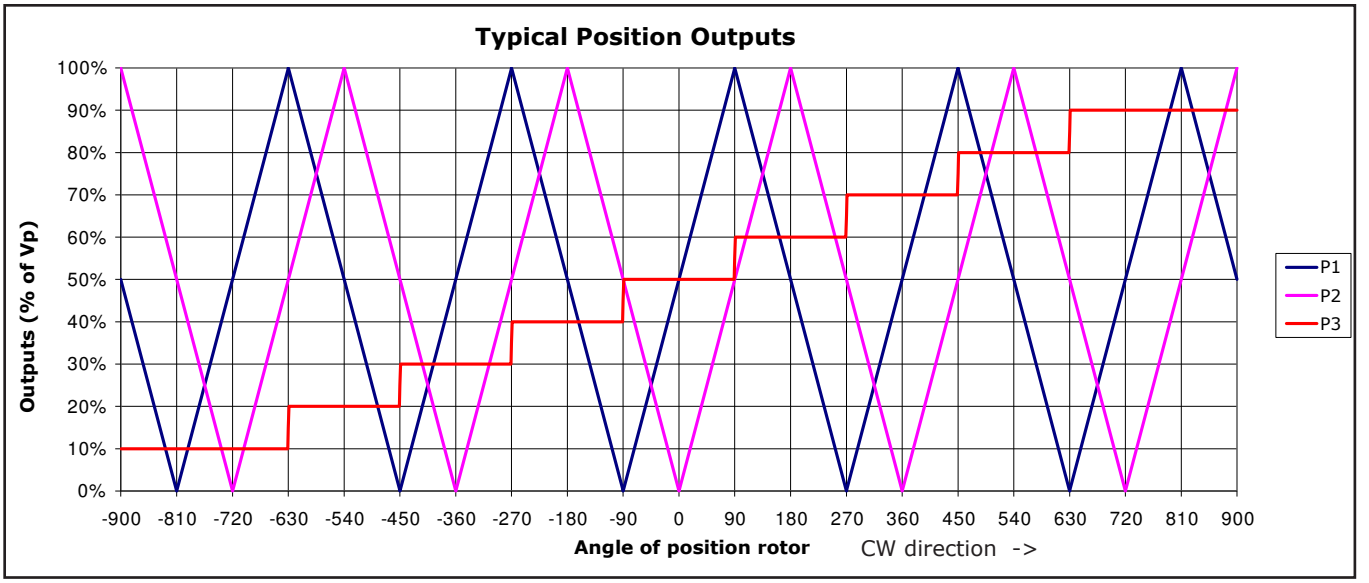
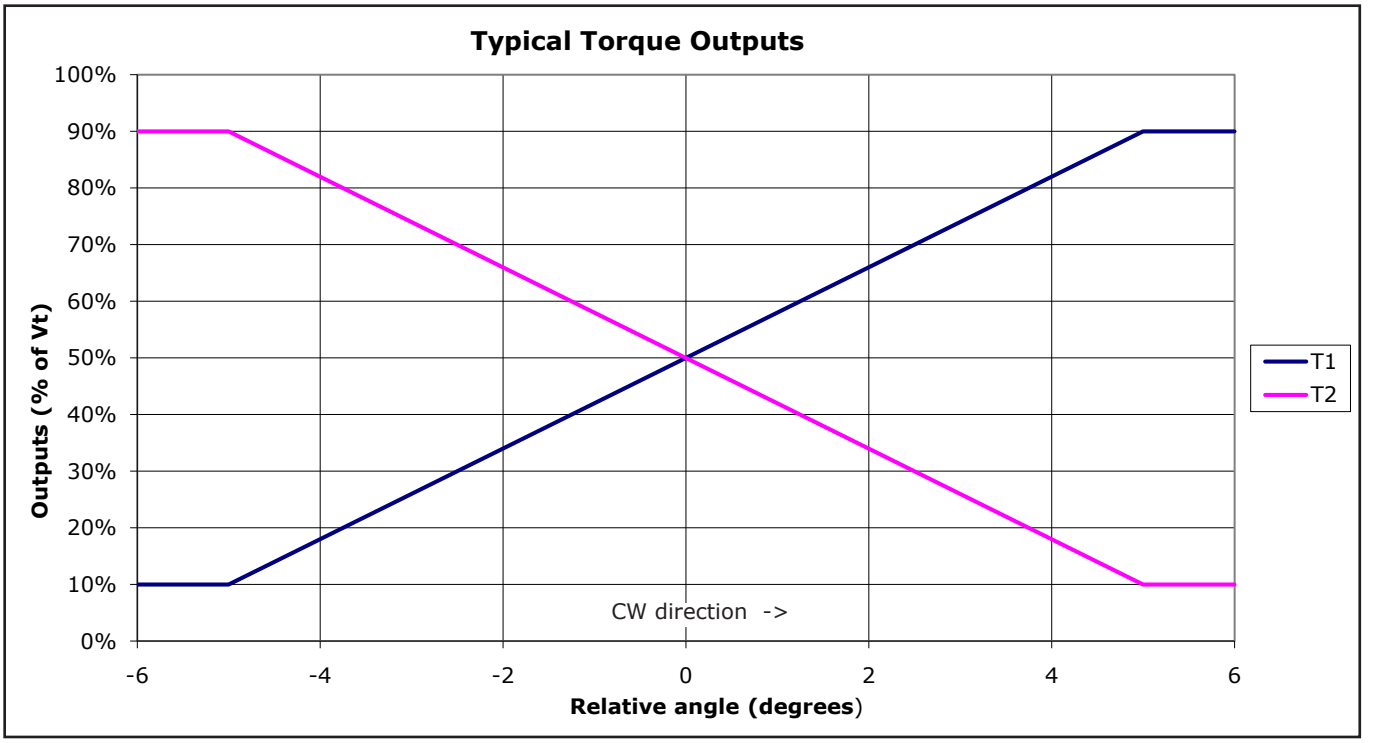
OUTPUT CHARTS





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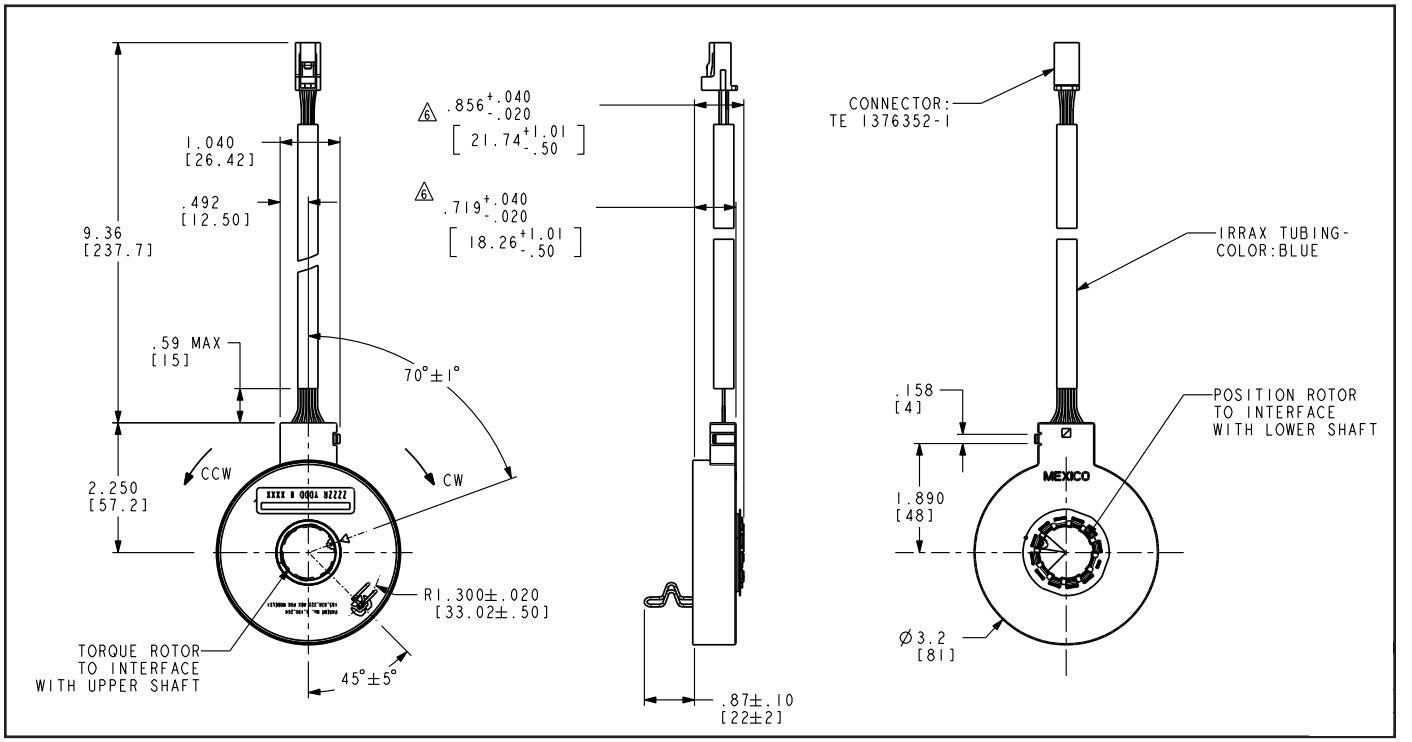
OUTLINE DRAWING



Tolerances ±0.25 mm unless otherwise specified. See drawing # 122-4404-80 for details.

PINOUTS

PIN OUTS-8 PIN CONNECTOR			
TE 1376352-1			
1	2	3	4
8	7	6	5

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

PIN No.	SIGNAL	WIRE COLOR
1	P1	BROWN
2	P2	WHITE
3	P3	YELLOW
4	NOT USED	- - -
5	Vcc	RED
6	GND	BLACK
7	T1	BLUE
8	T2	PURPLE

RECOMMENDED INTERFACE