

SX-4300

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.



ELECTRICAL¹

Torque Signal Linearity	±3%
Torque Hysteresis	0.5% maximum
Torque Signal Microgradient	±30% of theoretical slope over 0.4° interval
Torque Sensed Angle	±8°
Position Signal Linearity (P1, P2)	±1.5%
Position Signal Microgradient (P1, P2)	±30% of theoretical slope over 2° interval
Multi-turn Position Accuracy (P3)	±3%
Multi-turn Position Sensed Angle	±720°
Total Resistance	420 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

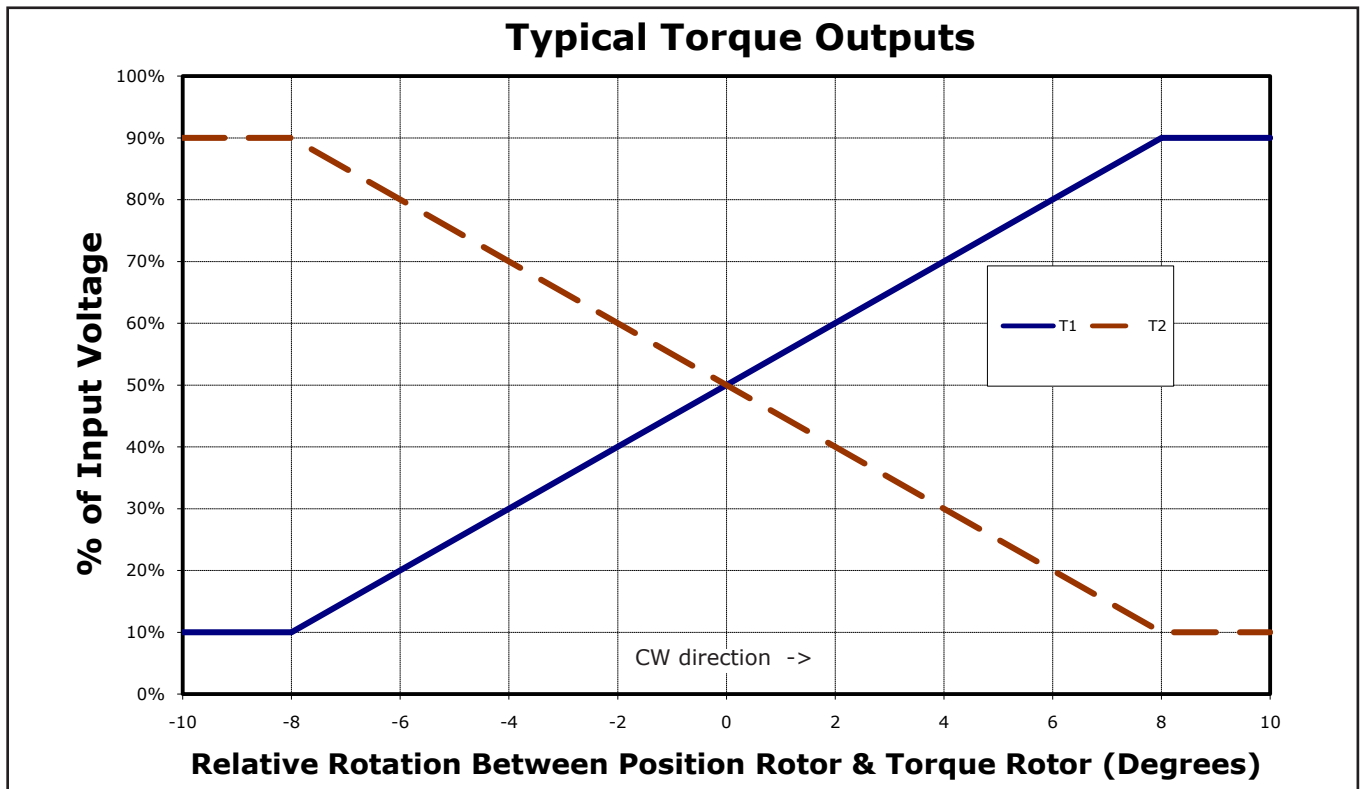
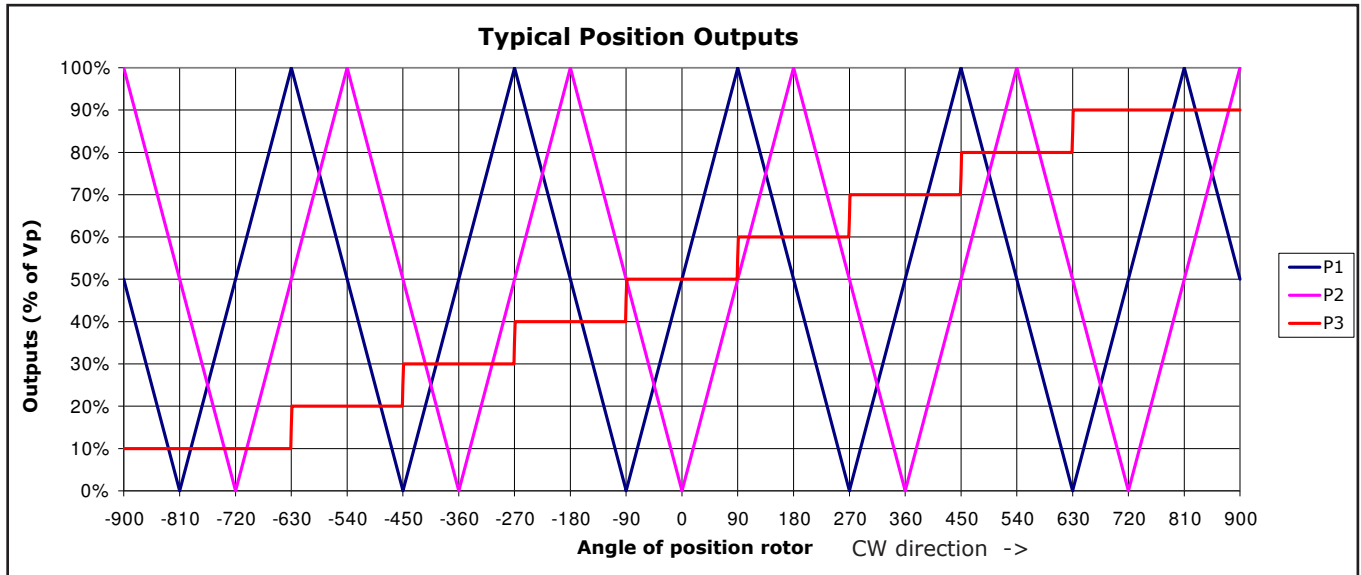
ENVIRONMENTAL

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

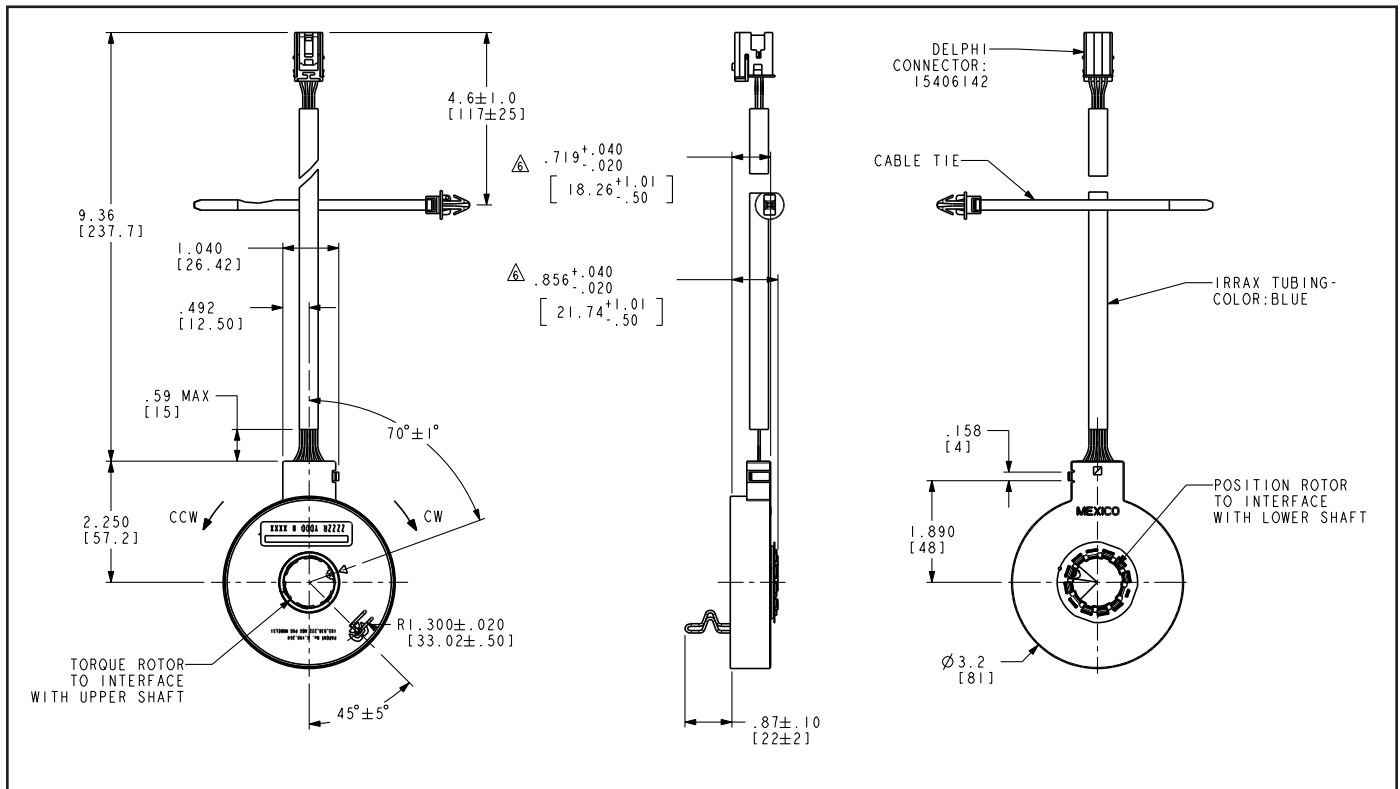
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OUTPUT CHARTS



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OUTLINE DRAWING



Tolerances ±0.25 mm unless otherwise specified. See drawing # 122-4300-80 for details.

PINOUTS

PIN OUTS-8 PIN CONNECTOR			
DELPHI 15406142			
1	2	3	4
5	6	7	8
(PIN No.'S ARE INDICATED AS WIRES ENTER CONNECTOR END)			
PIN No.	SIGNAL	WIRE COLOR	
1	P3	YELLOW	
2	P1	BROWN	
3	V _{cc}	RED	
4	T2	PURPLE	
5	NOT USED	- - -	
6	P2	WHITE	
7	GND	BLACK	
8	T1	BLUE	

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RECOMMENDED INTERFACE

