LH3 Torque & Multi-turn Position Sensor

SX-4300

Features:

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

RoHS 2 compliant



Electrical

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	±900°
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

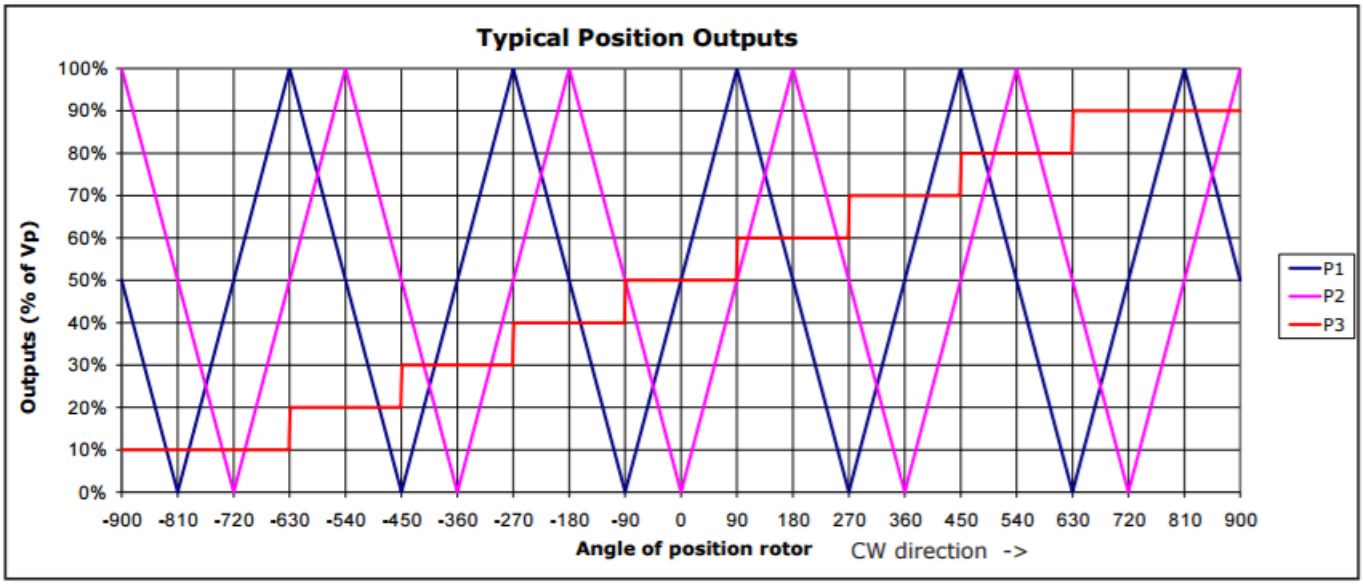
Operating Temperature Range	-40°C to +85°C
Shock	14 ms half-sine at 300 m/s^2
Vibration	10 to 55 Hz with 1 mm P-P constant displacement, 120 hours each of 3 planes
Torque Rotational Life	1 million cycles
Position Rotational Life	1 million cycles
Storage Temperature Range	-40°C to +105°C

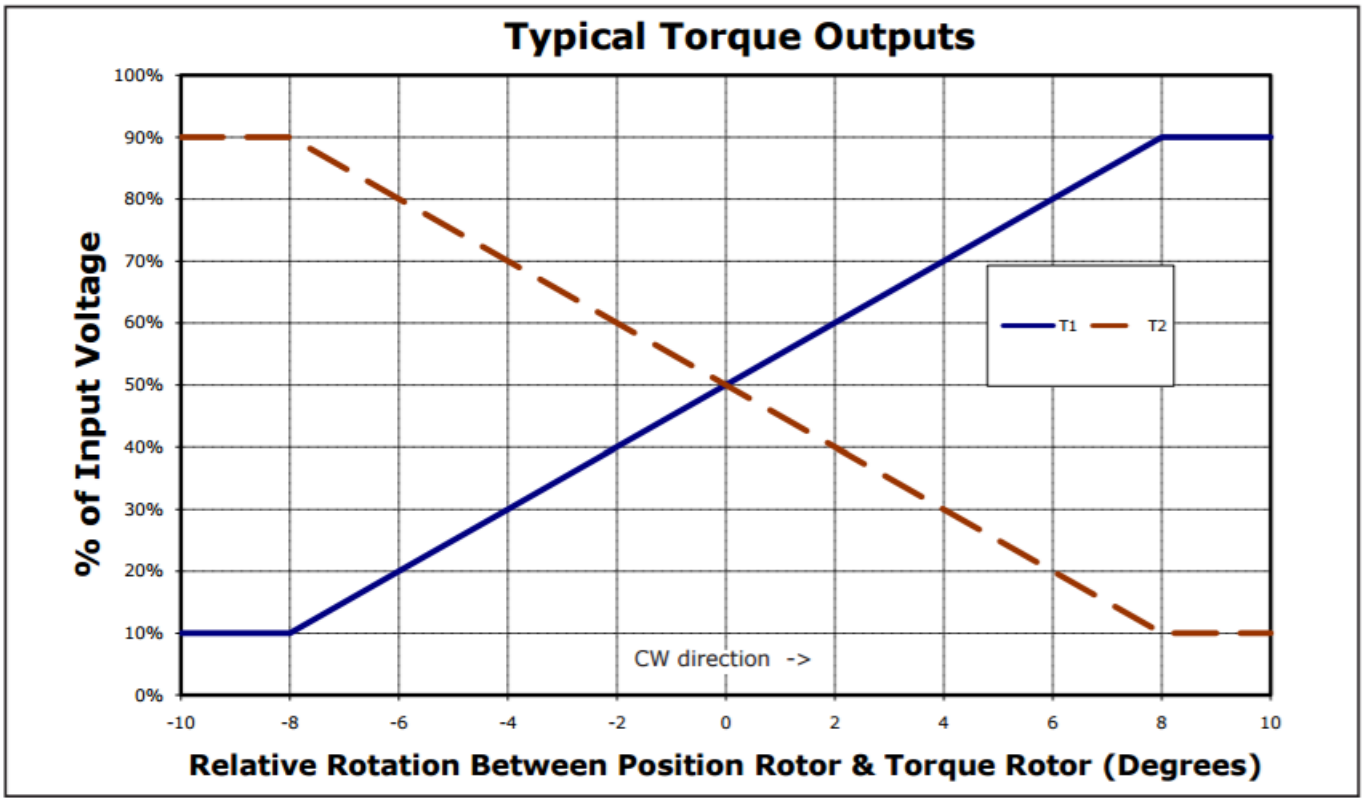
General Note
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Output Charts





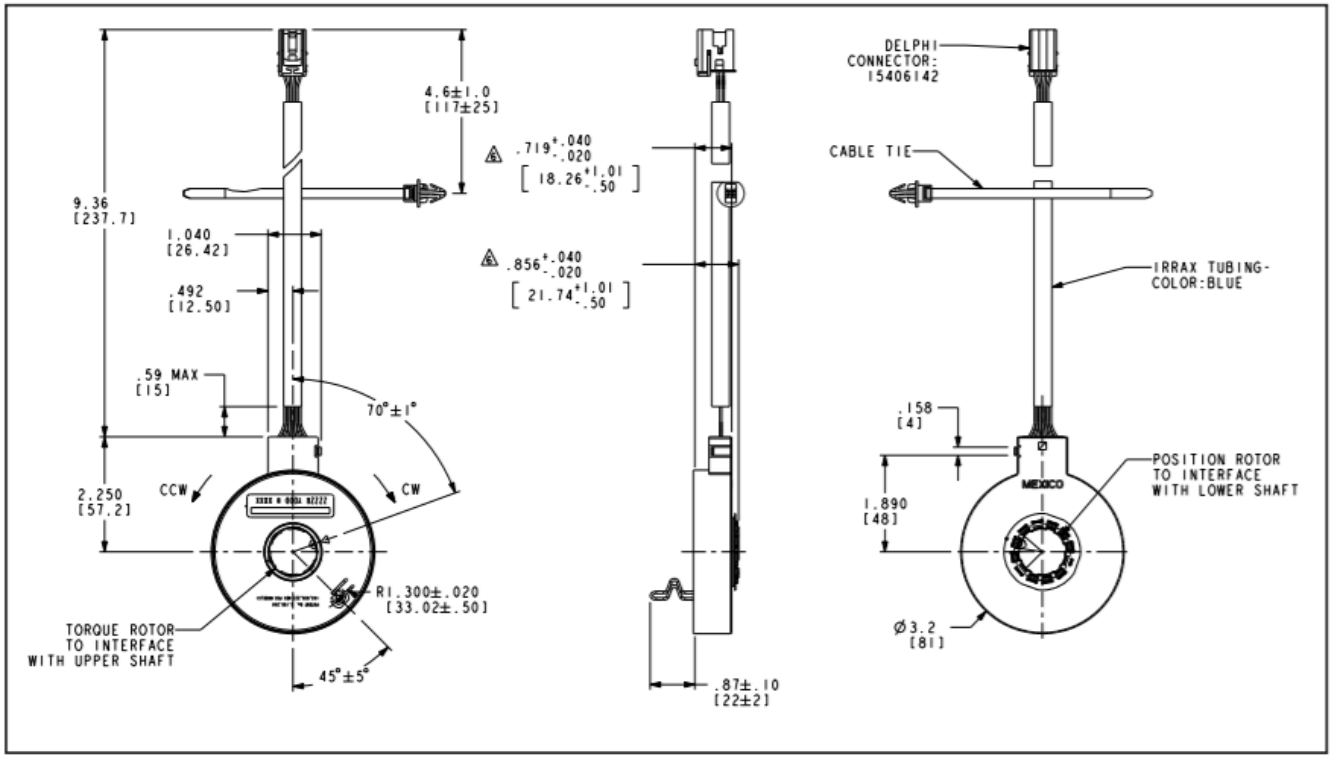
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Outline Drawing



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

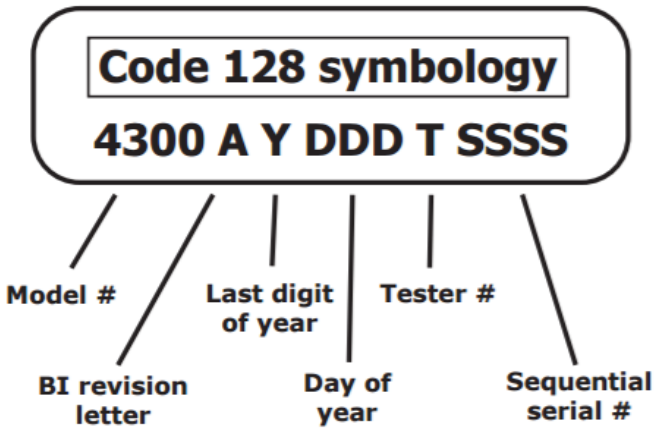
Pinouts

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	Vcc	RED
4	T2	PURPLE
5	NOT USED	- - -
6	P2	WHITE
7	GND	BLACK
8	T1	BLUE

Barcode Label

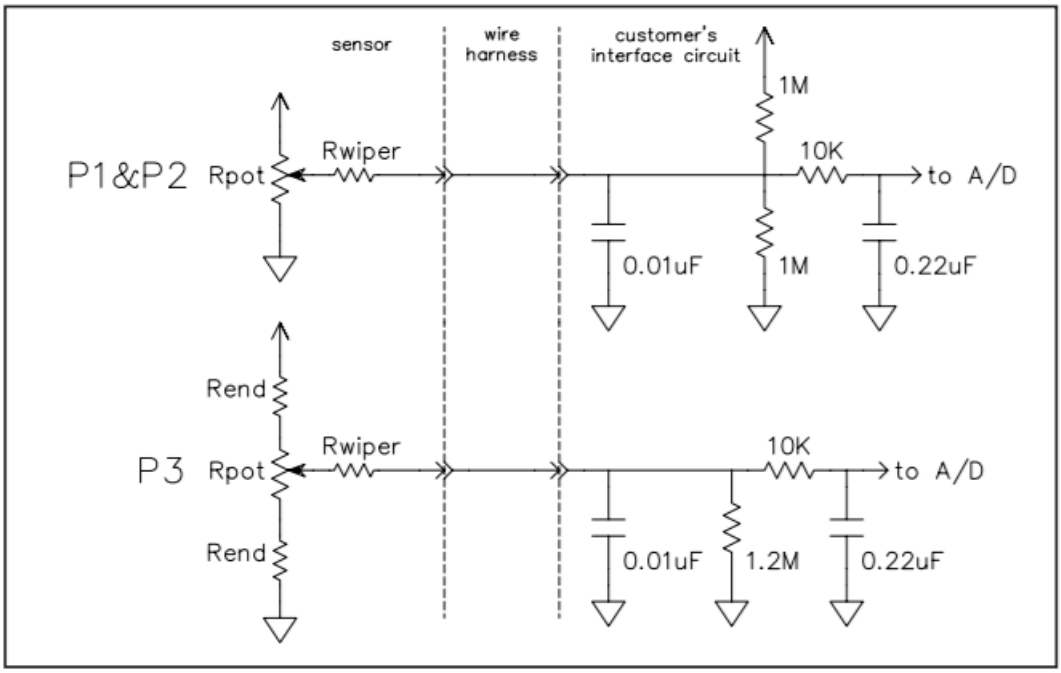


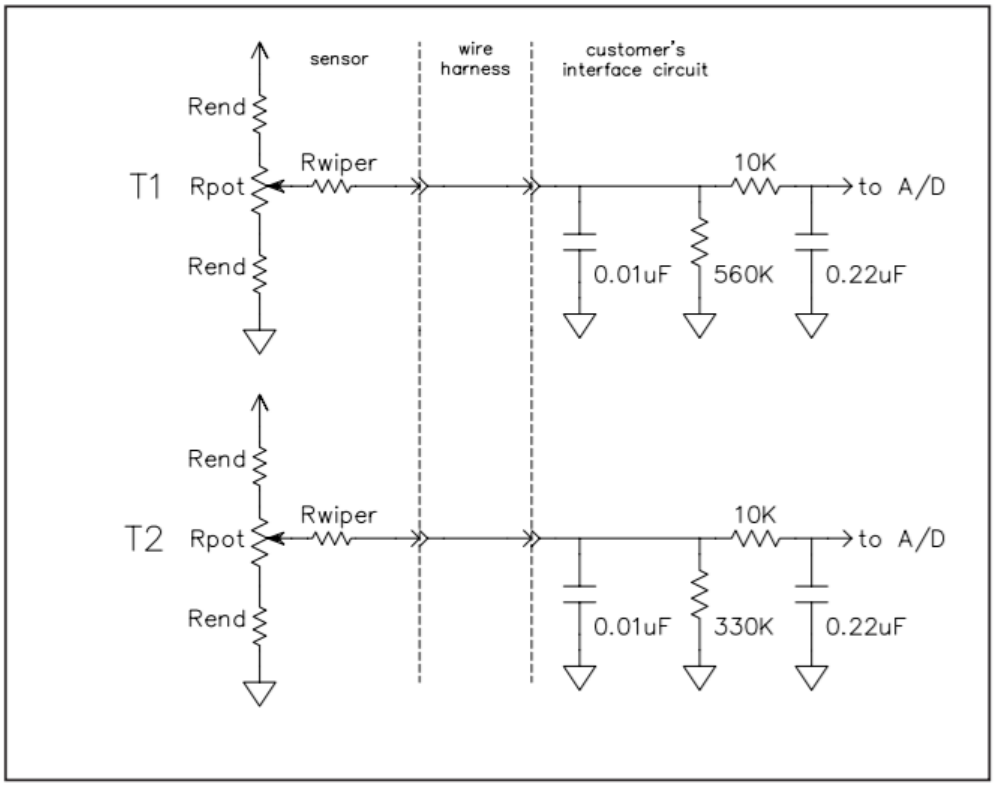
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Recommended Interface





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