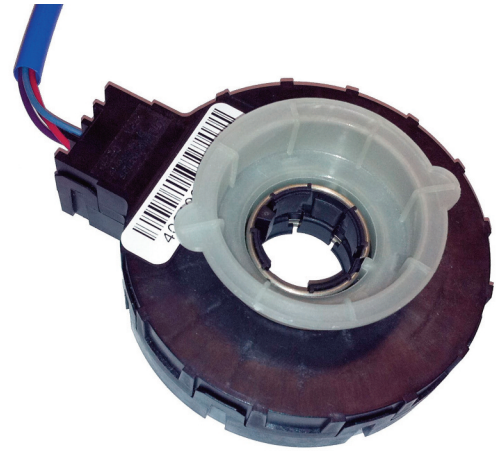


# SX-4400

## Magnetorque non-contacting steering torque sensor

Magnetorque is ideally suited for demanding Electric Power Steering systems.



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

Supply Voltage	4.5 to 5.5 VDC
Linearity	±3%
Hysteresis	±1.3%
Microgradient	±30% of theoretical slope over 0.4° interval
Sensed Angle	±5°
Supply Current	8 to 16 mA
Clamp Low	8 to 12%
Clamp High	88 to 92%
Sensitivity	0.388 to 0.412 V/°

### MECHANICAL

Mechanical Travel, Input Rotor	Continuous
Mechanical Travel, Output Rotor	Continuous
Turning Torque (rotor to rotor)	0 NM (non-contacting)
Turning Torque (input rotor to housing)	0 NM (non-contacting)
Turning Torque (output rotor to housing)	0.05 NM maximum
Weight	105 grams maximum

### ENVIRONMENTAL

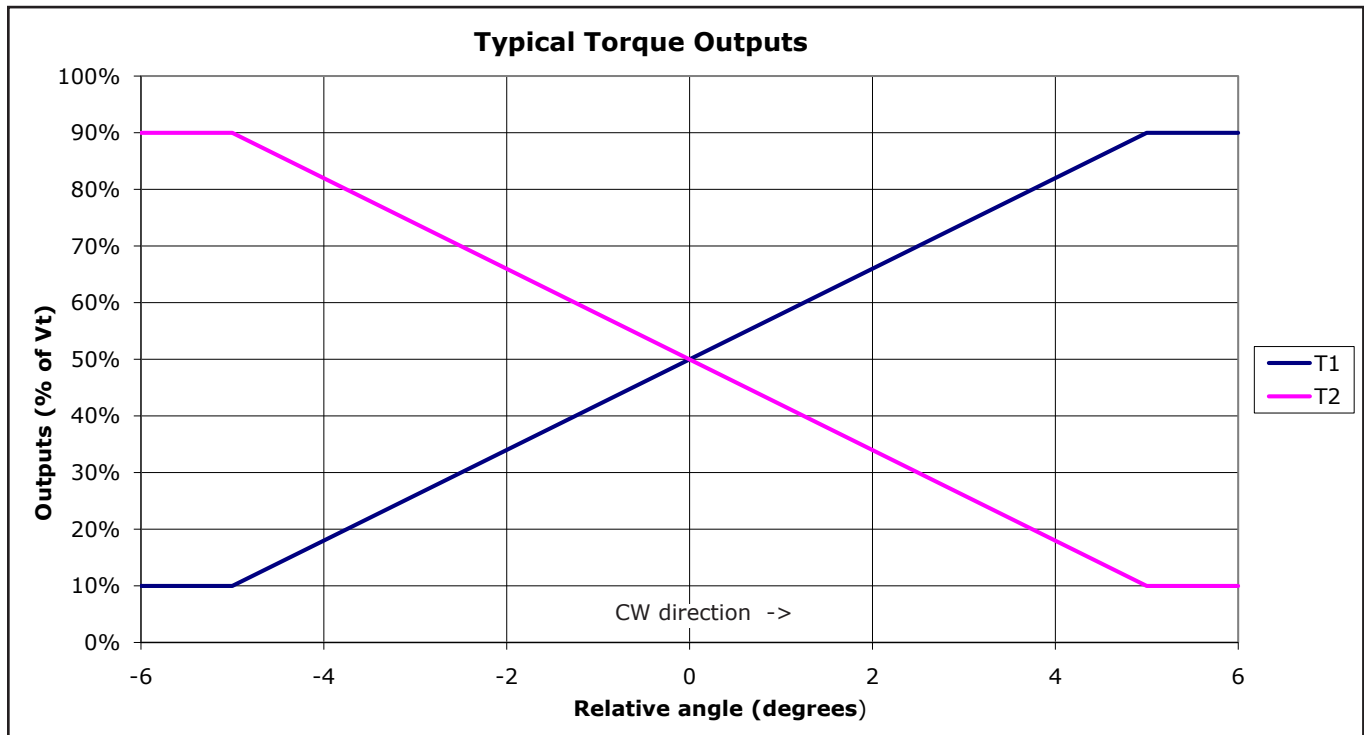
Operating Temperature Range	-40°C to +85°C
Vibration	10 to 55 Hz with 1 mm P-P constant displacement, 120 hours each of 3 planes
Input Rotor Rotational Life	Infinite (floating)
Output Rotor Rotational Life	10 million cycles
Storage Temperature Range	-55°C to +125°C

<sup>1</sup> Design can be programmed to meet other angles and amplitudes. Specifications per 122-4400-44A and subject to change without notice.



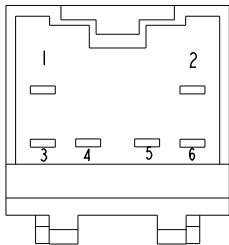
# SX-4400

## OUTPUT CHART

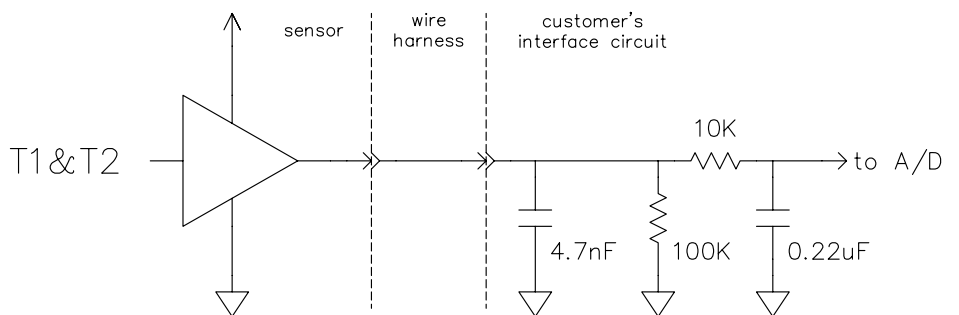


## PINOUTS & RECOMMENDED INTERFACE

PIN No.	SIGNAL	WIRE COLOR
1	VCC	RED
2	GND	BLACK
3	N/A	N/A
4	T1	BLUE
5	T2	PURPLE
6	N/A	N/A



YASAKI MATING CONNECTOR #7123-8365  
CONNECTOR FRONT VIEW



### BI Technologies Corporation

4200 Bonita Place, Fullerton, CA 92835 USA

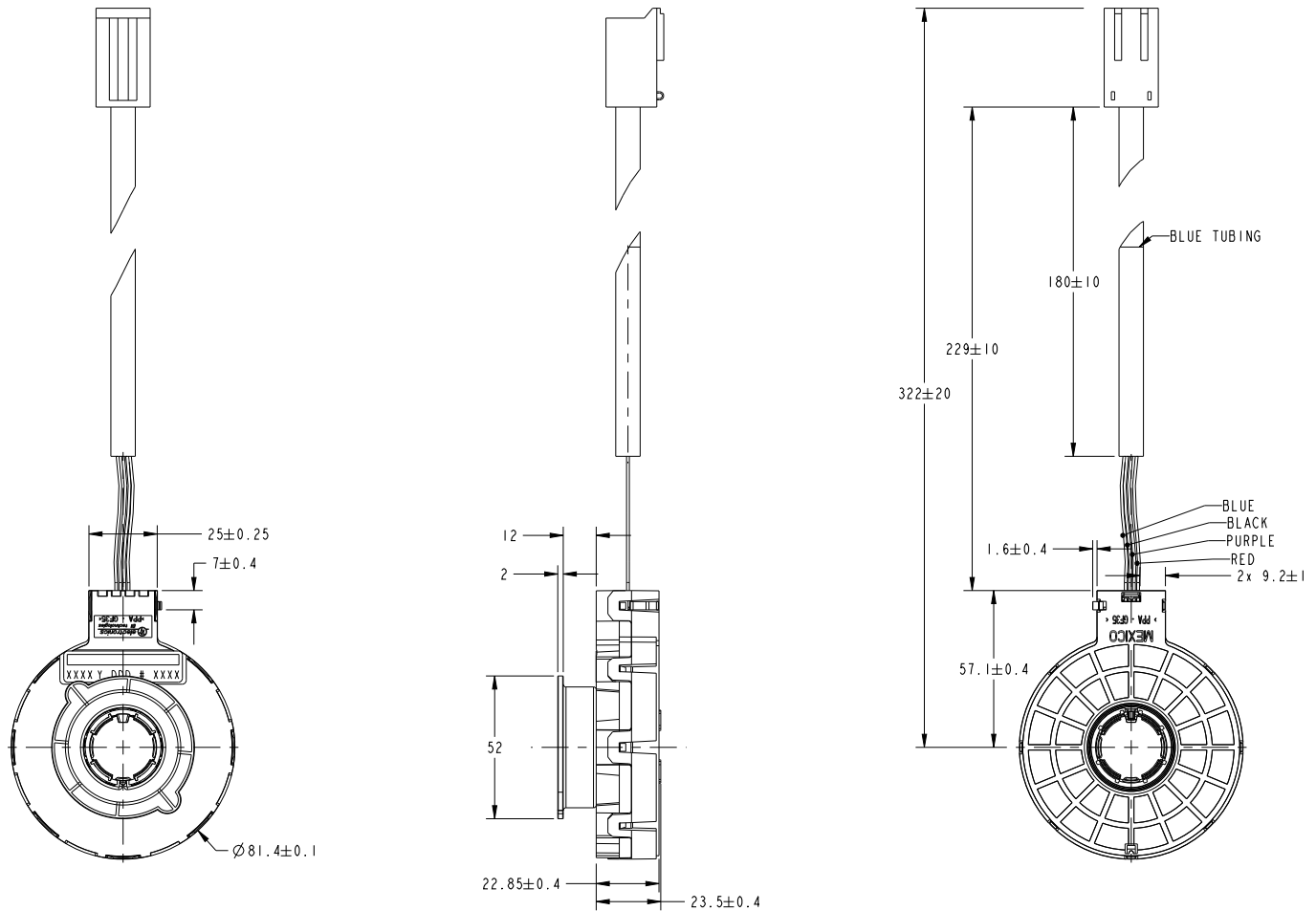
Phone: 714 447 2345 Website: [www.bitechnologies.com](http://www.bitechnologies.com)

January 29 2015

# SX-4400

## OUTLINE DRAWING

Tolerances  $\pm 1$  mm unless otherwise specified. See drawing # 122-4400-50 for details



## BARCODE LABEL

**Code 128 symbology**  
**400A Y DDD T SSSS**

Model  
code

Last digit  
of year

Tester #

Day of  
year

Sequential  
serial #

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