

SX-4428

Compact Magnetorque Non-Contacting Steering Torque Sensor



Features:

- Provides critical high accuracy torque & multi-turn position information
- Redundant outputs for full diagnostics
- Lead-free
- RoHS 2 compliant

Applications:

- Electric power steering systems

Electrical

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	10 to 20 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	84 grams maximum



General Note
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

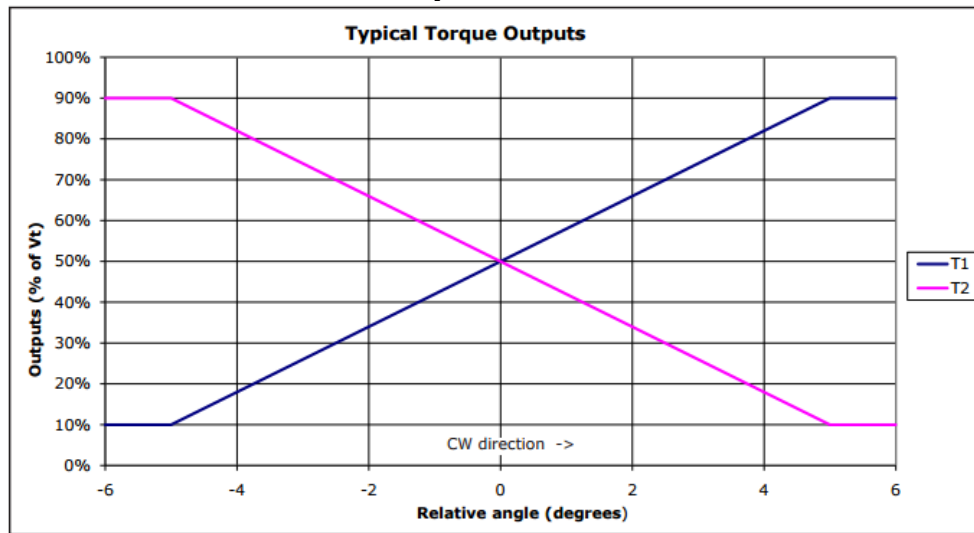
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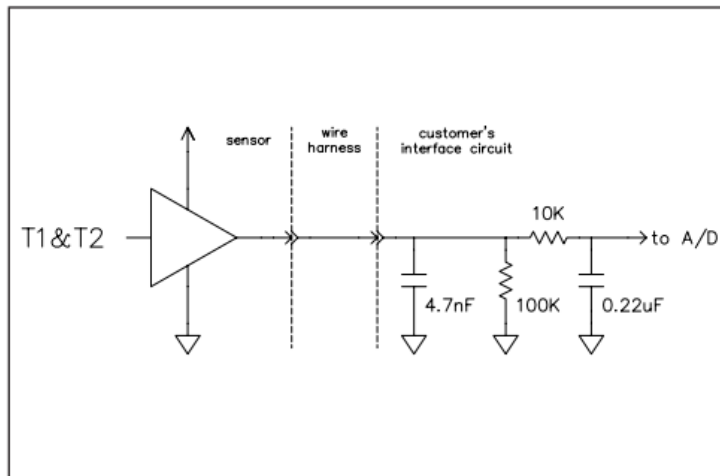
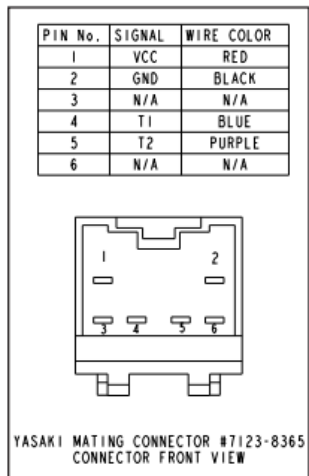
Environmental

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

Output Chart



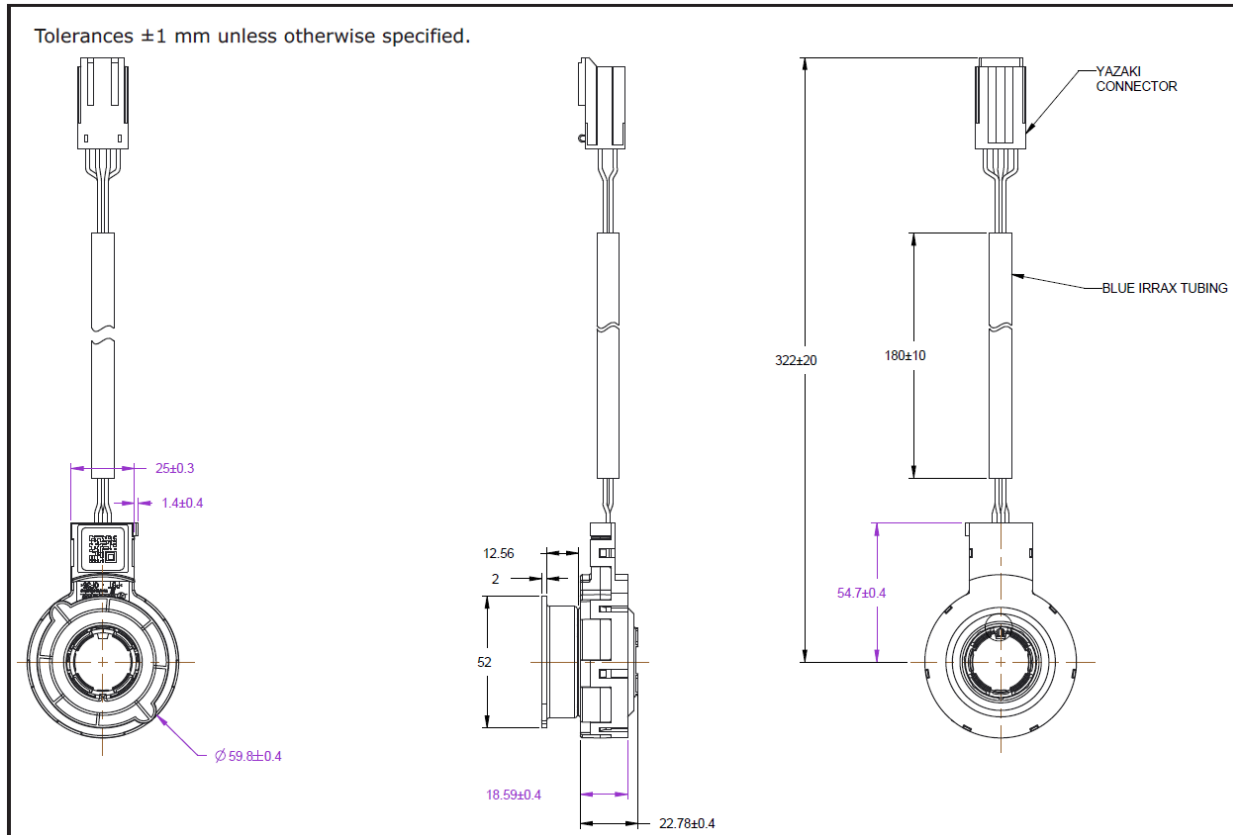
Pinouts and Recommended Interface



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Outline Drawing



Barcode Label



**Micro QR M4
symbology**

**Content not human readable:
4428 A YY DDD T SSSS**



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