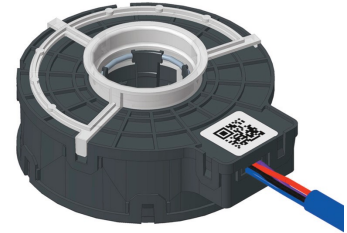


# Magnetorque Non-Contacting Steering Torque Sensor 4<sup>th</sup> Generation



SX-4462 (MT4)

**OBSOLETE**



**Features:**

- Provides critical high accuracy torque
- Output voltage clamps enable open/short detection
- Redundant outputs for full diagnostics
- Lead-free and RoHS 3 compliant

## Applications

- 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	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	±2.5 turns
Mechanical Travel, Output Rotor	Continuous
Turning Torque (rotor to rotor)	0 NM (non-contacting)
Turning Torque (input rotor to housing)	0.1 NM maximum
Turning Torque (output rotor to housing)	0.05 NM maximum
Weight (without shipping pin)	82 grams maximum

<sup>1</sup> Design can be programmed to meet other angles and amplitudes. Specifications per 122-4462-44 and subject to change without notice.



**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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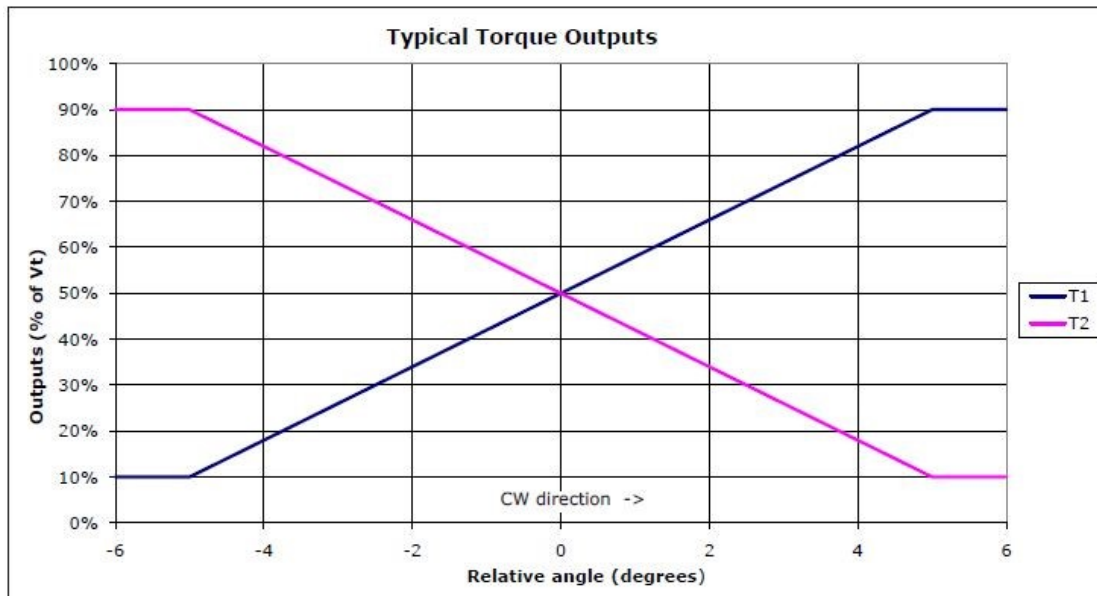
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### Environmental

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	10 million cycles
Output Rotor Rotational Life	10 million cycles
Storage Temperature Range	-55°C to +125°C

### Output Chart

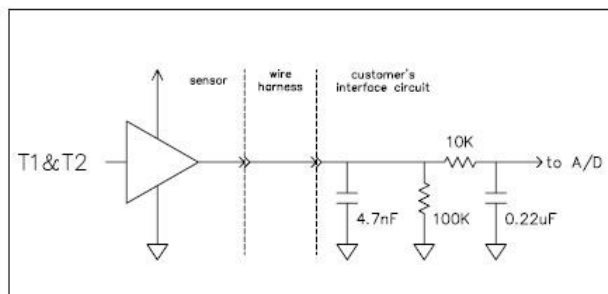


### Pinouts & Recommended Interface

PIN OUTS-6 PIN CONNECTOR		
YAZAKI		
CONNECTOR: 7122-8365		
TERMINAL: 7114-1470		
2		1
6	5	4
		3

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

PIN No.	SIGNAL	WIRE COLOR
1	Vcc	RED
2	GND	BLACK
3	NOT USED	- - -
4	T1	BLUE
5	T2	PURPLE
6	NOT USED	- - -



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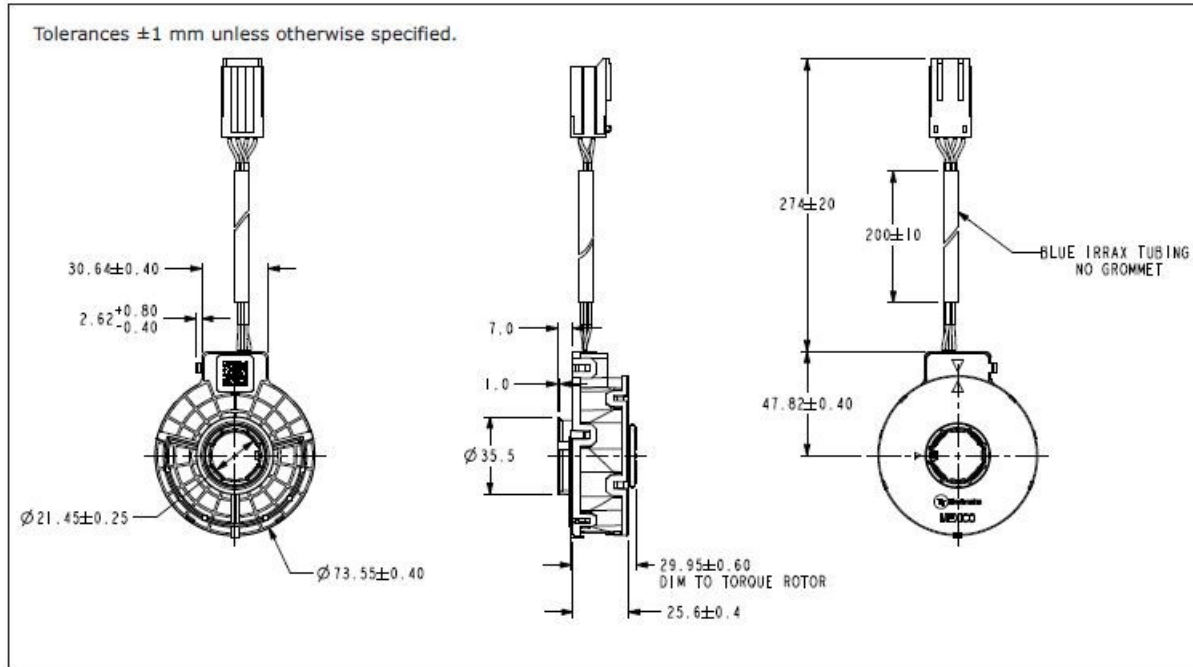
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### Outline Drawing



### Barcode Label



**Micro QR M4  
symbology**

**Content not human readable:  
4462 A YY DDD T SSSS**

