# Wheel Torque Transducer

## Model TW10.8

- 3,000 lbf · ft (4.0 kN · m) capacity •
- Adapts to 13 in and larger wheels •
- Environmentally protected •
- Rugged stainless steel construction •
- Consistent sensitivity among all units
- Configured to minimize magnetic sensitivity •

### Description



Ideal for measuring wheel torgue on passenger cars, the TW10.8 Wheel Torgue Transducer provides one channel of torque data and is completely weatherproof. It is designed to attach to adapters that simulate production wheel rims. The adapter system is fabricated by generating a profile of the original wheel rim and designing a hub adapter and rim adapter that duplicate the critical dimensions of the original rim. The hub adapter fastens to the interior bolt circle of the torque transducer and the rim adapter fastens to the exterior bolt circle. The versatility of this system allows the torgue transducer to be used with various wheel rim designs.

Both the torque and combined steer/camber moment load ratings of the TW10.8 transducer are 3,000 lbf ft. High grade stainless steel material and weatherproof sealing combine to provide excellent resistance to corrosion and environmental conditions. Temperature compensation of the torque transducer ensures stable output throughout a wide temperature range. In addition, all wires are precisely located to reduce sensitivity to magnetic effects.

### **Specifications**

Full Scale Measurable Load	3,000 lbf · ft (4.0 kN · m)
Maximum Torque Capacity	3,000 lbf · ft (4.0 kN · m)
Maximum Static Weight (Fz)	1,600 lb (725 kg)
Rim Size	≥ 13 in
Sensor	4 arm strain gauge bridge
Nonlinearity	$\leq$ 0.1 % of full scale output
Hysteresis	0.05 % of full scale output
Temperature Range, Operating	-40 °F to 257 °F (-40 °C to 125 °C)
Excitation Voltage, Maximum	10 Vdc or Vac rms
IP Rating	IP67

8500 Ance Road Charlevoix, MI 49720 Tel: 231-547-5511 Fax: 231-547-7070 03-7-22 Rev. A

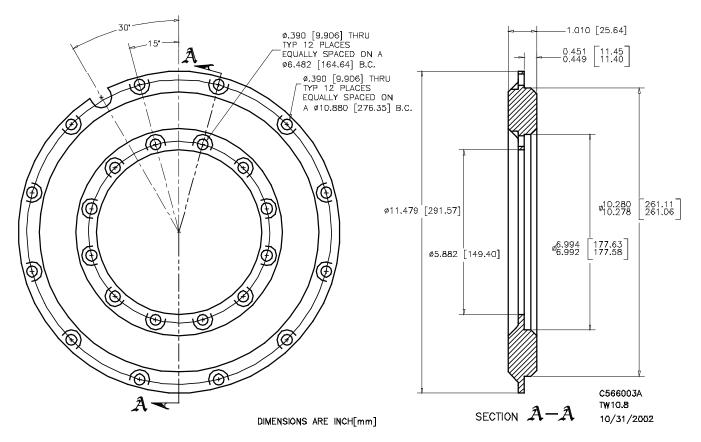
Email: mscinfo@michsci.com

MICHIGANSCIENTIFIChttp://www.michsci.comcorporation

321 East Huron Street Milford, MI 48381 Tel: 248-685-3939 Fax: 248-685-5406

## **Wheel Torque Transducer**

#### **TW10.8 Configuration**



#### **Ordering Options**

Michigan Scientific offers a fully weatherproof slip ring, encoder, and amplifier instrumentation assembly to be used with all *Wheel Torque Transducers*. Refer to the Instrumentation Assemblies section for more information.

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