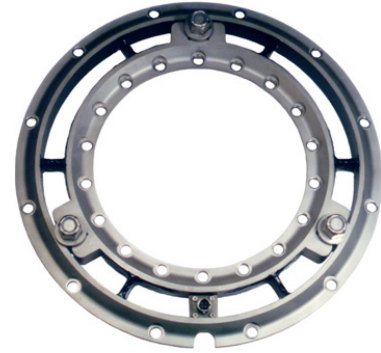


High Resolution Wheel Torque Transducer

Models TW12.8HRMS175, TW12.8HRMS800

- 175 lbf · ft (237 N · m) and 800 lbf · ft (1.0 kN · m) capacities
- Adapts to 14 in and larger wheels
- Resolves 0.1 lbf · ft and 0.2 lbf · ft
- Mechanically protected to 6,000 lbf · ft capacity
- Environmentally protected
- Rugged stainless steel construction
- Consistent sensitivity among all units
- Configured to minimize magnetic sensitivity



Description

Michigan Scientific's *TW12.8HRMS175* and *TW12.8HRMS800* Wheel Torque Transducers are highly sensitive torque transducers. Ideal for measuring small variations in wheel torque on both passenger cars and light duty trucks, these units provide one channel of torque data, and are 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 versatility of this system allows the torque transducer to be used with various wheel rim designs.

The *TW12.8HRMS175* and the *TW12.8HRMS800* Wheel Torque Transducers measure up to 175 lbf · ft and 800 lbf · ft and resolve 0.1 lbf · ft and 0.2 lbf · ft, respectively. Mechanical protection allows the transducer to be used under normal driving conditions. Torque and combined steer/camber moment overload ratings of each transducer is 6,000 lbf · ft. These models are geometrically configured to be used with the same adapters as the other *TW12.8* models.

High grade stainless steel material and weatherproof sealing provide excellent resistance to corrosion and environmental conditions. Temperature compensation ensures stable output throughout a wide temperature range. All wires are precisely located to reduce sensitivity to magnetic effects.

Specifications

	TW12.8HRMS175	TW12.8HRMS800
Full Scale Measurable Load	175 lbf · ft (237 N · m)	800 lbf · ft (1.0 kN · m)
Maximum Torque Capacity	6,000 lbf · ft (8.1 kN · m)	6,000 lbf · ft (8.1 kN · m)
Maximum Static Weight (Fz)	2,250 lb (1,000 kg)	2,250 lb (1,000 kg)
Rim Size	≥ 14 in	
Sensor	4 arm strain gauge bridge	
Nonlinearity	≤ 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
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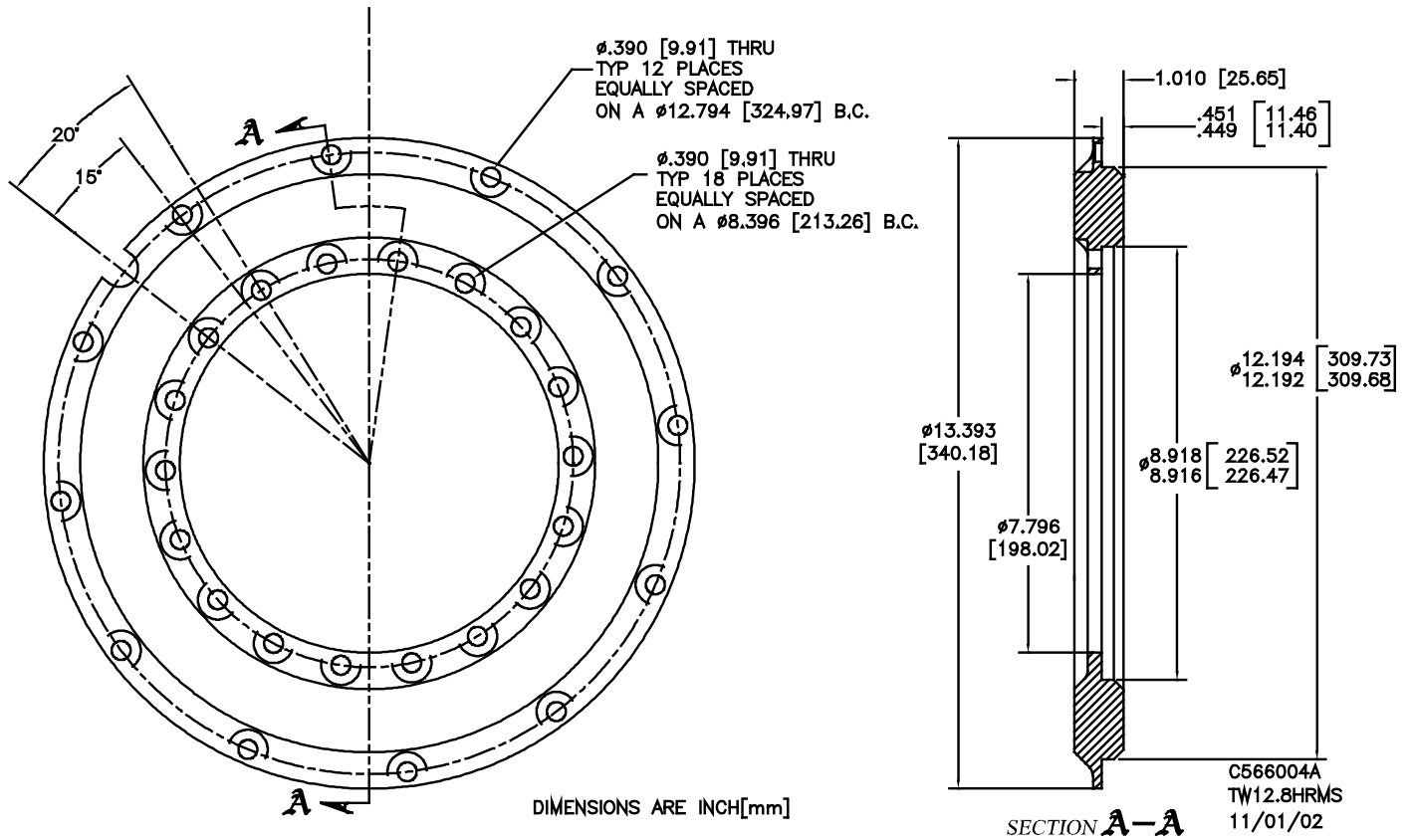
MICHIGAN SCIENTIFIC
corporation

<http://www.michsci.com>
Email: mscinfo@michsci.com

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

High Resolution Wheel Torque Transducer

TW12.8HRMS175, TW12.8HRMS800 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.

8500 Ance Road
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corporation

<http://www.michsci.com>
Email: mscinfo@michsci.com

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