TWHR2000 Wheel Torque Transducer System

Features:

✓ Capability

- Measures up to 2,700 N-m (2,000 lb-ft)
- 27,000 N-m (20,000 lb-ft) Mechanical Stop Capacity
- 5,000 kgf (11,000 lb) Maximum Static Load
- ± 4 N-m (3 lb-ft) Nonlinearity, 0.15% of Full Scale Output

✓ Versatility

- Used to Measure Rolling Resistance, Brake Drag, Aerodynamic Drag, & Bearing Drag on Highway Trucks
- Capable of On-Road Measurement
- Used for Regulatory CO₂ Emissions and Fuel Consumption Testing
- Meets Commission Regulation (EU) 2017/2400
- Adapts to 22.5" or Larger Rims
- Used on Single, Dual, or Super Single Wheels
- Slip Ring or Telemetry Data Transmission

✓ Rugged Design

- High Grade Stainless Steel
- · Environmentally Protected
- Weatherproof Connectors

Michigan Scientific's TWHR2000 Wheel Torque Transducer is the optimal tool for measuring low torque values for the purpose of studying parasitic losses such as; rolling resistance, brake drag, aerodynamic drag, and bearing drag. Knowing these values is crucial for analyzing CO_2 emissions and fuel consumption in highway trucks.

The TWHR2000 is an essential measurement device in completing the new EU 2017/2400 Regulatory CO₂ Emissions and Fuel Consumption Testing that is now required for heavy-duty vehicles. This transducer meets or exceeds all specifications outlined in the regulation for crosstalk, nonlinearity, measurement rate, and repeatability and is ideal for ensuring that your vehicle testing meets increasingly strict regulations.

The Michigan Scientific TWHR2000 is highly accurate in all weather conditions. It is simple to assemble and use in order to meet the growing pressure for short installation time and easy handling. Michigan Scientific also provides quick and reliable customer service and fast calibration services, minimizing customer down-time. The calibration complies with ISO9001 requirements and all reference measurement equipment used for calibration is traceable to NIST.



Specifications

| Full Scale Measurable Load | 2,700 N-m (2,000 lb-ft) |
|---------------------------------------|--|
| Maximum Load Capacity (My) | 27,000 N-m (20,000 lb-ft) |
| Maximum Static Vertical Load Capacity | 5,000 kgf (11,000 lb) |
| Nonlinearity | \pm 4 N-m (3 lb-ft) / 0.15% of full scale output |
| Repeatability | \pm 3 N-m (2.2 lb-ft) / 0.11% of full scale output |
| Crosstalk from Vertical Load (Fz) | < 0.5% of full scale output |
| Hysteresis | 0.05% of full scale output |
| Temperature Range, Compensated | 24°C to 93°C (75°F to 200°F) |
| Temperature Range, Usable | -40°C to 125°C (-40°F to 257°F) |
| Excitation Voltage, Maximum | 10VDC |
| IP Rating | IP67 |





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