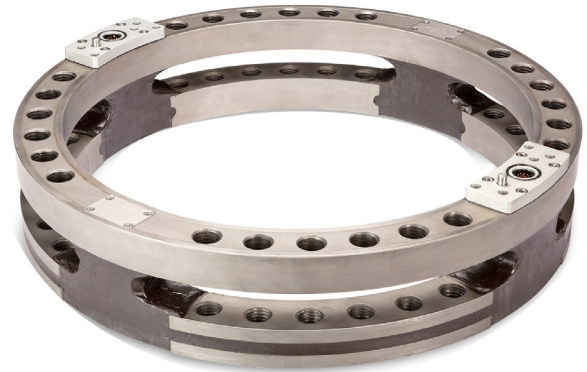


Heavy Duty Wheel Force Transducer, 6 Axis

Model LW-2T-100K

- 100,000 lbf (445 kN) radial load capacity
- 50,000 lbf (222 kN) lateral capacity at tire patch
- Measures 3 forces and 3 moments
- Measures X and Z accelerations
- Measures combined loads of one or two tires
- Adapts to 22.5 in and larger wheels
- Environmentally protected
- Temperature compensated
- Rugged stainless steel construction



Description

The *LW-2T-100K Wheel Force Transducer (WFT)* is capable of measuring all of the wheel forces and moments on class 8 trucks, large off-road vehicles and heavy equipment. It provides independent output signals for vertical, lateral, and longitudinal forces as well as camber, steer and torque moments. It is completely weatherproof making it ideal for on-road and off-road measurements in all weather conditions. It can also be used to monitor and control laboratory tests. One sensor measures the combined loads for a dual wheel set or a single tire.

The matching amplifier package easily mounts onto the transducer. It amplifies and digitizes the transducer signals before they pass through the slip ring. The amplifier package also includes X and Z acceleration outputs and performs remote shunt calibration of the transducer.

The *CT2 Transducer Interface Box* performs real-time coordinate transformation and crosstalk compensation, and outputs analog, CAN, and ethernet signals. An embedded webpage allows the user to configure the WFT system.

Specifications

Maximum Force Capacity [Fx, Fz] (radial)	100,000 lbf (445 kN)
Maximum Force Capacity [Fy] (lateral) at Tire Patch	50,000 lbf (222 kN)
Maximum Torque Capacity [Mx, My, Mz]	100,000 lbf · ft (135 kN · m)
Accelerometer Range	± 55 g
Sensor	4 arm strain gauge bridges
Nonlinearity	≤ 1 % of full scale output
Hysteresis	< 0.5 % of full scale output
Cross Axis Sensitivity after Correction	< 1 % of full scale output
Temperature Range, Operating	-40 °F to 257 °F (-40 °C to 125 °C)
Angular Resolution	0.17°

8500 Ance Road
Charlevoix, MI 49720
Tel: 231-547-5511
Fax: 231-547-7070
03-9-22
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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

Heavy Duty Wheel Force Transducer, 6 Axis

CT2 Transducer Interface Box

- Performs real-time coordinate transformation and crosstalk compensation
- Easy to use Zero, Shunt Calibration, and Bridge Power Off functions
- Simultaneous analog, CAN, and ethernet signal outputs
- Embedded webpage enables user to:
 - Change set-up options
 - Move WFT measurement origin
 - View Transducer static values
 - Create .dbc file



Amplifier & Slip Ring Package

- Internal X and Z accelerometers
- High resolution encoder for position and speed measurement
- Internal smart chip contains all calibration, zero, and shunt values
- Provides signal conditioning and amplification to the transducer strain gauge signals
- Digitizes transducer, encoder, and accelerometer signals
- Supports slip ring assembly



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