

# Wheel Force Transducer Spindle

## Model LWS30

- Six axis measuring hub for tire test stands
- 6,750 lbf (30 kN) radial load capacity
- Measures 3 forces and 3 moments
- For use with 12 in and larger wheels
- Interchangeable hub adapters
- Incorporates standard MSC Wheel Force Transducers
- Used for:
  - Passenger car tire testing
  - Tire non-uniformity measurement
  - Durability and vibration testing
  - Long-term endurance testing



## Description

The *LWS30 Wheel Force Spindle* is the ideal tool for measuring tire endurance and tire wear in tire and wheel test stands, as well as test vehicles. This measuring hub is used to determine wheel force and torque in the laboratory for long term testing, even at high speeds. It is also used for test stand controlling, or closed loop control. It was designed to have minimal crosstalk between the components for high accuracy measurements. With the option for greased or oil cooled bearings, the measuring hub remains at constant thermal conditions at high speeds with minimal bearing or sealing friction.

## Specifications

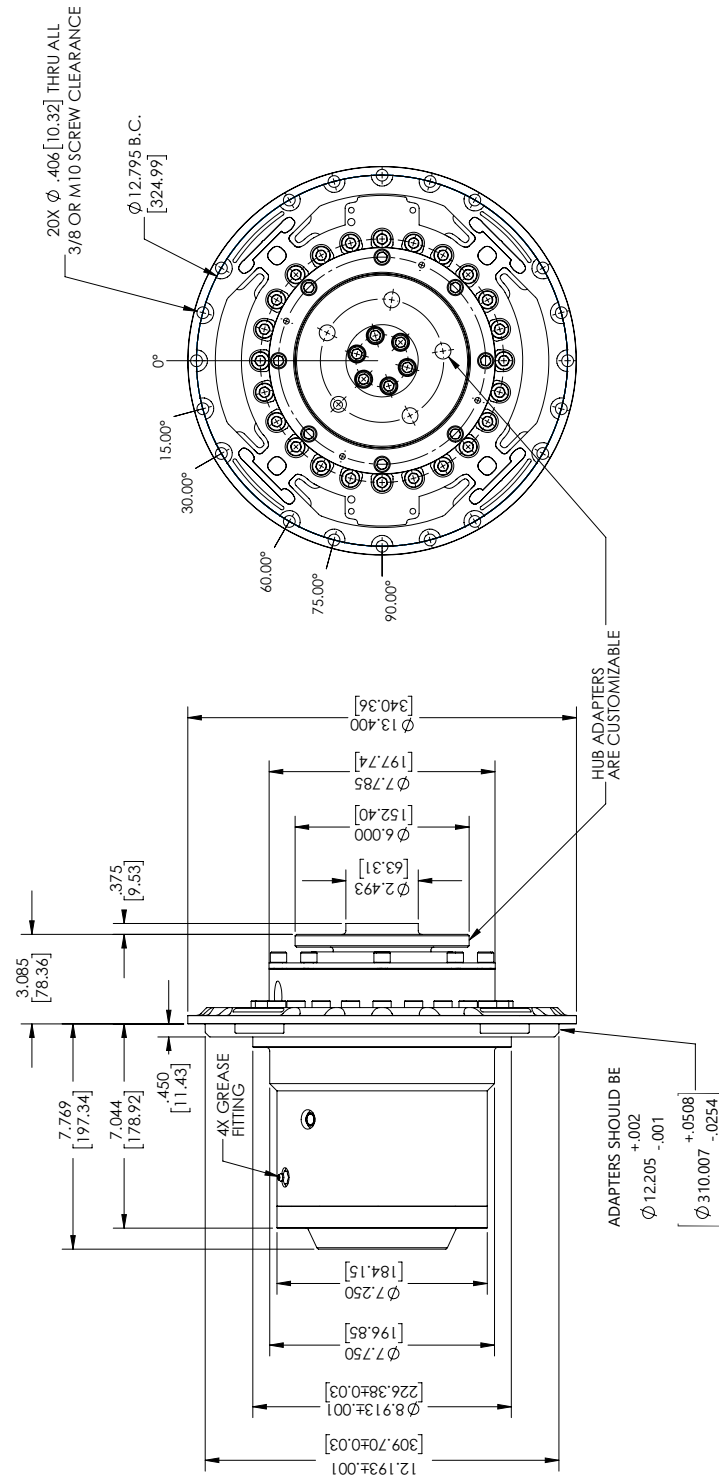
Maximum Force Capacity [Fx, Fy]	± 4,500 lbf (20 kN)
Maximum Force Capacity [Fz]	6,750 lbf (30 kN)
Maximum Torque Capacity [My, Mz]	2,950 lbf · ft (4 kN · m)
Maximum Torque Capacity [Mx]	± 5,900 lbf · ft (8 kN · m)
Nonlinearity	≤ 0.5 % of full scale output
Max. Rotational Speed - Grease Lubrication	1,900 r/min
Max. Rotational Speed - Oil Lubrication	2,700 r/min
Temperature Range, Operating	-40 °F to 257 °F (-40 °C to 125 °C)
Weight	120 lb (54 kg)

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