MTS 662.20-01 Axial/Torsional Load Transducers are compact, fatigue-rated devices designed for measuring through-zero tension and compression and torsional loads. These load transducers feature low deflection and a high degree of stiffness to give you better dynamic performance. They also feature a high degree of component concentricity and parallelism to give you greater accuracy during your test setup. Special attention has been given to ensure low crosstalk interaction between the two axes. Accuracy is also enhanced by a design that features radially-oriented strain measurement beams.

MTS uses proprietary wiring techniques to reduce electrical noise, then compensates each unit to ensure temperature stability.
662.20-01 Axial/Torsional Load Transducers

**Specifications**

**Temperature Effect On Zero**
- 0.0020% of full scale/°F
- 0.0036% of full scale/°C

**Temperature Effect On Sensitivity**
- 0.0020% of reading/°F
- 0.0036% of reading/°C

**Compensated Temperature Range**
- +70°F (+21°C) to +170°F (+77°C)

**Useable Temperature Range**
- −70°F (−21°C) to +200°F (93°C)

**Bridge Resistance (nominal)**
- Axial 1000 Ω
- Torsional 1000 Ω

**Maximum Excitation Voltage**
- 15 Vdc

**Repeatability**
- 0.1% of full scale

**Nominal Output Sensitivity**
- 1mV/V Axial at full scale load
- 75mV/V Torsional at full scale load

**Maximum Crosstalk**
- 1.0% of full scale torsional to axial
- 1.0% of full scale axial to torsional

**Deflection At Rated Force Capacity**
- 0.002 inch (0.05 mm)

**Deflection At Rated Torque Capacity**
- 0.20 degrees

**Weight (approximate)**
- 3.5 lb (1.6 kg) does not include adapter*

**Hysteresis**
- 0.15% of full scale

**Non-linearity**
- 0.15% of full scale axial
- 0.15% of full scale torsional

**Calibration**
- Each load transducer ordered may be calibrated by MTS at our factory or on-site by MTS Field Service. In addition, the load transducer and associated conditioning electronics may be returned to MTS for repair and recalibration.

**These A/T transducers** must be used with an aluminum isolation / adapter plate, or mount on an aluminum part, to avoid detrimental thermal effects on output of device.

**Model | Load Capacity | H Thread Size**
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662.20C-01 | 550 lb axial / 250 IN-LB torsional | 1/4-20 UNC-2B x .50 in. deep
662.20D-01 | 2.5KN axial / 25 N• M torsional | M6 x 1.0 mm x 12.7 mm deep