

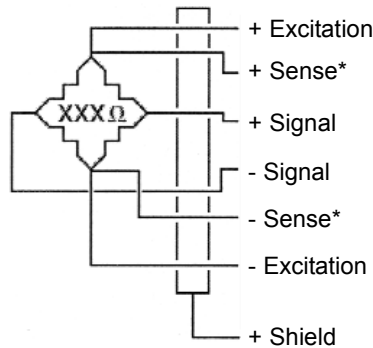
## TWX Transducer Operation Instructions

Rev 1.0

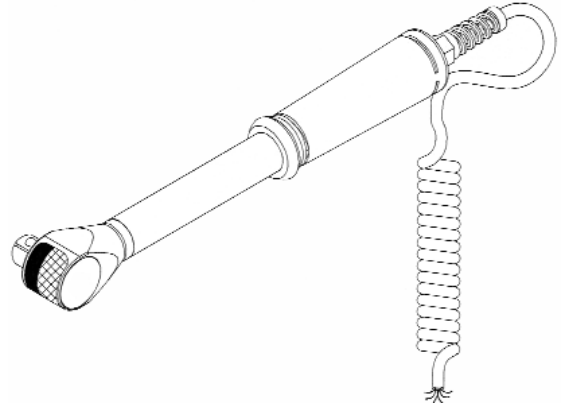
### TWX Application Examples

The TWX transducer is a torque wrench sensor for bolt and nut wrenching torques. These sensors are bi-directional and both tightening and break-away torque can be measured. It can also be used to check the calibration of mechanical wrenches. Ideal for installation or test of fasteners.

### TWX Wiring Diagram



\* Used with 6 conductor cable



#### Wiring Code

+ Excitation:	Red
+ Sense:	Orange
+ Signal:	Green
- Signal:	White
- Sense:	Blue
- Excitation:	Black

### Operating TWX

Once the TWX is connected with a Mountz Torque Analyzer, follow the instructions in the Torque Analyzer manual for accessing external transducers.

### Using Hand Tools

Make sure the application is within the torque range of the TWX model. If the application is under the torque range, then the accuracy may not be reliable. If the application is over the torque range, then you may overtorque the TWX and damage the transducer. Place the square drive of the wrench into the application apply torque. You may require adapters for the application or for calibration. Always make certain adapters are as short as possible and fit properly, with little "play."

### Calibration Procedures

1. Attach the TWX securely to a special fixture device.
2. Connect the TWX to a torque analyzer/display. Review the torque range of the transducer and select the appropriate measurement units.
3. Determine type of calibration to be performed.
 

<i>Calibration at 3 Pts.</i>	<i>Test at 10%, 50% and 100 of Full Scale.</i>
<i>Calibration at 6 Pts.</i>	<i>Test at 10%, 20%, 40%, 60% 80% and 100 of Full Scale.</i>
<i>Direction</i>	<i>Clockwise and/or Counter Clockwise</i>
4. Select the appropriate Calibration Arm or Wheel and attach it.
5. Gently connect the Hanger to the Calibration Arm or wheel.
6. Load 3 times to minimum 80% FS in direction of operation and reset to zero after loading.
7. Apply series of increasing torques in direction of operation starting from the lowest test point.
8. Record readings from the test device at each test point prior to performing any adjustments.
9. Repeat steps 6-8 in the opposite direction (if required).
10. Perform calibration adjustments. Repeat test as described above until readings at all test points are within tolerances.
11. Repeat test as described above and record 5 readings from test device at each test point. Compile all necessary details to generate test report.
12. Remove old calibration label and place new label on transducer.