

How to use and care for your Rotary Torque Sensor

Sensor

Tool Specification

- Model: XR 2 HD, 5 HD, 20 HD, 20 SD, 75 SD, 180 SD 500 SD & 1400 SD
(Torque Range from 0.2 – 1400 N.m)
- Bridge Resistance: 350ohm
- Output Sensitivity: 2mV/V
- Static Accuracy: $\pm 1\%$ of Maximum torque value
- Stability of zero offset with temperature: $\pm 0.1\%$ of Maximum Torque Value/ $^{\circ}\text{C}$
- Overload Capacity: 25% of Maximum Torque Value
- Temperature Range: 5 to 40 $^{\circ}\text{C}$
- Humidity: 0 to 75% non-condensing

Safety & Maintenance

- This Torque Tool is a precision instrument and should be used for its intended purpose only
- Only hold the tool using the handgrip
- Always ensure that the tool is in correct alignment with the fastener
- Torque tools should be regularly calibrated and inspected to ensure correct operation
- Ensure the tool is clean and free from oil, grease and water before use
- Do not use extension bars to increase the leverage of the handle
- Never dip into cleaning fluid or petroleum

How to use your Rotary Torque Sensor

This Rotary Transducer is designed to measure the torque during tightening processes. It is suitable for use in all manual applications and with all *non-impact* power tools.

The QuickTec system is fitted to this Transducer, which allows Transducer information to be automatically downloaded to QuickTec compatible readout devices such as the PETA system.

The Transducer is calibrated so that exactly 2mV/V output is produced at the maximum Transducer torque value. This value is marked on the Transducer and may have to be entered into readout devices other than QuickTec compatible devices.

The Rotary Transducer should be secured onto the tool output drive and a socket or suitable drive element fitted to the Transducer output shaft. Failure to observe the maximum Transducer torque capacity, may cause irreversible damage to the Transducer.

Connect the Transducer to the readout device, select an appropriate operating mode and then operate the tool in the normal way. In the interests of accuracy it is essential to maintain the correct alignment between the Fastener, Transducer and Tool.

If the male square drive detent pin is not required, this may be removed with a stepped punch (for location purposes) of $\text{Ø}2.3\text{mm}$ for a $\frac{1}{4}$ " square drive, $\text{Ø}3.95\text{mm}$ for a $\frac{3}{8}$ " or $\frac{1}{2}$ " square drive and $\text{Ø}6.3\text{mm}$ for a $\frac{3}{4}$ " or 1" square drive.

Servicing Information

Regular servicing of your Torque Tool by competent personnel is important to ensure it continues to perform correctly.