FAQ FOR BLRTSX BRUSHLESS ROTARY TORQUE SENSORS

Q1. What type of tools do the BLRTSX torque sensor test and measure torque?

A1. The instrument is for measuring dynamic torque for power tools with fastening applications.

Q2. Does it matter what BLRTSX model I use when testing a power tool?

A2. Ensure the torque tool being tested is within the torque range of the BLRTSX model. If the tool is below the minimum torque range capacity of the BLRTSX model, then the accuracy may not be reliable. If the tool exceeds the maximum torque range capacity of the BLRTSX model, you may over torque the BLRTSX and damage the sensor. Exceeding the toque capacity and damaging the sensor is not covered under warranty.

Q3. What type of torque sensor is the BLRTSX?

A3. It is a brushless rotary type of torque sensor. The brushless design features a non-contact signal transfer and is maintenance-free as no mechanical contacting parts wear out.

Q4. What is the difference between a reaction torque sensor and rotary torque sensor?

A4. A reaction sensor measures stationary torque (static or non-rotational), and rotary measures dynamic (rotational) torque

Q5. How do I view the torque reading when using the BLRTSX sensor?

A5. The BLRTSX sensor operates in conjunction with a torque analyzer. It must be connected to a torque analyzer to display a torque reading and store the test data (if the torque analyzer is capable).

Q6. Can the BLRTSX torque sensor be plugged into any torque analyzer?

A6. The sensor can only operate with a torque analyzer that allows an external torque sensor to be connected. You must select the proper cable connecting the sensor to the torque analyzer.

Q7. Is the BLRTSX torque sensor supplied with a cable for connecting to a torque analyzer?
A7. No, it is not supplied with a cable. It is purchased separately. You must select and purchase the appropriate cable connecting to the torque analyzer.

Q8. How does the BLRTSX torque sensor connect to a power tool?
A8. The BLRTSX attaches to the power tool's drive without interfering with the tool's ability to fasten a screw or bolt. Measuring the torque output of a tool with a rotary torque sensor allows you to monitor torque being applied from the tool to the fastener or bolt and analyze the efficiency of the fastening process. It is ideal for torque-auditing or torque verification programs.

Q9. What is a torque verification program?
A9. It is a quality control process to test and validate if a tool is still in or out of calibration. Conducting a daily or weekly torque verification allows you to monitor tool performance and identify when it drifts out of tolerance.

Q10. What is the torque auditing program?
A10. The process is for auditing the torque of a screw that has been tightened down. Torque auditing validates the fastening process, the torque tool, the joint application, and the materials used. It is a test method to detect loose fasteners or any signs of joint relaxation.

Q11. What is residual torque?
A11. The amount of tension that remains in a tightened joint after fastening a screw or bolt is complete. It determines how tightly the joint has been tightened and is an important factor in quality control. Measuring residual torque ensures a joint has been tightened properly and helps detect signs of joint relaxation during the fastening process.

Q12. What is a "first movement torque test" method?
A12. First, mark the tightened fastener and surrounding application. In the tightening direction, start applying force to the tool slowly until the first movement in the fastener is detected. The recorded reading indicates the original torque applied to the joint. This method is the best way to determine residual torque.

Q13. What is a "loosening torque test" method?
A13. This test is also known as the "breakaway" test. The loosening torque test measures how much torque is required to break the bond between the two surfaces. It is similar to the "first movement" method, but instead of

tightening the fastener, torque is applied in the opposite direction to loosen the fastener. When the fastener breaks loose, record the torque reading. The torque to loosen the fastener is the estimated torque applied to the joint.

Q14. What is a "marking torque test" method?
A14. With this testing method, mark the surface of the tightened fastener and continue that mark onto the surface that is being clamped. Next, loosen the fastener and retighten until the marks are aligned. The torque required to return the fastener to its original location refers to the original torque applied to it.

Q15. Can the BLRTSX be used with a hand tool?
A15. The sensor is also compatible with measuring hand tools like torque wrenches and screwdrivers.

Q16. Is it supplied with a calibration certificate?
A16. Yes, it is supplied with a Free ISO 17025 Certification of Calibration.