Torque Calibration

EA014

Fig 1 : 0 to 10Nm torque transducer.

Ideal for testing manual torque screwdrivers

- **Range 0 to 10Nm**
- **Accuracy 2%**
- **Supports different units e.g. mNm, ftlb, etc.**

Overview

Connect directly to the feature connector on the 2000 series calibrator to allow torque calibration to be performed.

Technical Details

Operation is controlled from the interface using either the Virtual front panel program or ProCal software. The software reads back the voltage signal from the transducer which can be converted to torque units which is displayed on the computer.

The ProCal calibration software allows a pre-defined sequence of tests (known as a procedure) to be set up. This allows the computer to automatically step through these tests, control the calibrator, set the correct outputs and record the amount of deviation in relation to the torque device's specifications.

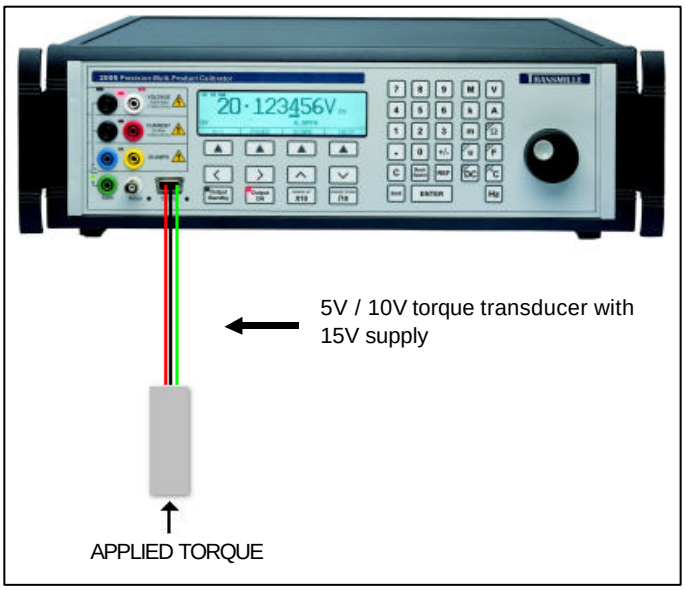
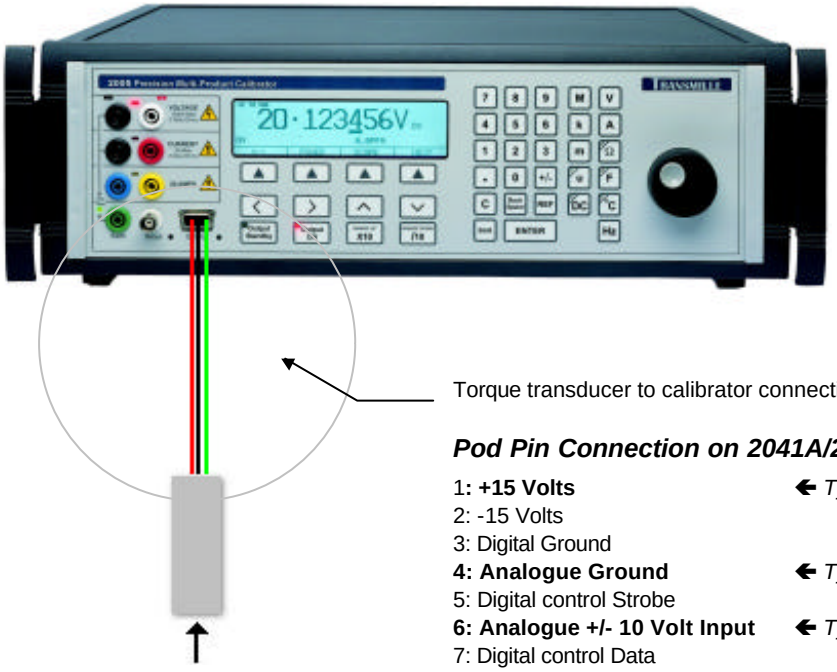


Fig 2 : Connecting a transducer to the 2000 Series

Torque Calibration Option - Operation

Torque Transducer Connection

The torque transducer is connected to the ‘feature’ connector of the 2000 series using a 9 way ’D’ type connector to an appropriate connector for the transducer.



Input to transducer from torque source.

Torque transducer to calibrator connection :

Pod Pin Connection on 2041A/2006A Series Calibrators

1**: +15 Volts** ← *Typical Transducer Connection*
2: -15 Volts
3: Digital Ground
4: Analogue Ground ← *Typical Transducer Connection*
5: Digital control Strobe
6: Analogue +/- 10 Volt Input ← *Typical Transducer Connection*
7: Digital control Data
8: Output from calibrator (0 to 20 Volts ac/dc, 0 to 20mA ac/dc)
9: Clock

This connection comprises of a 9 way ‘D’ type connector to a suitable connector for attaching to the transducer output.

Note : Transducer connections are typically made via three connection pins (shown by arrows)