

MLT0201 Force Transducer (5 mg - 25 g)

Transducer Series

Description

The MLT0201 Force Transducer is used for measuring forces under isometric conditions in the range of 5 mg to 25 g wt. The transducer is suitable for connection to all ADInstruments Bridge Amps.



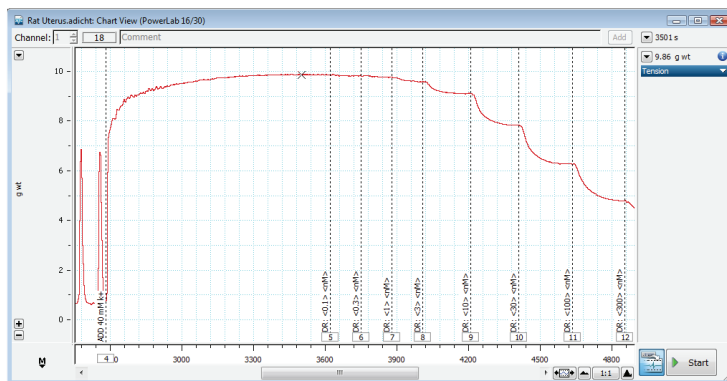
Operation

Mount the transducer by inserting the support rod through the hole on a micro-positioner or clamp and connect it to an 8-pin DIN input on the front of a Bridge Amp. The transducer is orientation specific. The cable exit indicates the top of the transducer. Take the thread tied to the tissue and attach it to the transducer by tying a loop around the cleft in the double plate on the end of the detecting rod which protrudes from the end of the transducer body. Using the micropositioner or clamp, adjust the tension in the thread to provide the desired amount of pre-load tension on the tissue.

Application

The MLT0201 Force Transducer is ideal for isolated tissue studies and has been designed for operation with our range of organ bath models. (For use with Radnoti Organ Baths order the MLT0201/RAD).

Typical Data



Signals obtained during a typical tissue contraction experiment

Caution

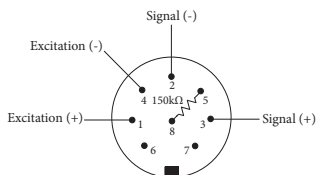
Read "Statement of Intended Use" on our website or in "Getting Started with PowerLab" before use.

Specifications

Operating range:	5 mg to 25 g wt
Resolution:	2 mg
Factory set excitation voltage:	10 V DC
Maximum excitation:	10 V
Bridge resistance:	360 Ω
Sensitivity	30 $\mu\text{V}/\text{V}/\text{g}$
Displacement range:	± 0.45 mm
Non linearity and hysteresis:	<1 %
Resonant frequency:	140 Hz (Typical)
Cable length:	2 m (6.6')
Body (length x ϕ):	60 x 30 mm (2.4" x 1.2")
Support rod (length x ϕ):	160 x 6 mm (6.3" x 0.24")
Weight (including cable):	170 g
Connector:	8-pin DIN

All specifications were tested at the time of printing and are subject to change.

Wiring Diagram



Viewed from the solder side

Ordering Information:

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Specify /RAD for version suitable for use with
Radnoti Organ Baths

For use with:

All ADInstruments Bridge Amps

ADINSTRUMENTS.com

ISO 9001:2008 Certified Quality Management System

WARRANTY: ADInstruments PowerLab data acquisition units (Product Number Prefix: PL), Front-end Signal Conditioners (Product Number Prefix: FE) are warranted against defects in materials and workmanship for a period of 5 years from the date of purchase. Other PowerLab data acquisition units and ADInstruments manufactured Front-end and Pod Signal Conditioners, and Instruments are warranted of a period of 3 years from the date of purchase. Third party products are covered by the manufacturer's warranty. Warranties are void if the product has been damaged due to negligence. Consumables and electrodes are not covered by a warranty. All questions regarding service and warranty should be directed to your nearest ADInstruments representative.