

MLT0420 Force Transducer (20g)

Transducer Series

Description

The MLT0420 is a sensitive isometric force transducer suitable for measuring small forces up to 20 g. The transducer is suitable for connection to ADInstruments Bridge Amps.



Operation

Mount the transducer by inserting the support rod through the hole of a micro-positioner. Loosen the grub screw at the bottom rear of the transducer to rotate the support rod to suit the orientation of the micro-positioner. Re-tighten the grub screw firmly before use.

Tie a silk thread to one end of the isolated tissue. Tie the other end of the thread through the hole on the arm of the transducer. The load should be in the direction of the arrows.

The transducer responds equally to either tension or compression loading. Use the micro-positioner to adjust the tension in the silk thread, to provide the desired amount of pre-load tension on the tissue.

Application

The MLT0420 Force Transducer (20g) is ideal for isolated tissue studies where forces of up to 20 g are expected. The MLT0420 Force Transducer has been designed for operation with our range of organ bath models.

NOTE: Support rod orientation differs between PanLab and Radnoti Organ Bath micropositioners.

Caution

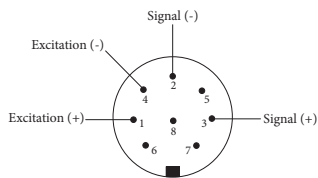
Read "Statement of Intended Use" on our website or in "Getting Started with PowerLab" before use.

Specifications

Non-linearity:	0.3% Rated Output (~60 mg)
Hysteresis:	0.3% Rated Output (~60 mg)
Repeatability:	0.3% Rated Output (~60 mg)
Temperature effect on zero balance:	0.5% Rated Output (~100 mg)/10°C
Temperature effect on output:	0.5% LOAD/10°C
Resistance:	270 Ω
Sensitivity:	87.5 $\mu\text{V}/\text{V}/\text{g}$
Displacement:	± 0.12 mm
Resonant F (typ):	210 Hz
Factory set excitation voltage:	3 V
Cable length:	2 m
Body (length x ϕ):	68 x 50 x 25
Support rod (length x ϕ):	165 x 6 mm (6.3" x 0.24")
Weight (including cable):	300 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:

MLT0420 Force Transducer (20g)

For use with:

ADInstruments Bridge Amps ONLY