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TISSUE BATHS, TRANSDUCERS, STIMULATORS

Isotonic Transducer

Cat. No. 7006

General

The 7006 Isotonic Transducer basically consists of a carbonfibre lever arm which pivots on the shaft of a Hall-effect rotary motion transducer of original design.

The arm is balanced by an adjustable counterweight of tungsten alloy.

It is possible to carry out experiments on extremely small muscle fibres, which can be held under a tension of as little as 100-200 mg so that minimal force and consequent displacement alterations can be recorded.

The lever arm balancing is provided by a tungsten alloy counterweight which can be shifted by turning its knurled section.

This load is monitored by the counterweight rim moving along a scale calibrated in grams.



The picture shows an Isotonic Transducer (left) & an Isometric Transducer (right), see separate datasheet

Also available from Ugo Basile:

- Tissue Baths, 1, 2, 4-chambers
- Digital Recorder DataCapsule-Evo
- Electrodes & Stimulators



Main Features

- Ugo Basile Isotonic Transducer is specially designed for investigating isotonic contractions in isolated organs, particularly smooth muscle, amphibian hearts, etc.
- An Isotonic Transducer is basically a displacement meter under constant load, whereas an Isometric transducer measures changes in force at constant length

Ugo Basile: more than 25,000 citations

Isotonic Transducer Specifications

Voltage Output	300 μ V per mm displacement of lever arm tip
Linearity	\pm 2% to \pm 15° rotation
Excitation Voltage	6 \div 15V
Excitation Current	20mA (constant in the range 6 \div 15V)
Operating Range	\pm 15° about the centre
Lever Arm Length	10cm
Lever Arm Travel	6cm
Breakaway Torque	less than 0.1g x cm
Moment of Inertia	35 g x cm ²
Overall Dimensions	16.5x5.5x11cm (excl. removable handle)
Weight	0.35Kg
Shipping Weight	1.60Kg
Packing	29x26x29cm

Compatibility

Before ordering, check the connection compatibility of your amplifier/recording system.

The Isometric & Isotonic Transducers are normally supplied with a connector designed for Ugo Basile Data-Capsule-Evo Recorder (see datasheet).

If the customer wishes to make use of other recording apparatus, the transducers can be supplied with appropriate connectors on request: we will be glad to provide transducer with different connectors, if available, or to provide wiring information and instruction.

Ordering Information

7006 Isotonic Transducer

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