



Thomas RECORDING GmbH

„We have the solution!“

Thomas Pencil Drive System



Product Features

- High precision & quality “Made in GERMANY” by Thomas RECORDING
- Axial resolution better than $1\mu\text{m}$, x-y-positioning with a grid and special holder
- Patented rubber-tube drive, no hysteresis, slick or free motion due to patented rubber tube drive (avoids drawbacks of cable, direct or hydraulic driven systems)
- Electrode travel range $10.000\mu\text{m}$
- Variable speed range from $0\text{...}250\mu\text{m/s}$, higher velocity on request
- Small and lightweight (just 33g per drive unit incl. motor)
- No electrode connection cables free in air!
- Easy electrode exchange
- Custom made solutions for each recording application
- Stable long-term recordings with thin microelectrodes for hours

 Made in
GERMANY

Certified
ISO 9001  TÜV Rheinland®
Precisely Right

www.ThomasRECORDING.com



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Innovative Products for Neurophysiology



Fig. 1: Thomas Pencil Drive mounted to an implanted primate recording chamber



Fig. 2: Lateral positioning of the Pencil Drive guide tube with a grid. (optimal available)

The **Thomas Pencil Drive** is a small and lightweight microdrive system for electrode, tetrode, heptode and multitrode recordings.

The system consists of a single miniaturized precision microdrive system, which can be used with a single Thomas multitrode, heptode, tetrode or single core microelectrode. The system is completely shielded against electrical interference (e.g. from radio stations or electrical lab equipment or installation). One can record brain activity while the electrode is moving!

A precision low noise preamplifier for up to 8 channels and a precision drive unit is integrated in the Thomas Pencil drive system. The axial resolution of the microdrive is 1 μ m.

The single microdrive is equipped with an electrode guide tube. The length of this guide tube can be adapted to the depth of the recording chamber.

The **Thomas Pencil Drive** chassis can be mounted to a special recording chamber holder on an implanted recording chamber or to each other stereotaxic instrument. The system is delivered completely with microprocessor motor control unit, PC software, connection cables, integrated preamplifier, preamplifier power supply etc.

Custom-made adaptations are possible, please feel free to ask for your special adaptation.

Ordering information:

Article number: AN000322

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