

Hydraulic Probe Drive

Instrumentation and microelectrodes for neuroscience research

The use of a hydraulic drive for positioning microelectrodes allows the investigator to make discrete micron axial movements as well as minimize vibration, audio, and visual artifacts. Using a motorized drive unit to advance the probe gives rapid acceleration over short distances increasing success in isolating and penetrating cells.



The 50-12-1C **Hydraulic Probe Drive** features 15mm axial travel and includes provision for mounting metal or glass microelectrodes as well as our preamplifier probes. The probe is provided with a four inch, 5/16 inch diameter stainless steel mounting rod which has 1/4" and 7/16" sections at the end so it is suitable for mounting on most stereotaxics and micromanipulators. It can also be mounted on our chronic systems using the 50-12-2 **Chronic Adaptor**, or several versions of our **Guide Tube Drive**.

The probe drive is connected to the master cylinder by 3 meters of flexible tubing (other lengths can be specified), and is advanced with any of four drive systems. Our hydraulic probe is also easily mounted on any of FHC's guide tube drives. This will provide for a guide tube, greatly extend the electrodes range of axial travel (up to 65mm with some guide tube drive models) and provide for both a coarse and fine knob driven electrode advance.

Features

- MINIATURE HYDRAULIC PROBE ACCEPTS METAL AND GLASS MICROELECTRODES AS WELL AS AMPLIFIER PROBES
- SEALED HYDRAULICS ELIMINATE PERIODIC REFILLING
- VERSATILE — ADAPTERS FOR ACUTE AND CHRONIC PREPARATIONS
- DRIVE SYSTEMS INCLUDE MANUAL AND MOTORIZED CONTROL UNITS

Specifications

Travel: 15mm minimum
 Backlash: <5 micron axial, <.5 micron lateral
 Dimensions: please refer to drawing 1064D1.00 and 50-12-1C/2B for dimensions.
 NOTE: Tubing connected slave and master cylinder is 8 feet. Other lengths, up to 20 feet, may be specified.

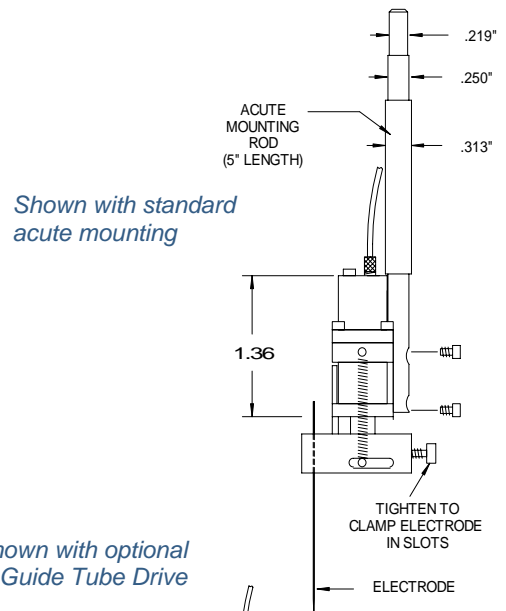
Ordering Information

50-12-1C Hydraulic Probe Drive

A Drive System is required for operation. Select from manual and motorized options below:

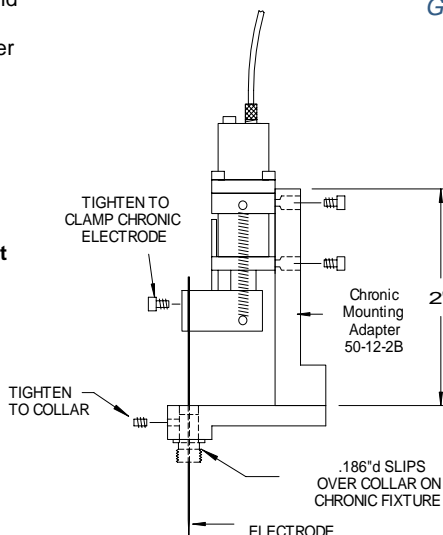
Motorized:
 MCM Motorized Drive System

Manual (select one):
 50-12-8-02 Micrometer Drive
 50-12-9-02 Drum Drive



Shown with standard acute mounting

Shown with Chronic Mounting Adaptor



Shown with optional Guide Tube Drive

