MODEL 730 NEEDLE PIPETTE PULLER

CONTROLLABLE PARAMETERS!

In the pulling sequence…

Model 730 Needle Pipette Puller has truly advanced features. In addition to controllable parameters in the pulling sequence, this unit has separate heater controls for patch clamp pipettes and is capable of producing pipettes without readjusting the heater settings. It is the ideal instrument for the busy laboratory where a number of pipettes are required.

By setting or adjusting values for the first and/or second pull, in conjunction with the other various parameters, you can vary the length, taper and tip to achieve an endless variety of shapes and sizes.

Model 730 will repeatedly pull micropipettes of the configuration for which it has been set. This is possible because of the ability to control the parameters in the pulling sequence and the vertical slide mechanism. Parameter controls include two heater control knobs and digital display with 0.1 resolution, DC regulated solenoid control and optical switch with adjustable flags to set the length of gravity fall. These controllable parameters coupled with heater configuration allow a wide variety of pipettes to be pulled.

Small fluctuations in heater temperature can significantly affect the shape of a pipette during pulling sequence. To help prevent this, Model 730 is designed to be less susceptible to line voltage changes. Heater voltage is divided into 20 units with a resolution of 0.1 units.

Another factor which can adversely affect pipette shape is residual heat in the heating elements. When using platinum alloy filaments, Model 730 helps eliminate this problem in several ways. First, the heater goes off the instant the solenoid is activated, and since the unit is of vertical design, any residual heat rises away from the tips. Second, platinum/iridium filaments have an extremely low thermal mass and cool very rapidly. Third, the tip of the pipette is pulled below the heating elements where there is no residual heat. These solutions are so effective there is no need for air jet cooling.

Model 730 Advanced Features

- Easy-to-use, versatile and reliable with excellent repeatability.
- Patch clamp capabilities with 2 heater controls.
- Tips of .25 microns or less can be obtained.
- Can be used with a variety of heater configurations.
- Slide mechanism employs super accurate bearing components, as have all Kopf Needle Pipette Pullers.
- Pulls pipettes vertically to help assure straight, concentric shapes.
- Faceplate protects heater from drafts to ensure reproducibility.
- Small, compact size takes up less than a square foot of bench space.

SPECIFICATIONS

Size: 9½" W x 14½" H x 11" D

Weight: 35 lbs (total shipping)

Power Requirements: 100/120/220/240 VAC, 50-60 Hz via rear panel entry module with appropriate power cord.

Digital Display: Three digits, resolution of tenths. 0-19.5 units with resolution of 0.1 units.

Solenoid Current: 0-5 amp DC regulation.

Optical Switch: Fixed location with adjustable flags.

Fuses: 4 amp, 1.5 amp (100/120 VAC); 3.15 amp, 1.6 amp (220/240 VAC)