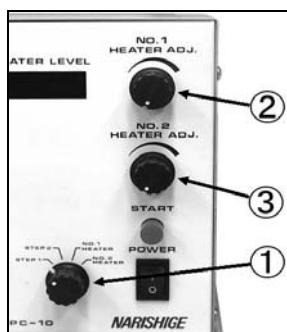


Setting Values in the PC-10 Puller

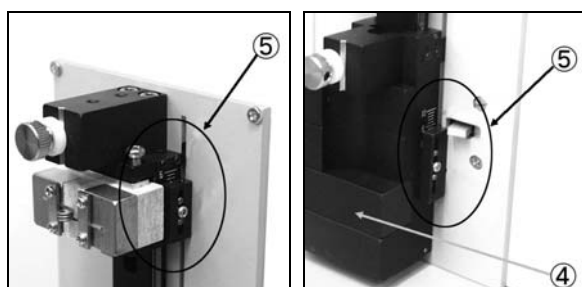
Do you know how to set values in the PC-10 Puller when making a pipette? In this news, we will discuss several settings to guide you, while making particular pipettes

Configuring heating value, weight, one-step pulling and two-step pulling makes different pipette tips in shape. For example, high heating value makes long thin pipettes, while low heating value makes short thick pipettes. One-step pulling makes supple pipettes, while two-step pulling makes firm pipettes. As varied shapes can be produced, it is inevitable that a suitable setting for one's particular purpose is found for oneself. However, it is sometimes difficult to find the setting from random combinations, we therefore will provide some examples to guide you.

◆◆ Setting Functions ◆◆



- STEP 1(①) provides one-step pulling when the start switch is pressed, while STEP 2 provides two-step pulling.
- NO.1 HEATER (①) allows setting of heater value (②) in the first step in the two-step pulling.
- NO.2 HEATER (①) allows setting of heater value in the one-step pulling (③), and also setting of heater value of the second step in the two-step pulling (③).



- (④) Tensile force is adjusted by increasing/decreasing the number of weights from one to four.
- (⑤) In the two-step pulling, you set drop length for the first step pulling. As the heater filament has to come to the center of the capillary for the next heating, the heater slider is set in half value of the first step.

◆◆ Guide Settings ◆◆

The following is the guide settings with 1mm O.D. (0.6mm I.D.) capillary.

Shape · Tip diameter	Application	Step(①)	NO.1(②)	NO.2(③)	Weight(④)	Slider(⑤)
Normal · Less than 0.3 μm	Holding (after being cut)	One-step	—	70	4	—
Cone shape · 0.5 μm		One-step	—	55~60	4	—
Funnel shape · 10~15 μm	ES cells	Two-step	70	70	0~1	2 (1)
Funnel shape · 3~10 μm	ICSI, Xenopus	Two-step	65	75	4	3 (1.5)
Hourglass shape · 0.5 μm	C.elegans, transgenic mouse, microdissection	Two-step	65	85	2~4	6 (3)
Tubular shape · 50~100 μm	Holding, crystal analysis	Two-step	70	55	1~3	8 (4)
Normal · 1~50 μm	Picking up cells	Two-step	65	45~60	0~1	9~10(4.5)

※The Slider values in brackets refer to the values of the heater slider.

《POINT》

The given heater values do not represent temperature but represent proportion (%) to the maximum output. As the maximum output differs slightly from one unit to another, the given values do not provide the exact shapes and tips. Also, as air-conditioning and humidity affect the heater, one unit does not always provide an identical tip every time.

The values are only examples. If you have any questions or have a problem while making a pipette, please contact us.

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