

Pneumatic Microinjector IM-11-2

Characteristics of the product

Comparison of Injectors

-Oil Type and Pneumatic Type-



**Oil Type
IM-9B**



**Pneumatic Type
IM-11-2**

Comparison of Injectors

-Oil Type and Pneumatic Type-

Oil Type Injector

Advantage	Great response.
Disadvantage	Troublesome when inserting a pipette (such as air bubble from the pipette end.) Requires the knowledge and experience for the set-up.

Pneumatic Injector

Advantage	Easy to attach or detach a pipette. Helps a beginner by its simple set-up. Clean for your hand and surroundings.
Disadvantage	Response is not as good as the oil injector (however, it is modified in New Pneumatic Type.)

Comparison of Injectors

-Oil Type and Pneumatic Type-

What is the advantage of using Pneumatic Type?

1. Fast exchange of pipette.
2. No oil refilling.
3. No greasy mess.
4. No oil leakage
5. No air bubble while attaching the pipette.

Comparison of Pneumatic Injectors

- New Type and Existing Type -



**Existing Type
IM-9C**

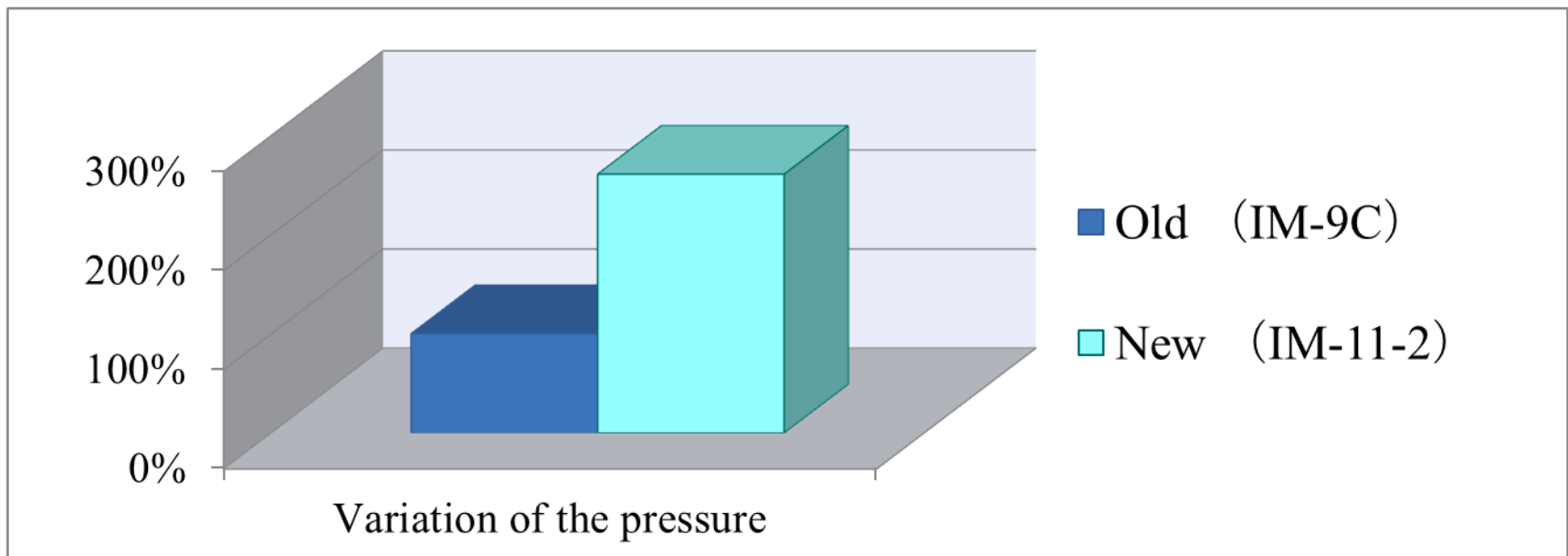


**New Type
IM-11-2**

Comparison of Pneumatic Injectors

- New Type and Existing Type -

- * Maximum response (variation of the pressure) is 260% higher than previous type which realized the superior operability just like an oil hydraulic injector with this new pneumatic control mechanism.



Comparison of Pneumatic Injectors

- New Type and Existing Type -

One-touch relief valve

- * Newly developed one-touch relief valve simplifies the adjustment of the pressure volume inside of the injector. Moreover, the adjustment can be operated while keeping the sample in the pipette.



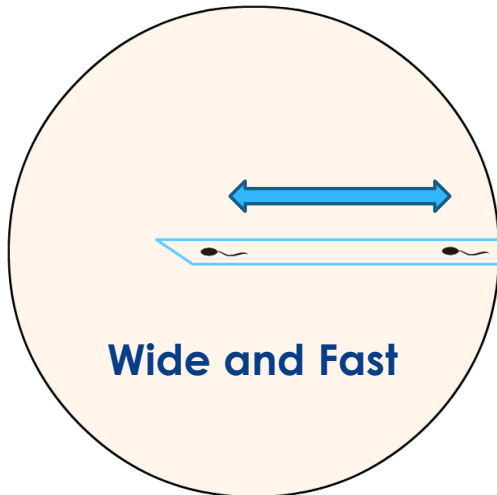
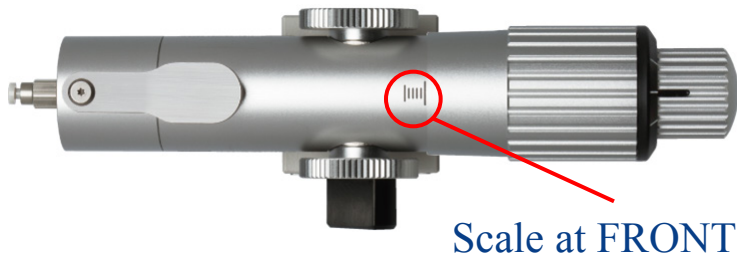
Comparison of Pneumatic Injectors

- New Type and Existing Type -

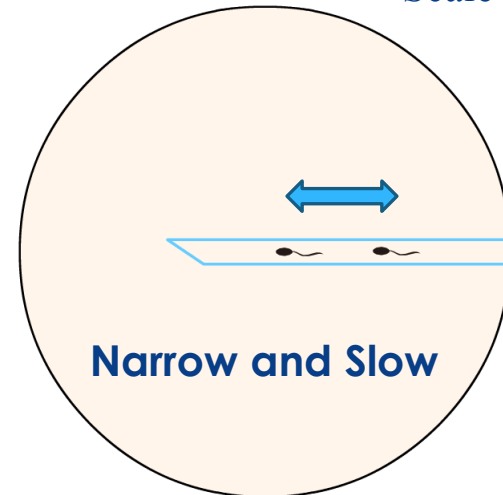
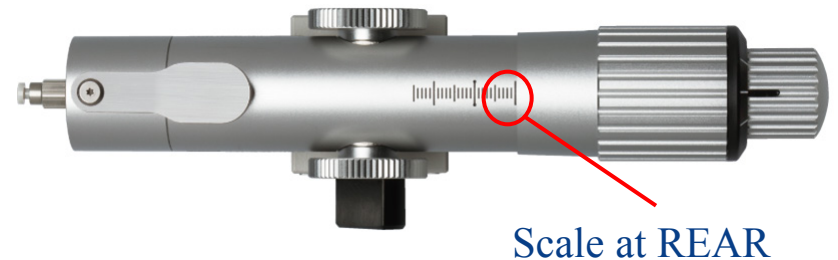
The control speed adjustable

The difference of speed control

Response at the front position



Response at the rear position



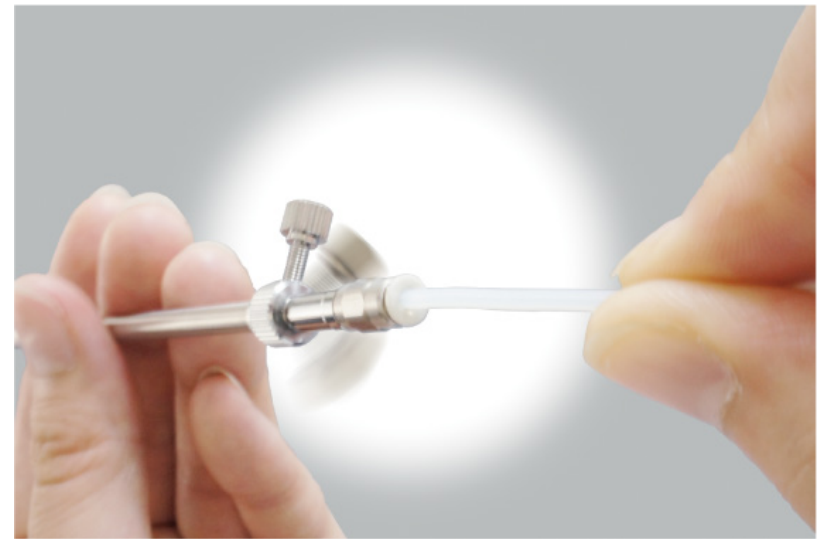
Comparison of Pneumatic Injectors

- New Type and Existing Type -

The tubing attachment mechanism



- * To attach and detach the tubing, new tubing mechanism made them easy!



- * Since the connecting part rotates, the kink or the vice of the tubing will not influence the holder.

Comparison of Pneumatic Injectors

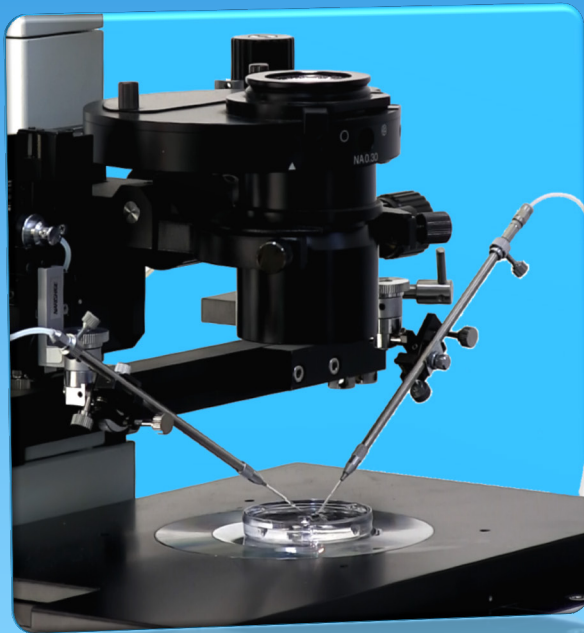
- New Type and Existing Type -

Coarse and Fine Control Knob

- * New Type achieves both large and small pressure controls by selecting from two knobs of coarse and fine.



New Pneumatic Injector makes
your pipette setting much easier!



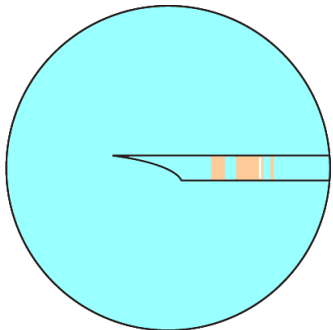
New Pneumatic Injector makes your pipette setting much easier!

Requires only three steps. Ready to use!

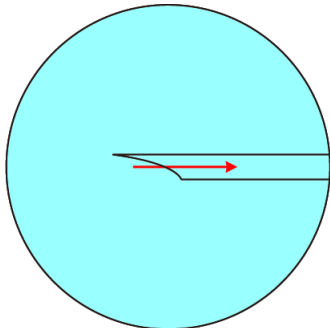
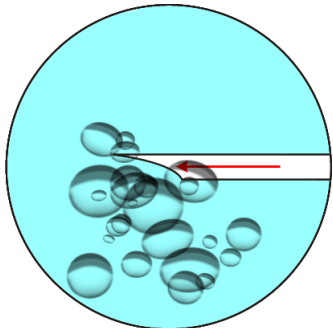
1. Insert a pipette into the injection holder, and attach it onto your micromanipulator.
 2. Adjust the positioning of control knob according to your favorite response, and free the pressure by pushing the pressure relief valve. (The pressure becomes balanced at one atmospheric pressure.)
 3. Control your micromanipulator in order to bring the pipette down into the medium.
- ✓ **Compared with Oil Type injector, the pipette setting becomes much easier!**

New Pneumatic Injector makes your pipette setting much easier!

Take an advantage of Pneumatic solution!



No more troubles of Oil mixed up with air bubble or contamination! By using Pneumatic Injector, you don't need to pay attention to those troubles.



Whenever unwanted air bubble or contamination get inside of pipette, Pneumatic Type is able to push them out from the pipette inside. Therefore, it is not necessary to change the pipette as the Oil Type has to do.

INFORMATION



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