NARISHIGE

MMO-4

Three-axis Hanging Joystick Oil Hydraulic Micromanipulator

Upgraded MMO-202ND, usability is greatly improved.

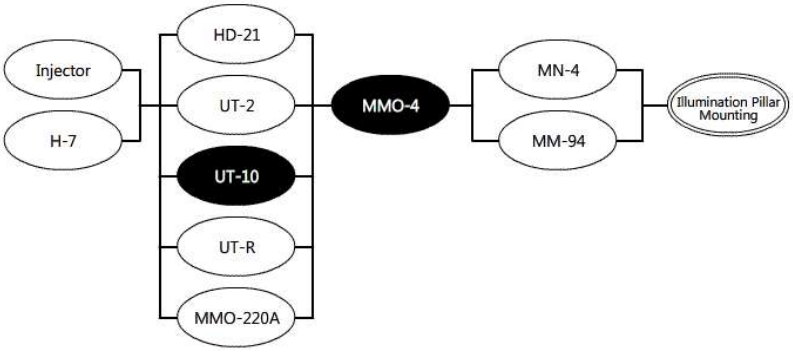
The MMO-4 micromanipulator features an oil hydraulic joystick enabling smooth three-dimensional movement with a single lever. Conversion from right to left-hand use is no longer necessary. Improved Joystick which is the key of control, greatly reduces the risk of unwanted movement from the oil pressure. Hanging joystick enables users to manipulate comfortably with the arms and hands placed on the table. Operation is therefore done in a natural posture, and can be maintained for longer periods. Improved universal joint (UT-10) included, enables stable and accurate attachment of a pipette.

* For attachment to the microscope, a coarse manipulator and suitable mounting adaptor are required (sold separately).
* Select TypeB adaptor for mounting this manipulator in combination with MMN-1 coarse manipulator.
* Changing the universal joint included with the micromanipulator to the double pipette holder HD-21 (sold separately) enables performance of embryo biopsy.
* Changing the universal joint included with the micromanipulator to MMO-220A one-axis oil hydraulic micromanipulator (sold separately) enables four-dimensional remote controlled movement.
* In combination with the return mechanism UT-R (sold separately), MMO-4 enables mechanisms to retract and return the pipette.

Specification

Accessories included		IP Iron Plate UT-10 Universal Joint (with Angle Gauge)
Movement range	**Fine**	X10mm, Y10mm, Z10mm Full rotation of knob 250μm Minimum graduation 2μm
Movement range		Joystick (for maximum movement in X-Y plane) 2mm
Dimensions/Weight	**Control unit**	W177 × D70 × H178mm, 1.76kg
	Drive unit	W70 × D40 × H87mm, 168g
Hydraulic tube length		0.9m

System Diagram



refers to the model itself with standard attachments
refers to attachable main accessories
refers to types of mounting adaptors

Specifications are subject to change without notice.

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