



Ideally sized for personal use, the Grant-bio PS-M3D multi-function rotator provides all that is required for thorough mixing in flasks, dishes, petri dishes and boxes:

- 3D rotation over the speed range 5 to 30rpm
- reciprocal 3D rotation from 1 to 360°
- vibration, from 1 to 6°, settable in a burst of 1 to 5 seconds
- all actions may be set for continuous or timed operation, and individual phases may be linked together for absolute operational flexibility:
 - 3D orbital
 - 3D reciprocal
 - 3D vibration
 - 3D orbital and reciprocal
 - 3D orbital and vibration
 - 3D orbital and reciprocal and vibration
 - 3D reciprocal and vibration

Designed to meet the challenge of workspace restrictions, the Grant-bio PS-M3D rotator is compact, with a low profile and small footprint, fitting neatly into the smallest workspace. It is also extremely quiet.

Small but highly functional, the stepper motor produces regulated and reproducible rotation throughout the speed range and, combined with the sturdy construction, will guarantee years of consistent operation.

The PS-M3D is extremely easy to operate, with very simple set-up of a multi-segment program, using the two line set-up and status display.

- variable speed, fixed angle, multi-function 3D rotator
- multi-function: rotation, reciprocation, vibration
- variable speed: 5 to 30 rpm
- fixed angle: 7° tilt
- timed operation for each phase
- 215 x 215mm platform
- smooth non-slip mat supplied as standard; optional dimpled mat also available
- for loads up to 1kg
- low voltage power supply enables safe cold room operation
- operating ambient temperature range 4°C to 45°C, for use in a cold room or incubator
- low energy consumption

The goal of mixing is to produce a uniform and reproducible mixture from an assortment of components of different size and characteristics. In spite of considerable interchangeability, the correct kind of movement is often critical and can affect the outcome of an experiment or a diagnosis. One of the key criteria is the particle size of each component. This factor is critical, as it determines which type of 'wave' motion is needed to produce adequate mixing for that particular component:

- small particles require short wave motion
- medium size particles require medium wave motion
- large particles require long wave motion



A short wave motion, for example, will have very little effect on large particles.

The PS-M3D provides all that is needed for a mixture of different sized particles:

- 3D orbital long wave
- reciprocal long and medium wave
- vibration short wave

An individual program may be configured for any different combination of components, to ensure the optimum mixing conditions.

Specification

			PS-M3D
tilt angle		°	7
orbit diameter		mm	22
orbital mode			
speed		rpm	5 to 30
timer		sec	1 to 250
reciprocal mode			
turning angle		°	1 to 360
timer		sec	1 to 250
vibration mode			
turning angle		°	1 to 6
timer		sec	1 to 5
number of cycles			1 to 125
ambient temperature range		°C	4 to 45
maximum load		kg	1
platform working area	w/d	mm	215/215
platform outer dimensions	w/d	mm	238/238
footprint	w/d	mm	225/170
overall height		mm	125
input voltage		V	12
input type			dc
input current		A	0.5

Applications

Suitable for applications in many different fields with specific applications including:

- immunoprecipitations and other affinity matrix applications
- treatment of adherent tissue culture in small volumes e.g. for trypsinisation
- gel staining and destaining
- antibody staining
- washes
- hybridisations
- Southern blots
- western blots
- in situ

Accessories

- PTP-26 tube adaptor for 26 tubes up to 11mm diameter
- PDM dimpled mat, prevents tubes from rolling around



Grant

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Grant-bio products

- meet the requirements of IEC61010 parts 1 and 2
- bear the CE mark to indicate that they meet the requirements of the Low Voltage and EMC Directives

Repairs are normally carried out within three to five working days of arrival at our factory or receipt of authorisation to repair. Alternatively, spare parts and service manuals can be despatched within two working days. Most overseas distributors offer a rapid and effective after-sales service, with spare parts held in stock.

Grant-bio products are guaranteed for two years against faulty materials and workmanship. For repairs carried out under guarantee, no charge is made for labour or materials.

We are committed to a continuous programme of improvement and specifications may be changed without notice.