

Operating Instruction & Manual

Magnetic-Stirrer-MINI



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1. Pre-face

Magnetic-Stirrer-MINI (MSM) is 100% maintenance and wear-free stand-alone magnetic stirrer.

1.1 Basic functions

The MSM can drive a variety of agitation devices inside non-metal vessels, beakers with Magnetic-Bottom-Drive (MBD) ranging 100 – 2.000 RPM delivering up to 15 watt of power. The MSM is housed hermetically in an AISI 304 stainless steel cabinet and therefore easy to clean med water or ethanol. Though don't submerge or pour liquid into the power connection at rear. Always ensure the power socket is 100% dry when connecting the 24 VDC power.

2. Product combinations

In the addition to the use at the conventional laboratory desk the MSM has been tested for applications in:

- Laminar-Flow-Bench (hood)
- Safety Cabinets
- Safety Cabins
- Incubators

The MSM at temperatures up to max 40°C / 104 °F and max 80% humidity (the black Power Supply unit must be kept at max 20°C / 68°F and at low humidity).

2.1 Safety

Despite the sealed construction don't pour liquid into the power connection at rear. Always ensure the power socket is 100% dry when connecting the 24 VDC power.

The MSM is explicitly not intended for these applications:

- Stirring flammable liquids
- Use immersed in any liquid

2.2 Requirement, recommendation

The vessel, beaker, bioreactor to be agitated on the MSM must be properly installed according to general recommendations. The POM SUB-Support-Square (SSS) help to centre the glass or plastics vessels. Use the correct centring ring Inner Diameter to insure best possible power transfer. Insure the vessel in use have a flat bottom.

Insure the magnetic device receiving the magnetic force is covered with liquid at any time.

2.3 Specification

When connection to a suitable supply of drive gas pressure and a vacuum source with sufficient capacity then the spec is:

Specification for the Magnetic-Stirrer-MINI	
Stirrer points	1
Agitated volume, ml	150-5,000
Speed range, RPM	100-2,000
Max delivered power, W	15
Protection category	IP65
Cabinet material	AISI304 stainless steel
Cabinet sealing material	PUR
Dimension (WxDxH), mm	188 x 238 x 38
Weight, kilo	4.2

3. Technical setup

The black Power-Supply (PS) unit facilitate a standard IEC C14 inlet socket for high voltage 100-240 VAC supply 50-60 Hz. Output is low voltage 48 VDC via cable and snap-lock connector. Insure to use the appropriate high voltage power cord according to geographical area/country with adaptors and WITH ground pin.




Always connect in this order:

1. connect MSM with the low voltage snap-lock on the rear side of MSM
2. insert the high voltage power cord with C13 plug into the black Power Supply unit C14 socket
3. finally connect the high voltage power cord with the appropriate geographical plug into a wall socket with ground

Opposite when disassembling.

Always keep the black Power Supply unit at max 20°C / 68°F and at low humidity. Read the instruction on the black Power Supply unit.

4. Security

		Be sure to keep in appropriate distance from MSM - Cardiac Pacemakers, data storage mediums, magnetic cards, credit cards and other devices - which can be affected by the magnetic fields.
		Do not use cleaning agents or cleaning rags that is based on chlorine or ammoniac. Do not use metallic or ceramic containing cleaning materials.
		Before cleaning the MSM switch off the MSM on its front and insure to pull the power cable from the wall socket.

END