

## Magnetic Stirrer with Hot Plate MSH-300/300i

### Description

The models of the MSH-300 magnetic stirrers are equipped with a heating plate and have powerful magnets. The housings of the magnetic stirrers are made of powder-coated metal that is resistant to acids and alkalis.

### Models

- **MSH-300**  
A solid analogue heating/stirring unit for common laboratory work.
- **MSH-300i**  
Digital heater/stirrer. Designed specifically for laboratories with higher demands. Provides digital setting and precise control of temperature and speed. Allows mixing of solutions with glycerine viscosity.

### Applications

- Organic synthesis
- Extraction
- Analysis of oil products
- pH-measurements
- Dialysis
- Soil suspending
- Preparing buffer solutions, etc.

### Specifications

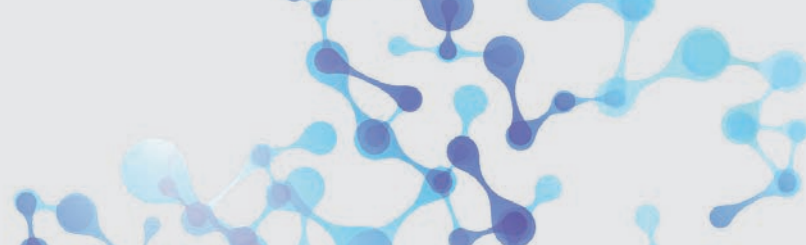
- Cylinder-shaped magnetic stirring bar (6 × 25 mm) covered with Teflon. Resistant to acids and alkalis.
- Overheating protection and automatic switch-off when the set temperature limit is exceeded.
- Additional protection prevents heating if the set temperature is exceeded by 30°C.
- Operating temperature range from +4°C to +40°C (from cold rooms to incubators) at a max. relative humidity of 80%.
- Option only for modell MSH-300i:
  - Stand for fixing various sensor elements (temperature, pH value, etc.).
  - External probe for direct control of the stirred liquid temperature.



Analog model MSH-300



MSH-300i with stand HTP-1 and external probe

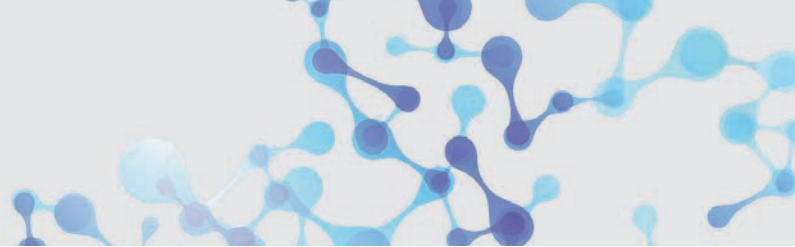


# Magnetic Stirrer with Hot Plate MSH-300/300i



## Technical Data

Model	MSH-300, analog	MSH-300i, digital
<b>Order No.</b> Basic unit without accessories	<b>104.0820</b>	<b>104.0830</b>
Speed control range	250 – 1250 rpm	100 – 1250 rpm (increment 10 rpm)
Max. stirring volume (H <sub>2</sub> O)	15 litres	20 litres
Plate temperature regulation range	+30°C up to +330°C	+30°C up to +330°C (increment 1°C)
Temperature control range with external probe	–	+20°C up to +150°C
Temperature uniformity on the plate	±3°C	±3°C
Display	–	LCD
Working plate heating time till 330°C	15 min	11 min
Maximum continuous operation time	24 h	168 h
Diameter of working plate	160 mm	160 mm
Plate material	Aluminium alloy	
SR-1, attachable stand size	Ø 8 × 320 mm	
Max. stirring liquid viscosity	up to 1170 mPa.s	
Length of magnetic stirring element	10 – 50 mm	20 – 70 mm
Fault indication	Outputs sound signal and turns off the heating	Outputs an error code on display, turns off the heating
Overall dimensions (W × D × H)	190 x 270 x 100 mm	190 x 270 x 100 mm
Weight	2.9 kg	3.2 kg
Nominal operating voltage	230 V; 50/60 Hz	230 V; 50/60 Hz
Power consumption (Stirring)	8.5 W	8.5 W
Power consumption (Heating)	550 W	550 W
Probe type	–	Thermocouple
Connection	–	Type K
Cable material	–	Covered with Teflon, mechanically strong, elastic and chemically stable against oils, acids, aggressive reagents and liquids
Cable length	–	1 m
Operation temperature range	+4°C up to +40°C	-50°C up to +250°C
Rel. humidity	80%	80%



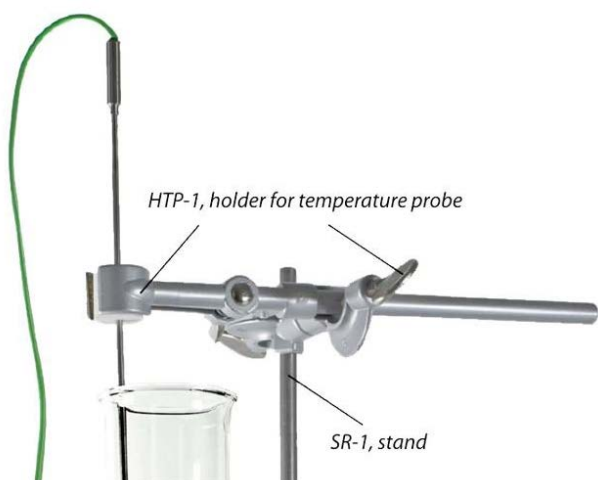
# Magnetic Stirrer with Hot Plate MSH 300i



## Accessories only for model MSH-300i

### Stand HTP-1

For fixing the probe in the liquid during the stirring process. The stand is attached directly to the base of the MSH-300i magnetic stirrer.



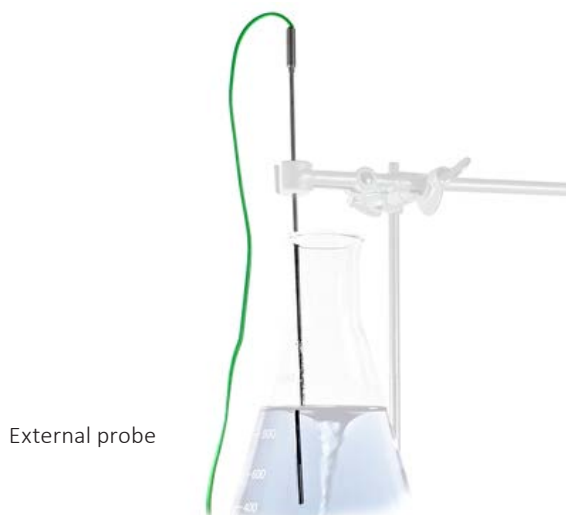
### External Temperature Probe

An external probe allows direct control of the liquid temperature. The cable is covered with Teflon, strong, elastic and chemically resistant to oils, acids, aggressive reagents and liquids.

Operation temperature range	-50°C up to +250°C
Cable length	1 m
Connection	Type K
Probe type	Thermocouple



HTP-1 Stand for probe



Connection of the external probe, rear side MSH-300i