

Department of Physics
University of Kerala, Thiruvananthapuram-695581

TENDER No. - *Phy/311/22-23*

Date: 13/01/2023

Quotations are invited for the purchase of a magnetic stirrer. Kindly quote the lowest price for the item and the price may include admissible reduction and taxes applicable to educational/ research purposes. The item should be delivered at Department of Physics, University of Kerala, Kariavattom, Thiruvananthapuram without any transportation/ extra charges.

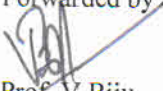
Technical specifications

Number of stirring positions	1
Stirring quantity max. per stirring position (H ₂ O)	20 l
Motor rating output	9 W
Direction of rotation	right / left
Speed display set-value	LCD
Speed display actual-value	LCD
Speed adjustment	Turning knob
Speed range	50 - 1500 rpm
Setting accuracy speed	10 rpm
Stirring bar length	30 - 80 mm
Self-heating of the set-up plate by max. stirring (RT:22°C/duration:1h)	+13 K
Heat output	850 W
Temperature display set-value	LCD
Temperature display actual-value	LCD
Temperature unit	°C / °F
Heating temperature range	Room temp. + device self heating - 310 °C
Heat control	Turning knob
Temperature setting range	0 - 310 °C
Temperature setting resolution of heating plate	1 K
Connection for ext. temperature sensor	PT1000, ETS-D5, ETS-D6
Temperature setting resolution of medium	1 K
Adjustable safety circuit	50 - 370 °C
Set-up plate material	Aluminum with ceramic coating
Set-up plate dimensions	137 x 137 mm
Automatic reverse rotation	
Intermittent mode	
Viscosity trend measurement	
Timer	
Timer display	LCD
Sensor in medium detection (Error 5)	
Speed deviation (no load, nominal voltage, at 1500rpm + 25 °C)	±2 %
Heating rate (1l H ₂ O in H1500)	7.5 K/min

Heat control accuracy of heating plate (at 100°C)	±5 K
Heat control accuracy with ext. PT1000 (500ml H2O in 600ml beaker,40mm stirring bar,600rpm,50°C)	±0.5 K
Heat control accuracy with ETS-D5 (500ml H2O in 600ml beaker,40mm stirring bar,600rpm,50°C)	±0.5 K
Heat control accuracy with ETS-D6 (500ml H2O in 600ml beaker,40mm stirring bar,600rpm,50°C)	±0.2 K
Dimensions (W x H x D)	160 x 85 x 270 mm
Protection class according to DIN EN 60529	IP 42
RS 232 interface	
USB interface	
Voltage	220 - 230 V
Frequency	50/60 Hz
Power input	900 W
Power input standby	1.6 W


The firms who wish to supply the item are requested to submit the sealed quotations to Dr. I Hubert Joe, Department of Physics, University of Kerala, Kariavattom Campus, Thiruvananthapuram, 695581, on or before 25/01/2023, 4.00 pm.

Forwarded by


Prof. V Biju
Head
Department of Physics
University of Kerala, Kariavattom

Head
Department of Physics
University of Kerala
Kariavattom - 695 581




Dr. I Hubert Joe
Associate Professor
Department of Physics
University of Kerala, Kariavattom