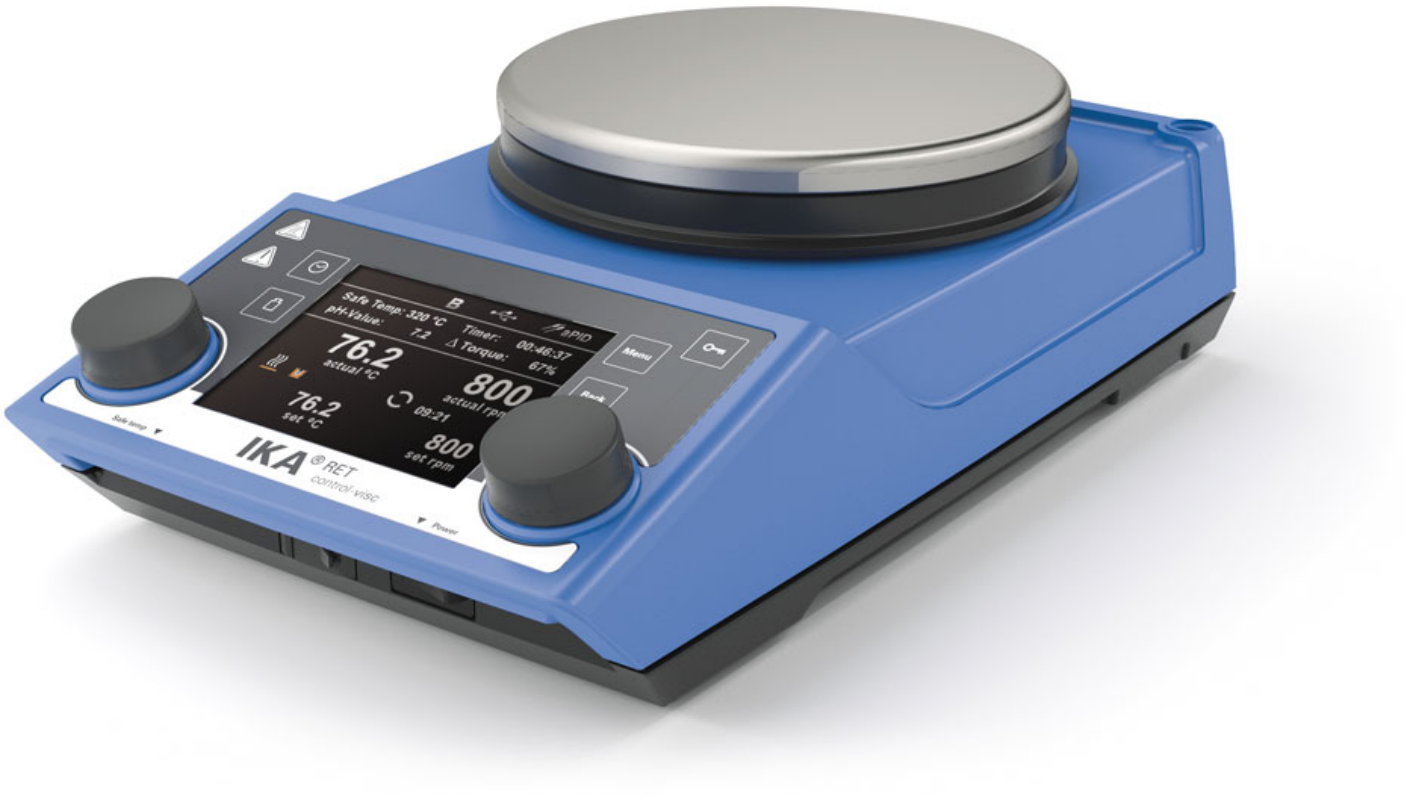
IKA

designed for scientists



RET control-visc

/// Data Sheet

PATENTED WORLD FIRST: Safety magnetic stirrer with heating and integrated balance. Clear, multilingual TFT display makes it easy to set all parameters.
Integrated temperature control feature enables connection of a temperature probe, placed directly in the medium, to control medium temperature with a high degree of precision. PT 100 temperature sensor is included. The stainless steel composite hot plate, reaching a temperature of 340 °C, enables rapid heating.
RS 232 and USB interfaces enable pc control of the magnetic stirrer and documentation of all test parameters. "Lock" function prevents inadvertent changes of speed and temperature settings. As a safety feature, the current temperature is displayed when the unit is switched off but surface is still hot. Below 50 °C the display turns off automatically.

- BNC socket for connection of a pH electrode
- Adjustable temperature control mode: rapid heating and very accurate temperature control
- Dual sensor for simultaneous control of heat transfer fluid temperature and medium temperature

- Timer and countdown functions
- Display of viscosity change trend
- Detached magnet detection
- Intermittent operation
- Several modes of operation available
- Safety circuit adjustable from 50 to 380°
- Transparent protective cover included
- Error code display for easy troubleshooting
- Exact temperature and speed adjustment by means of digital display; even when function switched off
- Suitable for unsupervised operation
- Sealed casing (IP 42) ensures a long service life
- Automatic switch-off of the heating function if the connected external temperature sensor is not immersed in the medium. Function selectable, timeout time adjustable (Error 5).

Scope of delivery
•RET control-visc
•PT 100.70 Temperature sensor
•IKAFLON® 30 Magnetic stirring bar
•IKAFLON® 40 Magnetic stirring bar
•Screwdriver
•H 104 Cover for RET control
•USB Cable - USB A to Micro-B, 2 m

IKA

designed for scientists

Technical Data

Number of stirring positions	1
Stirring quantity max. per stirring position (H2O) [l]	20
Maximum load [kg]	25
Motor rating output [W]	9
Direction of rotation	right
Speed display set-value	TFT
Speed display actual-value	TFT
Speed adjustment	Turning knob
Speed range [rpm]	50 - 1700
Setting accuracy speed [rpm]	10
Stirring bar length [mm]	20 - 80
Self-heating of the set-up plate by max. stirring (RT:22°C/duration:1h) [K]	+17
Heat output [W]	600
Temperature display set-value	TFT
Temperature display actual-value	TFT
Temperature unit	°C / °F
Heating temperature range [°C]	Room temp. + device self heating - 340
Heat control	Turning knob
Temperature setting range [°C]	0 - 340
Temperature setting resolution of heating plate [K]	0.1
Connection for ext. temperature sensor	PT100/PT1000 (dual sensor)
Characteristics in the medium with temperature sensor	1l M50 Oil at H1500
Temperature medium max. [°C]	270
Temperature setting resolution of medium [K]	0.1
Adjustable safety circuit [°C]	50 - 380
Set-up plate material	stainless steel 1.4301
Set-up plate dimensions [mm]	Ø 135
Intermittent mode	yes
Viscosity trend measurement	yes
Break detection stirring bar	yes
Timer	yes
pH measurement	yes / BNC socket female
Graph function	yes
Programs	yes
Sensor in medium detection	yes
Weighing function	yes
Weighing range [g]	10-5000
Weighing accuracy	±(0.3%+2) g
Load capacity weighing function max. [kg]	5
Heating rate (1l H2O in H1500) [K/min]	7
Dimensions (W x H x D) [mm]	160 x 85 x 270
Weight [kg]	2.7
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 42
RS 232 interface	yes
USB interface	Micro-USB
Voltage [V]	220 - 240

designed for scientists

Frequency [Hz]	50/60
Power input [W]	650