

IKA

designed for scientists

EN



Safety
Power
Intelligence

THE VERSATILE MAGNETIC STIRRER | RET control-visc

imLab



www.imlab.eu - info@imlab.eu



+33(0)3 20 55 19 11



+32(0)16 73 55 72

Intelligent technology magically attracts us

/// SAFE MAGNETIC STIRRER WITH HEATING AND INTEGRATED SCALE

Comfort, versatility and safety is what distinguishes the RET control-visc magnetic stirrer. The user-friendly IKA menu navigation and countless setting options set it apart from other magnetic stirrers. In addition, it not only stirs, but also heats, weighs, and determines pH values and can also detect viscosity trends, at the same time, regulate sample, and block temperatures. These features make the RET control-visc an extremely valuable companion to have in the laboratory.



Personalized application advice

In the IKA Application Center, you can convince yourself of the RET control-visc magnetic stirrer's amazing performance. Our experts will show you how to use it and show you its sophisticated accessories.



Worldwide service

The decision to purchase IKA's RET control-visc magnetic stirrer is also a decision to take advantage of IKA's excellent technical service available in your region. Our team is available worldwide for questions relating to service and usage. Spare parts carry a 10-year guarantee.

Questions?
Our service team will be happy to assist you:

00 8000 4524357 (00 8000 IKAHELP)



RET control-visc

/// ONE DEVICE, TWO VERSIONS

The RET control-visc magnetic stirrer is available in two versions: either with a high-quality stainless steel hotplate surface or with a ceramic coating.

RET control-visc has a stainless steel heating plate which allows your sample to heat as quickly and safely as possible.

Thanks to the white surface, the ceramic-coated heating plate of the RET control-visc white makes detecting color changes to the sample easier. It's also chemically more resistant.

4
/// SAFE USE

10
/// TECHNICAL DATA

6
/// STRONG PERFORMANCE

11
/// ACCESSORIES

8
/// INTELLIGENT FUNCTIONS



Advantages for you

- > Increased work safety
- > Perfect test control
- > Quick and easy troubleshooting



Safe use

Enclosed housing and access protection

The RET control-visc electronics are well protected in an enclosed housing. The key button will lock the display so the selected settings are not altered by accidentally touching the knobs. You can also use password protection to prevent others from changing the settings.

Error display

If an error does occur, a message will appear on the display, allowing you time to react more quickly and easily.

Magnetic crack detection

If the stirrer breaks off, the RET control-visc will stop automatically and the stirring process will continue once the magnet is coupled again.



Integrated Safety

Our safety concept, Integrated Safety, protects the sample, laboratory and users and ensures the safe success of your experiment. Integrated Safety includes setting of the safety temperature according to the respective laboratory directives, monitoring of the heating plate, a safety shutdown, chemical resistant housings and independent control circuits. In addition, the device issues a warning in case of a heating plate temperature of over 50°C, even when turned off.



Powerful performance

Advantages for you

- > Perfect mixing results
- > Reduced waiting time
- > More accurate test results



Strong mixing

The high stirring power of the IKA RET control-visc magnetic stirrer is all thanks to the EC motor with its internal high-performance transformer. The motor has a power output of 9 watts.

Fast heating up

In combination with the intelligent composite heating plate, RET control-visc has a heating power of 600 watts and achieves a heating rate of 7 K/min in water.

Even temperature control

The composite heating plate consists of the heating surface in connection with a heating foil, a pressure plate and a specially developed insulation layer. The RET control-visc can thus optimize heat transfer and temper the sample more uniformly than other magnetic stirrers.

HEATING SURFACE

HEATING FOIL

PRESSURE PLATE

INSULATION





Intelligent functions

Sensor calibration

The temperature sensor and pH electrodes can be calibrated relative to a known source.

Ramping functionality

The RET control-visc offers you the possibility to set temperature limits and complex ramping programs, so your magnetic stirrer works reliably and safely while you're doing other tasks.

Double temperature control

Two temperature sensors allow the block and the sample temperatures to regulate simultaneously.

USB and Bluetooth interface

The USB and Bluetooth interfaces allow you to export data and to control the labworldsoft® universal laboratory software. It enables your RET control-visc to network with other laboratory equipment. It's also possible to connect a wireless controller (WiCo) and use our firmware update tool (FUT) to keep the device software up to date.



Advantages for you

- > Easy to use
- > Save work steps and thus resources
- > Precise documentation of the data

Integrated measuring functions

RET control-visc can also weigh your samples, determine the pH value and recognize viscosity changes relative to the torque trend measurement.

User-friendly menu navigation

The RET control-visc magnetic stirrer has a large, user-friendly, LED display and multilingual IKA menu navigation, so controlling the experiment setting is intuitive and similar to other IKA laboratory instruments you are already familiar with.

Setting the temperature

Setting the rotational speed

Locking function Operating mode Temperature sensor connected

Safe Temp: 250 °C	Timer: 00:03:58
pH-Value: 7.0	Δ Torque: 100 %
233.8 actual °C	1700 actual rpm
240.0 set °C	1700 set rpm

Actual temperature (heating plate or transfer medium)

Actual speed

Heating activated

Motor status

Technical data

TECHNICAL DATA	RET® control-visc RET® control-visc white
Max. stirring quantity per stirring point (H ₂ O)	20 l
Motor rating output	9 W
Speed range	50 – 1700 rpm
Heat output	600 W
Temperature setting range	0 – 340 °C
Adjustable safety circuit	50 – 380 °C
Control accuracy with integrated temperature control	PT 100: ± 0.2 K
Set-up plate material RET® control-visc RET® control-visc white	Stainless steel 1.4301 Technical enamel
Speed display	TFT
Speed adjustment option	Knob
Speed adjustment accuracy	10 rpm
Stirring bar length	20 – 80 mm
Set-up plate dimensions	Ø 135 mm
Timer	Yes
Weighing feature	Yes (10 – 5000 g)
Interval operation	Yes
pH measurement feature	Yes
Viscosity measurement	Yes
Interfaces	USB, RS 232, BNC, Bluetooth



RET® control-visc
Ident-No.: 0005020000



RET® control-visc white
Ident-No.: 0005030000

GENERAL DATA	
Weight	2.7 kg
Dimensions (L x W x H)	160 x 85 x 270 mm
Permissible ambient temperature range	5 – 40 °C
Voltage	220 – 240 V
Frequency	50 / 60 Hz
Power input	650 W
Protection class according to DIN EN 60529	IP 42

SCOPE OF DELIVERY RET® control-visc / RET® control-visc white

H 104 protective cover,
IKAFLON 30 and 40 magnetic bars,
PT 100.70 temperature sensor,
USB cable

Accessories



PT 1000.51 temperature sensor
Two separate stainless steel sensors. Glass-coated for working with aggressive mediums such as acids and alkalis. Suitable for the RET control-visc and RET control-visc white magnetic stirrer
Ident-No.: 0003377700



PT 100.70 temperature sensor
Immersion depth: 230 mm; Diameter: 3 mm; Material: AISI 316 Ti
Ident-No.: 0020000440



RS 2 set of magnetic stirring bars
Consisting of IKAFLON® and TRIKA® stirring bars
Ident-No.: 0004499100



LABLIFT m
Laboratory lifts lift and support small pieces of laboratory equipment and containers. A maximum weight of 7 kg (maximum dynamic load) can be lifted. Carrying weight: up to 25 kg (max load). The working height is between 70 mm and 300 mm
Ident-No.: 0004022400



H 104
Protective hood for RET control
Ident-No.: 0004209500



H 38 Holding rod
Ident-No.: 0003547700



H 44 Boss head clamp
Ident-No.: 0002437700



H 16 V Support rod
Ident-No.: 0001545100



WiCo RET control-visc
Wireless remote control for controlling and documenting all RET control-visc parameters.
Ident-No.: 0020007259



labworldsoft® 6 Starter
Laboratory software for small configurations with up to 3 simultaneously controllable devices, freely selectable from the device library.
Ident-No.: 0020019397



labworldsoft® 6 Pro
Laboratory software suitable for all configurations. Pro version allows access to the entire device library and allows simultaneous control of any number of devices.
Ident-No.: 0020017366

Find more accessories on www.ika.com