

Data Sheet



RET control-visc white

WORLD'S FIRST: Safety magnetic stirrer with heating and integrated weighing function. The clear, multilingual TFT display makes it easy to set all parameters.

Integrated temperature control feature enables connection of a temperature probe which can be placed directly in the medium to control medium temperature with a high degree of precision. PT 100 temperature sensor is included with purchase of RET control. The stainless steel composite hot plate, reaching a temperature of 340 °C, enables rapid heating.

RS 232 and USB interface enables pc control of the magnetic stirrer and documentation of all test parameters. Furthermore firmware updates can be installed through the USB interface. The 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

- Integrated weighing function
- BNC socket for connection of a pH electrode
- Adjustable temperature control mode: rapid heating or very accurate temperature control
- Dual sensor for simultaneous control of heat transfer fluid temperature and medium temperature (optional)
- 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°C
- Transparent protective cover included
- Error code display for easy troubleshooting
- Exact temperature and speed adjustment by means of digital display; even when function is switched off
- Digital display of the safety temperature limit
- Suitable for unsupervised operation
- Sealed casing (IP 42) ensures a long service life

Accessories: PT 100.50 Temperature sensor, PT 1000.50 Temperature sensor, PT 100.51 Temperature sensor, PT 1000.51 Temperature sensor, PT 100.53 Temperature sensor, coated, PT

Technical Data	
Number of stirring positions	1
Stirring quantity max. per stirring position (H2O) [I]	20
Motor rating input [W]	20
Motor rating output [W]	12
	TFT
Speed display	
Speed range [rpm]	0/50 - 1700
Stirring bar length max. [mm]	80
Heat output [W]	600
Heating rate (1 I H2O in H15) [K/min]	7
Heating temperature range [°C]	Room temp 340
Temperature medium max. (dep. on vessel) [°C]	265
Heat control	TFT
Heat control accuracy [±K]	0.1
Speed control	TFT
Adjustable safety circuit min. [°C]	50
Adjustable safety circuit max. [°C]	380
Connection for ext. temperature sensor	PT 100
Heat control accuracy of medium with sensor [±K]	0.2
Accuracy of temperature measurement [K]	± (0,15 + 0,2% o.Mv.)
Temperature measurement resolution [K]	0.1
Self-heating of the hotplate by stirring (RT:22°C/duration:1h) [+K]	35
Set-up plate material	technical enamel
Set-up plate dimensions [mm]	Ø 135
Weighing function	yes
Weighing range [g]	0 - 5000
Load capacity weighing function max. [kg]	5
Weighing accuracy	<500g: +/-1g, >500g: +/-5g
Viscosity trend measurement	yes
Intermittent mode	yes
Break detection stirring bar	yes
Timer	yes
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	yes
Voltage [V]	220 - 240 / 115 / 100
Frequency [Hz]	50/60
Power input [W]	650
Ident. No.	0005030000
	000000000

1000.53 Temperature sensor, dual, coated, H 16 V Support rod, H 16.1 Extension, H 44 Boss head clamp, H 38 Holding rod, H 104 Cover for RET control, H 29 Oil bath attachment, H 30 Oil bath attachment, H 1000, H 1500, H 3000, H 5000, H 8000, IKAFLON® 110 Magnetic stirring bar, IKAFLON® 155 Magnetic stirring bar, IKAFLON® 10 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® 15 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® 20 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® 25 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® 30 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® 40 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® 50 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® 80 Set (5 Pcs) round PTFE-coated Magnetic stirring bars, IKAFLON® glass 25 Set (5 Pcs) round Magnetic stirring bars, IKAFLON® glass 30 Set (5 Pcs) round Magnetic stirring bars, IKAFLON® glass 40 Set (5 Pcs) round Magnetic stirring bars, IKAFLON® glass 50 Set (5 Pcs) round Magnetic stirring bars, IKAFLON® 20 Set (5 Pcs) power SmSo PTFE-coated Magnetic stirring bars, IKAFLON® 30 Set (5 Pcs) power SmSo PTFE-coated Magnetic stirring bars, IKAFLON® 50 Set (5 Pcs) power SmSo PTFE-coated Magnetic stirring bars. IKAFLON® 25 Set (5 Pcs) slide round PTFE-coated Magnetic stirring bars, IKAFLON® 30 Set (5 Pcs) slide round PTFE-coated Magnetic stirring bars, IKAFLON® 40 Set (5 Pcs) slide round PTFE-coated Magnetic stirring bars, IKAFLON® 50 Set (5 Pcs) slide round PTFE-coated Magnetic stirring bars, IKAFLON® 20 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 25 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 30 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 35 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 40 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 50 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 60 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 70 Set (5 Pcs) ellipse PTFE-coated Magnetic stirring bars, IKAFLON® 10 Set (5 Pcs) cross PTFE-coated Magnetic stirring bars, IKAFLON® 20 Set (5 Pcs) cross PTFE-coated Magnetic stirring bars, IKAFLON® 25 Set (5 Pcs) cross PTFE-coated Magnetic stirring bars, IKAFLON® 30 Set (5 Pcs) cross PTFE-coated Magnetic stirring bars, IKAFLON® 38 Set (5 Pcs) cross PTFE-coated Magnetic stirring bars, IKAFLON® 37 Set (5 Pcs) bone PTFE-coated Magnetic stirring bars, IKAFLON® 54 Set (5 Pcs) bone PTFE-coated Magnetic stirring bars, TRIKA® 25 Set (5 Pcs) PTFE-coated Magnetic stirring bars, TRIKA® 35 Set (5 Pcs) PTFE-coated Magnetic stirring bars, TRIKA® 55 Set (5 Pcs) PTFE-coated Magnetic stirring bars, TRIKA® 80 Set (5 Pcs) PTFE-coated Magnetic stirring bars, IKAFLON® 67 (1 Pc) beaker PTFE-coated Magnetic stirring bars, IKAFLON® 74 (1 Pc) beaker PTFE-coated Magnetic stirring bars, IKAFLON® 103 (1 Pc) beaker PTFE-coated Magnetic stirring bars, IKAFLON® 125 (1 Pc) beaker PTFE-coated Magnetic stirring bars, IKAFLON® 9 Set (5 Pcs) crown PTFE-coated Magnetic stirring bars, RS 1 Set of magnetic stirring bars, RS 2 Set of magnetic stirring bars, RSE Stirring bar remover, H 11 Mains cable Euro plug, H 135.10 Square Carrier without Handle, H 135.101 Block 16 x 4 ml, H 135,102 Block 16 x 8 ml, H 135,103 Block 9 x 16 ml, H 135.104 Block 4 x 20 ml, H 135.105 Block 4 x 30 ml, H 135.106 Block 4 x 40 ml, H 135.107 Block 100 ml, H 135.108 Block 250 ml, H 135.20 Flask Carrier 100 ml without Handle, H 135.201 Flask inlay 10 ml, H 135.202 Flask inlay 25 ml, H 135.203 Flask inlay 50 ml, H 135.30 Flask Carrier 500 ml without Handle, H 135.301 Flask inlay 100 ml, H 135.302 Flask inlay 250 ml, H 135.40 Flask Carrier 1000 ml without Handle, H 135.401 Flask inlay 500 ml, H 135.50 Flask Carrier 2000 ml without Handle, H 135.501 Flask inlay 1000 ml, H 135.60 Flask Carrier 3000 ml without Handle, H 135.601 Flask inlay 2000 ml, H 135.70 Flask Carrier 5000 ml without Handle, H 135.701 Flask inlay 3000 ml, LABLIFT m, labworldsoft®, PC 1.1 Cable, BC 1000 Beaker cap, HG 600 Heating jacket, HG 1000 Heating jacket