



Magnetic stirrers

Rotator, tilting and vortex mixer shakers

Rocking Mixer shakers

Orbital and linear motion shakers

Overhead stirrer

Orbital shaker incubators

Ultrasonic homogenizer

Grinding and mixer homogeneizer

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STIRRERS Stirrer and shaker summary table

QUICK OVERVIEW

MAGNETICS									
Single Direction	Part No.	Controller	Volume max.	Heater	Controller	Range	Range	Rapid	Plate Ø
Stirring			litres		Type	temperature °C	r.p.m.	Overview	cm
AGIMICRO	7001638	Analogue	2	No	-	-	40 / 1700	ABS	12
AGIMATIC-S	7000270	Analogue	10	No	-	-	60 / 1600	INOX	14.5
AGIMATIC-N	7000271	Analogue	10	Yes	Electronic/Energy	...350	60 / 1600	INOX	14.5
AGIMATIC-E	7000273	Analogue	10	Yes	Electronic/Temperature	...350	60 / 1600	INOX	14.5
AGIMAN	7000272	Analogue	2	Yes	Electronic/Energy	...350	60 / 1600	For Heating	Mantle
AGIMATIC-ED	7000280	Digital	10	Yes	Electronic/Temperature	...350	60 / 1600	INOX	14.5
KIT AGIMATIC-ED	7001512	Digital	10	Yes	Electronic/Temperature	...350	60 / 1600	INOX	14.5
AGIMATIC-ED-C	7000281	Digital	10	Yes	Electronic/Temperature	...350	60 / 1600	CERAMIC	14,5
Large volume stirring									
AGIMATIC-HS	7001005	Digital	25	No	-	-	50 / 980	INOX	28 x 34
AGIMATIC-HL	7001006	Digital	60	No	-	-	50 / 980	INOX	44 x 38
Reversible stirring action									
AGIMATIC REV-TFT	7000837	TFT touch screen	10	Yes	Electronic/Temperature	...350	100 / 1600	INOX	14.5
AGIMATIC REV-TFT-C	7000838	TFT touch screen	10	Yes	Electronic/Temperature	...350	100 / 1600	CERAMIC	14,5
Multi- positions									
MULTIMATIC 5-S	7000951	Analogue	5 x 0.6	No	-	-	...1600	INOX	28 x 33
MULTIMATIC 9-S	7000952	Analogue	9 x 0.3	No	-	-	...1600	INOX	28 x 33
MULTIMATIC 5-N	7000953	Analogue	5 x 0.6	Yes	Electronic/Energy	...300	...1600	INOX	25 x 25
MULTIMATIC 9-N	7000954	Analogue	9 x 0.3	Yes	Electronic/Energy	...300	...1600	INOX	25 x 25
ROTARY & TILTING MIXERS									
Tube Mixers	Part No.		Vol. max. litres		Heaters		Range r.p.m.		Capacity
ORBIT	3000445		5 x 0.25		No		12		See Tube Selection
MOVIL ROD	7001723		-		No		10 / 80		35 mm Ø max.
MOVIL TUB	7000913		-		No		15		12 Tubes
VORTEX-VIB	7001725		-		No		2800		See Tube Selection
VIBRATING SHAKER									
Oscillating	Part No.		Max. Load		Heater		Capacity		Oscil. min.
VIBROMATIC	7000384		4 Kg		No		8 flasks of 50 mm Ø max. (optional + Erlenmeyer 250 ml)		100 / 950
ORBITAL TO - FRO SHAKERS									
To & Fro & orbital movement	Part No.		Heater		Heater		Range	Range	Platforms
					Type		temperature °C	r.p.m.	cm
ROTATERM	3000435		Yes		Electronic/Digital		...250	20/230	41x31
ROTABIT	3000974		No		-		-	20/230	According to accessories



Shaker for Petri plates "AG-200", shaker for bottles "AG-200-A", and shaker for Erlenmeyer flasks "AG-200-B".

Thermo shaker "TRM-4" for Microtiter.

Incubated / refrigerated high volume orbital shakers "1102", "2102", "D-1102" and "D-2102".

Ultrasonic homogenizers "CY-500".



MAGNETIC STIRRERS “AGIMATIC” AND “AGIMAN”



A new generation design of stirrers at the forefront of technology

COMMON FEATURES

Unique functional design, with epoxy covered alloy case. Choice of stainless steel or ceramic top plate (model dependent). An internal case acts as a spill guard and insulator, made from AISI304 stainless steel. Tilted control panel for easy viewing with splash protection. Location hole at the back for a retort support rod, supplied as an accessory. Electronic speed control from 60 to 1600 r.p.m. and from 100 to 1600 r.p.m. for models “Agimatic Rev” with constant speed irrespective of liquid viscosity. Easy to service and to replace modular electronics. All heated models have a connection at the back to connect an electronic contact thermometer “Sensoterm II”, electronic controller “Electemp-TFT” or Pt100 temperature probe, model dependent. **Agimatic and Agiman exterior measures: Height 14,5, Width 19 and Depth 26 cm. Weight: 3,2 Kg.** All hotplates have a safety over temperature cut out, set to the maximum working temperature.

TECHNICAL SCHEMATICS OF DIFFERENT COMPONENTS

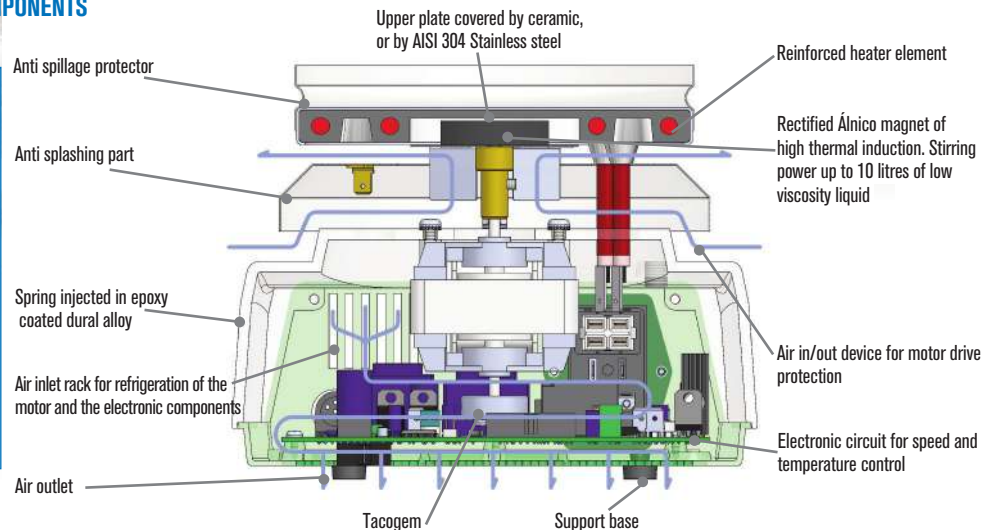
ICONS OF THE DIFFERENT TEMPERATURE REGULATION SYSTEMS AND OPTIMUM STIR CONDITIONS.



Electronic contact thermometer “Sensoterm II”



Temperature sensor Pt100



Magnetic Stirrers “Agimatic” and “Agiman” analogue control



FOR SPEEDS FROM 60 TO 1600 rpm..

MAXIMUM STIR VOLUME: 10 LITRES.

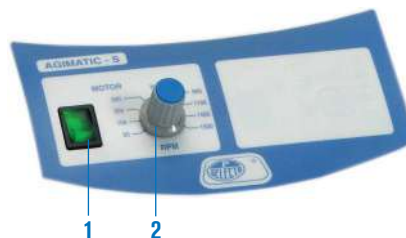
PLATE MADE FROM AISI 304 STAINLESS STEEL WITH REMOVABLE SAFETY RING. PLATE Ø 14.5 cm.



“Agimatic-S” without heating

CONTROL PANEL

1. Mains switch illuminated.
2. Electronic stir speed control.



MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
AGIMATIC-S 7000270	up to 10	14,5 19 26	90	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.





“Agimatic-N” with heating

ELECTRONIC CONTROL OF SPEED AND POWER TO THE HEATER.

CONTROL PANEL

1. Switch on button with indicator lamp for heating and for stirring speed.
2. Electronic stir speed control.
3. Electronic heater energy control from 0-100%, synchronised with an indicator lamp that functions when the plate is hot.
4. Illuminated indicator when the heater is “on”.



MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
AGIMATIC-N 7000271	up to 10	14,5 19 26	550	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.

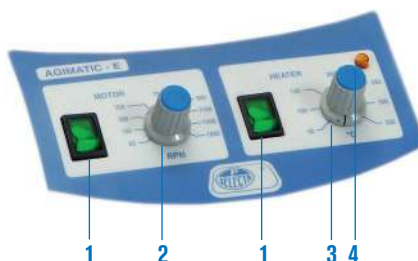


“Agimatic-E” with heating

ELECTRONIC TEMPERATURE CONTROL OF SPEED AND POWER TO THE HEATER.
FROM 50 °C TO 350 °C PRECISION ±2 °C.

CONTROL PANEL

1. Switch on button with indicator lamp for heating and for stirring speed.
2. Electronic stir speed control.
3. Electronic temperature control of the heater plate from 50 °C to 350 °C synchronised with an indicator lamp that functions when the plate is hot.
4. Illuminated heater indicator when the heater is “on”. Precision ±2 °C.



MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
AGIMATIC-E 7000273	up to 10	14,5 19 26	550	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.



Magnetic stirrer “Agiman”

ELECTRONIC CONTROL OF SPEED AND POWER TO THE HEATER.
WITH A MECHANISM FOR ATTACHING HEATING MANTLES.

CONTROL PANEL

- Switch on button with indicator lamp for heating and for stirring speed.
Electronic stir speed control.
Electronic heater energy control from 0-100%, synchronised with an indicator lamp that goes on when the mantle is hot.
Illuminated heater indicator when the mantle is “on”.

ACCESSORIES

Attachable heating mantle for the “Agiman” magnetic stirrer.

Part No.	Capacity flask ml	Power W
3000447	250	130
3000448	500	270
3000449	1000	410
3000450	2000	530

Complements for Agimatic-S-N-E and Agiman.
See accessories on page 31 and 32.

MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Weight Kg
AGIMAN 7000272	up to 2	14,5 19 26	3,5

Supplied with a PTFE coated stir bar of Ø 10 x 32 mm long.





Magnetic Stirrers “Agimatic-ED” and “Agimatic-ED-C” digital control



FOR SPEEDS FROM 60 TO 1600 RPM.
 FOR ADJUSTABLE TEMPERATURES FROM 50 °C TO 350 °C (200 °C WITH EXTERNAL PROBE). PRECISION ± 2 °C.
 MAXIMUM STIR VOLUME: 10 LITRES.
 PLATE Ø IS 14,5 cm.
 WITH RENOVALE SAFETY RING AGAINST SPILLAGE.



“Agimatic-ED” with heating

ELECTRONIC TEMPERATURE CONTROL OF SPEED AND POWER TO THE HEATER.

SILUMIN UPPER PLATE COVERED BY AISI 304 STAINLESS STEEL.

CONTROL PANEL

1. Digital display indicating stir speed or temperature.
 2. Push button, parameter selector, Stir speed or Temperature.
 3. Push button, increase parameter value.
 4. Push button, decrease parameter value.
 5. Indicator lamp, safety thermostat “on”
 6. Push button Stop-Start
- Precision ± 2 °C.



MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
AGIMATIC-ED 7000280	up to 10	14,5 19 26	550	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.



“Agimatic-ED-C” with heating

ELECTRONIC TEMPERATURE CONTROL OF SPEED AND POWER TO THE HEATER.

SILUMIN UPPER PLATE WITH CERAMIC SURFACE.

CONTROL PANEL

1. Digital display indicating stir speed or temperature.
 2. Push button, parameter selector, Stir speed or Temperature.
 3. Push button, increase parameter value.
 4. Push button, decrease parameter value.
 5. Indicator lamp, safety thermostat “on”
 6. Push button Stop-Start
- Precision ± 2 °C.



MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
AGIMATIC-ED-C 7000281	up to 10	14,5 19 26	550	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.

Ceramic surface:

- Excelent conductivity and heat distribution.
- Unalterable surface.
- Higher acceleration to reach temperature.
- Extreme resistance against chemical agents and scratches.



Complements for Agimatic-ED and Agimatic ED-C.
 See accessories on pages 31 and 32.



Reversible magnetic Stirrers “Agimatic-Rev-TFT” and “Agimatic-Rev-TFT-C”



Forefront technology with TFT touch screen

FOR SPEEDS FROM 100 TO 1600 rpm.

FOR ADJUSTABLE TEMPERATURES FROM 30 °C TO 350 °C. PRECISION ± 2 °C.

MAXIMUM STIR VOLUME: 10 LITRES. PLATE Ø IS 14,5 cm.

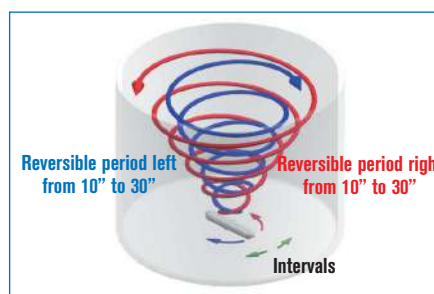
MAGNETIC REVERSIBLE ACTION STIRRERS, WITH ADJUSTABLE TIME STIRRING PERIODS AND PRECISE SPEED CONTROL, PROVIDES THE FOLLOWING ADVANTAGES FOR REPEAT PROCESSES:

A.- FASTER MIXING, REDUCED STIRRING TIME. B.- CONTROLLABLE VORTEX EFFECT. C.- QUICKLY ELIMINATES AIR FROM WITHIN THE SAMPLE MIXTURE, DEGASSING. D.- MINIMUM SPLASHING, NO LOSS OF SAMPLE.

SELECT MOVEMENT FOR ONE DIRECTION OR REVERSE.

ELECTRONIC CONTROL OF THE FREQUENCY INVERTING PERIOD, FROM 10-30 SECONDS.

MEMORY UP TO 10 WORKING PROGRAMS. AUTOMATIC CYCLES UP TO 6 SEGMENTS WITH TEMPERATURE PROGRAMMING, RPM AND TIME.



Complements for Agimatic-Rev-TFT and Rev-ED-C see accessories on pages 31 and 32.



“Agimatic-Rev-TFT” with heating

ELECTRONIC DIGITAL CONTROL OF STIR SPEED AND HEATER TEMPERATURE. WITH REMOVABLE SAFETY RING AGAINST SPILLAGE.

SILUMIN UPPER PLATE COVERED BY AISI 304 STAINLESS STEEL.

CONTROL PANEL

1. Probe position indicator.
2. rpm, temperature and time reading.
3. Start up.
4. Stop.
5. Settings.
6. Backward.
7. Increase/decrease parameters value.
8. Cursor.



MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
Agimatic-Rev-TFT 7000837	up to 10	14,5 19 26	550	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.



“Agimatic-Rev-TFT-C” with heating

ELECTRONIC DIGITAL CONTROL OF STIR SPEED AND HEATER TEMPERATURE. WITH REMOVABLE SAFETY RING AGAINST SPILLAGE.

SILUMIN UPPER PLATE WITH CERAMIC SURFACE.

CONTROL PANEL

1. Probe position indicator.
2. rpm, temperature and time reading.
3. Start up.
4. Stop.
5. Settings.
6. Backward.
7. Increase/decrease parameters value.
8. Cursor.



MODEL

Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
Agimatic-Rev-TFT-C 7000838	up to 10	14,5 19 26	550	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.

Ceramic surface:

- Excellent conductivity and heat distribution.
- Unalterable surface.
- Higher acceleration to reach temperature.
- Extreme resistance against chemical agents and scratches.





Complete KIT stirrer Agimatic-ED with support rod and temperature sensor PT100. With heating

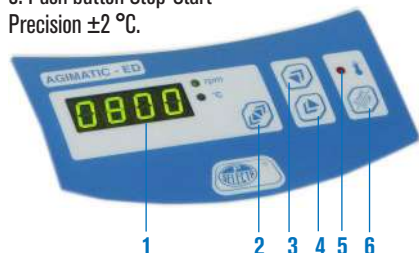
SUPPLIED COMPLETE WITH SUPPORT ROD, TEMPERATURE SENSOR PT100, CLAMP AND STIR BAR.
ELECTRONIC TEMPERATURE CONTROL OF SPEED AND POWER TO THE HEATER.

SILUMIN UPPER PLATE COVERED BY AISI 304 STAINLESS STEEL.



CONTROL PANEL

1. Digital display indicating stir speed or temperature.
2. Push button, parameter selector, Stir speed or Temperature.
3. Push button, increase parameter value.
4. Push button, decrease parameter value.
5. Indicator lamp, safety thermostat "on"
6. Push button Stop-Start



INCLUDED

Support rod with thread of 12 mm Ø x 500 mm high, stirrer dependent, attaches to the main body of the stirrer.

Temperature sensor Pt100. Controls the sample temperature in the digital hotplate stirrers. Immersion Probe: 4mm Ø x 130 mm long.

Cable connector 150 cm long.

Clamp with bosshead, "AUTOMATIC" Chrome coated alloy with screw closure. For Ø from 0 to 25mm.



MODEL

	Part No.	Maximum stir volume litres	Height/width/Depth (exterior) cm	Power W	Weight Kg
KIT	7001512	up to 10	14,5 19 26	550	3,5

Supplied with a PTFE coated stir bar of Ø 8 x 40 mm long.



Magnetic stirrer "Agimicro" without heating

FEATURES

- Maximum stir volume: 2 Litres.
- Adjustable stir speed from 40 to 1400 r.p.m.
- Durable moulded ABS plastic body.
- Excellent chemical resistance.

MODEL

Part No.	Height cm	Ø Plate cm	Power W	Weight Kg
7001638	5	12	3	0.5

Comes complete with a 8 Ø x 32 mm P.T.F.E. coated stir bar.

CONTROL PANEL

- Mains switch with luminous "on" indicator.
- Analogue control of speed in r.p.m.



ACCESSORIES

Support bar and electrode clamp (1 of 13 and 2 of 16 mm Ø). Used with pH and conductivity meters. Part No. **7001639**



Powerful magnetic stirrer "Agimatic-H" without heating

FOR LOW VISCOSITY VOLUMES FROM 1 TO 60 LITRES.
USING REDUCED VOLUMES THE UNIT CAN STIR MEDIUM TO HIGH VISCOSITY LIQUIDS.

Maximum stirring power

FEATURES

- Electronic speed control from 50 to 980 r.p.m., will maintain a constant stir speed irrespective of the liquid viscosity.
- Digital speed display.
- AISI 304 stainless steel top plate with an epoxy coated metal case.

CONTROL PANEL

- Main switch with a luminous "on" indicator.
- Electronic speed control.
- Digital speed display in r.p.m.

MODEL

	Part No.	Speed control r.p.m.	Maximum stir volume in litres	Height/Width/Depth (exterior) cm	Power W	Weight Kg
AGIMATIC-HS	7001005	50 to 980	up to 25	12 28 34	35	8
AGIMATIC-HL	7001006	50 to 980	up to 60	14 44 38	40	12

Model HS comes complete with a 16 Ø x 127 mm stir bar and model HL with a 19 Ø x 150 mm stir bar.





Multiple position magnetic stirrers "Multimatic"



COMMON FEATURES

External plate made from AISI 304 stainless steel with engraved stirrer positions.
Independent stirring speed control for each position.
Front panel protected against splashes.

Models 5-S and 5-N: Suitable for 5 flasks, 600 ml max. (max. Ø 90 mm).
9-S and 9-N: Suitable for 9 flasks, 300 ml max. (max. Ø 75 mm).
Epoxy coated external case.

APPLICATIONS

Specially recommended for bio-pharmaceutical diagnostic assays.



Stirrers "Multimatic" 5-S and 9-S without heating

FOR 5 AND 9 POSITIONS.



CONTROL PANEL

Illuminated mains switch.
Individual position stir speed control.

MODELS

	Part No.	Height / Width / Depth (exterior) cm	Width / Depth (plate) cm	Speed control r.p.m.	Maximum stir volume ml	Power W	Weight Kg
MULTIMATIC 5-S	7000951	11 28 35	28 33	Up to 1600	5 x 600	16	7
MULTIMATIC 9-S	7000952	11 28 35	28 33	Up to 1600	9 x 300	27	9

Comes complete with a 5 or 9 mm stir bar, model dependent covered in PTFE of 8 Ø x 32 mm long.

ACCESSORIES

Transparent methacrylate bath.
Fits onto the non heating stir plate of the "Multimatic" 5-S y 9-S
The bath can withstand temperatures up to 60 °C.
See section immersion Thermostats (page 94).

Part No.	Capacity litres	Height / Width / Depth (exterior) cm	Weight Kg
1001007	14	16 30 55	4



Hotplate stirrers "Multimatic" 5-N y 9-N with heating

FOR 5 AND 9 POSITIONS, OVER TEMPERATURE SAFETY THERMOSTAT FITTED.



MODELS

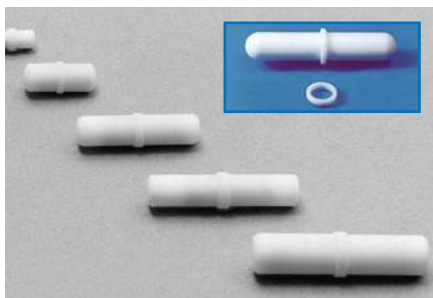
	Part No.	Height / Width / Depth (exterior) cm	Width / Depth (plate) cm	Maximum temperature °C	Speed control r.p.m.	Maximum stir volume ml	Heater Power W	Total Power W	Weight Kg
MULTIMATIC 5-N	7000953	16 28 35	25 25	200	Up to 1600	5 x 600	680	700	12
MULTIMATIC 9-N	7000954	16 28 35	25 25	200	Up to 1600	9 x 300	680	700	14

Comes complete with a 5 or 9 mm stir bar, model dependent covered in PTFE of 8 Ø x 32 mm long.

CONTROL PANEL

Mains illuminated power switch.
Individual speed control for each position.
Electronic heater energy control from 0-100% synchronised with an indicator lamp when the heater is on.

ACCESSORIES FOR MAGNETIC STIRRERS



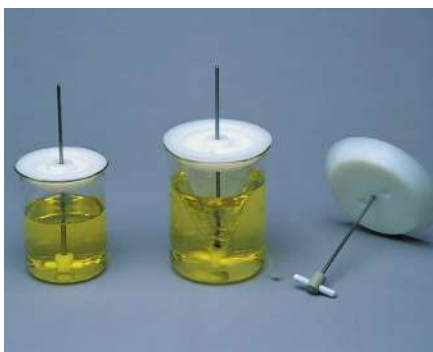
Stir-bars followers for magnetic stirrers.

Encased in PTFE with pivot ring, temperature resistant to +275 °C.

Part No.

1000009	6 Ø x 10 mm long.	without pivot ring.
1000012	4 Ø x 12 mm long.	without pivot ring.
1000019	7 Ø x 20 mm long.	with pivot ring.
1000032	8 Ø x 32 mm long.	with pivot ring.
1000039	8 Ø x 40 mm long.	with pivot ring.
1000045	10 Ø x 45 mm long.	with pivot ring.
1001061*	12 Ø x 75 mm long.	with pivot ring.
1001062*	16 Ø x 102 mm long.	with pivot ring.
1001063*	16 Ø x 127 mm long.	with pivot ring.
1001064*	19 Ø x 150 mm long.	with pivot ring.

* With pivot ring for large volumes.



Concentric stir-bar with beaker cover "CENTRIMAN".

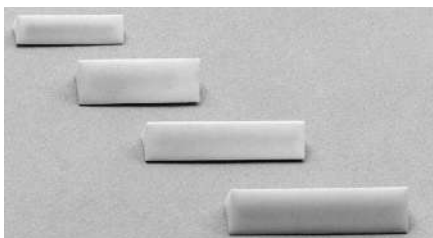
Encased in P.T.F.E. with an adjustable axis bar made of AISI 304 stainless steel. Suitable for applications with volumes of 100 to 2000 ml.

Soft start stirring and adjustable height prevents the stir-bar jumping inside the vessel.

Conical fitting lid of polypropylene with excellent chemical and thermal properties that resists temperatures up to 160 °C. The lid has an auto-lubricating central axis hole with two lateral air displacement holes.

Part No.

1000900	Concentric stir-bar with conical fitting lid for beakers volumes of 100 ml. to 500 ml. Length 32 mm.
1000901	Concentric stir-bar with conical fitting lid for beakers volumes of 500 ml. to 1000 ml. Length 50 mm.
1000902	Concentric stir-bar with conical fitting lid for beakers volumes of 1000 ml. to 2000 ml. Length 55 mm.



Triangular stir-bar "TRIMAG".

Encased in heat resistant PTFE of temperatures up to 275 °C. useful for "dissolving solids" and stirring silts. Liquids flow upwards as well as sideways. Quiet with excellent stability. Suitable for flat bottomed vessels.

Part No.

1000536	9 side x 35 mm long.
1000537	14 side x 40 mm long.
1000538	12 side x 50 mm long.
1000539	14 side x 55 mm long.



Starhead stir bar.

Circular, encased in heat resistant PTFE for temperatures up to 275 °C. Useful for tubes, flasks and round bottom vessels.

Part No.

1000790	25 Ø x 15 mm height.
1000791	40 Ø x 17 mm height.



Box of 17 assorted stir bars.

Encased in temperature resistant PTFE for temperatures up to 275 °C.

Contents:

- 1 stir-bar with pivot ring 6x10 mm.
- 1 stir-bar with pivot ring 4 x12 mm.
- 1 stir-bar with pivot ring 7x20 mm.
- 2 stir-bars with pivot ring 8x32 mm.
- 2 stir-bars with pivot ring 8x40 mm.
- 2 stir-bars with pivot ring 10x45 mm.
- 1 triangular stir-bar of 9x35 mm.
- 1 triangular stir-bar of 14x40 mm.
- 1 triangular stir-bar of 12x50 mm.
- 1 triangular stir-bar of 14x55 mm.
- 1 stir-bar Rotor-Pat of 11x35 mm.
- 1 oval stir-bar of 16x30 mm.
- 1 oval stir-bar of 20x40 mm.
- 1 star head stir-bar of 20x15 mm.
- 1 star head stir-bar of 40x17 mm.

Part No. **1000487**



Stir Bar "ROTOR-PAT".

Encased in PTFE useable up to temperatures of

275 °C.

Excellent stability with strong vortexing turbulence, useful for round bottom or convex bottom flasks.

Part No.

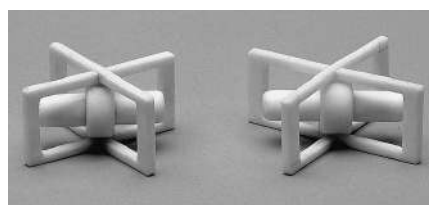
1000001 10 Ø max. x 32 mm long.



Oval stir bar, coated with PTFE, resistant to high temperatures of up to +275 °C. Can be used for all types, including

round bottom vessels.

Part No.



1000788 16 Ø x 30 mm long.

1000789 20 Ø x 40 mm long.

Floating magnetic stir-bar "IMANFLOTTER".

Encased completely in PTFE Dismountable structure, autoclavable. Designed specifically for low constant speed stirring. Recommended for tissue culture applications. The floating conception of the Imamfloter minimises the grinding effect of cell damage as there is no friction on the bottom of the flask.

Medium speed levels prevent the IMANFLOTTER from jumping within the vessel.

Part No. Total length Stir bar length



1000897 50 mm 39 mm

1000898 60 mm 45 mm

Stir-bar retriever.

Flexible, encased in PTFE.

Part No.

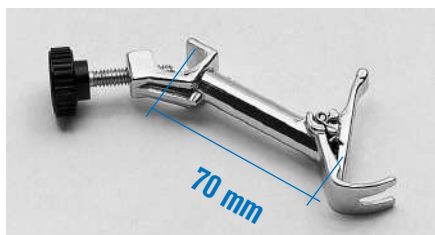
1000020 Length: 280 mm.

ACCESSORIES FOR MAGNETIC STIRRERS AND HOTPLATE STIRRERS



Support rod with thread of 12 mm Ø x 500 mm high, stirrer dependent, attaches to the main body of the stirrer.

Part No. **1000725**



Clamp with bosshead, "AUTOMATIC" Chrome coated alloy with screw closure.

For Ø from 0 to 25mm.

Part No. **7000251**



Electronic contact thermometer with digital readout "Sensoterm II".

Complete with AISI 304 stainless steel sheathed Pt1000 temperature sensor.

FEATURES:

Conceived and designed as external sensor probe, where the controller is away from the measuring temperature zone of heat and vapour. The advantages over a contact thermometer means additional safety, no broken glassware or mercury spills.

SPECIFICATION

Temperature range from: -50 °C to +300 °C.

Temperature sensor : 3.5 Ø x 250 mm immersion.

Stability: 1 °C ±1 digit

Resolution: 1 °C.

Temperature display: LCD 8 mm.

Working environment: 0 to 60 °C and relative humidity up to 80 %.

Dimensions: 130 high x 71 wide x 24 mm deep (without probe)



Identification ICON

Part No. **1001009**



Adapters for round flasks of 250, 500 and 1000 ml. Made of Aluminium alloy. Suitable for the stirrers with a Ø greater than 14.5 cm.

Maximum adapter temperature 250 °C.

Part No.

1001712 250 ml flasks.

1001718 500 ml flasks.

1001719 1000 ml flasks.



Temperature controller Electemp-TFT.

FEATURES:

P.I.D. digital temperature controller. User configurable microprocessor of function parameters.

Temperature measurement range: -150 °C to 1300 °C.

Temperature regulation: from ambient +5 °C to 1300 °C.

Sensor options: Pt100 or Thermo resistor K type probe.

See page 293.

SPECIFICATION:

Stability: ±0.1 °C.

Resolution: ±0.1 °C Pt 100 /±1 °C K Type probe.

Operation: P.I.D.

AUTOTUNING. Adapts automatically to the working medium (Solid, liquid or gas.)

Dimensions: 10.5 high x 13.5 wide x 21cm deep.

Maximum power (at 230 V): 3100 W.

Weight: 1.250 Kg

Part No. **3000897**

ACCESSORIES:

Probe Pt100 Part No. **1000893**

Probe K Type. Part No. **1000895**



Aluminium PTFE coated bath.

Suitable for stirrers and hotplate stirrers. "Agimatic N, E, ND, ED and Rev-E".

Suitable as water or oil baths for temperatures up to 200 °C with magnetic stirring from 150 to 1500 r.p.m. For rotary evaporators etc.

Part No.

1001230 capacity 2 litres. 11 cm high x 18 cm Ø.

1001231 capacity 4 litres. 13 cm high x 24 cm Ø.

ACCESSORIES:

Suitable only for tank Part No. 1001230.

Set of 4 reduction ring lid, stainless steel AISI304, with location hole for a thermometer.

Part No. **3000917**



Temperature sensor Pt100. Controls the sample temperature in the digital hotplate stirrers. Immersion Probe: 4mm Ø x 130 mm long. Cable connector 150 cm long.



Identification ICON

Part No. **1001610** for 7000280 and 7000281.

Part No. **1000893** for 7000837 and 7000838.



Rotator "Orbit"



FEATURES

Rotation Speed: 12 r.p.m.
Adjustable rotation angle axis from vertical to horizontal. An elastic shaft drive and clip supports permit the flasks and tubes to be loaded and unloaded while the motor is running. Epoxy coated outer casing. Recommended for extractions of cell cultures, blood tubes and other haematological applications.

MODEL

Part No.	Speed r.p.m.	Height / Width / Depth (exterior) cm	Power W	Weight Kg
3000445	Fixed 12	19 23 20	15	6



ACCESSORIES

Erlenmeyer flask adapters, clips made from stainless steel.		Tube adapters, made from Aluminium, with nickel/chrome clips for different tube Ø.	
Part No.	Capacity	Part No.	Capacity
3000850	8 x 50 ml Erlenmeyer flasks.	3000356	35 tubes from 6 to 9 mm Ø.
3006100	6 x 100ml Erlenmeyer flasks.	3003011	30 tubes from 10 to 13 mm Ø.
3005250	5 x 250ml Erlenmeyer flasks.	3002512	25 tubes from 14 to 16 mm Ø.
		3002215	22 tubes from 17 to 20 mm Ø.
		3001820	18 tubes from 21 to 24 mm Ø.
		3001723	17 tubes from 23 to 28 mm Ø.



Tilting Mixer Shaker "Movil-Tub"

FEATURES

Fixed speed tilting shaker mixer with removable silicon, anti slide tray. Recommended especially for haematology, chemistry and microbiology applications.

MODEL

Part No.	Tube capacity	Tube Ø / length mm	Speed r.p.m.	Height / Width / Depth (exterior) cm	Tilt angle	Power W	Weight Kg
7000913	12	20 160	15	12 34 20	25°	6	2,5



Mixer shaker for tubes "Vortex-Vib"

SHAKE BY MIXER HEAD.

Strong and economic.

FEATURES

With stirring selector by pressure, or fixed in continuous. Starting switch, 4 interchangeable platforms for multiple tubes and 50 ml flasks. Base with 4 suction cups for full adherence.

MODEL

Part No.	Frequency r.p.m.	Height / Width / Depth (exterior) cm	Power W	Weight Kg
7001725	2800	18 12,5 18	50	4



Roller and tilt mixer "Movil-Rod"

WITH VARIABLE SPEED CONTROL FROM 10 TO 80 r.p.m.

FEATURES

Roll and tilt mixer with 7 rollers, double action, gently rolls the tubes while rocking, produces a sinusoidal movement, providing excellent sample homogenisation. Recommended for suspensions of biological and haematological fluids.

MODEL

Part No.	For tube Ø up to mm	Speed r.p.m.	Length (rollers) cm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
7001723	35	10 - 80	24	9.8 34.9 26.5	12	3.6





Roller and tilt mixer "Movil-Rod II"

FIXED SPEED 36 RPM.

FEATURES

Roll and tilt mixer with 5 rollers, double action, gently rolls the tubes while rocking, produces a sinusoidal movement, providing excellent sample homogenisation. Recommended for suspensions of biological and haematological fluids.

MODEL

Part No.	For tube Ø up to mm	Speed r.p.m.	Length (rollers) cm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
7001726	35	36	23	14 26 15,5	6	3



NEW



Rocking Mixer "Vibromatic"

DIGITAL ELECTRONIC CONTROL OF SPEED AND TIME.



Optimum shaking frequency: 950 oscillations per minute

APPLICATIONS

Dissolution, extractions and homogenisation.

FEATURES

Electronic control from 100 to 950 oscillations per minute. (1900 vibrations) and timer from 1 to 999 minutes or continuous operation.

Oscillation amplitude: 8 mm.

Easily detachable arms equipped with 8 clamps that allow all types of tubes and flask with diameters of between 5 to 50 mm can be held in position.

Maximum load: 4 kg.

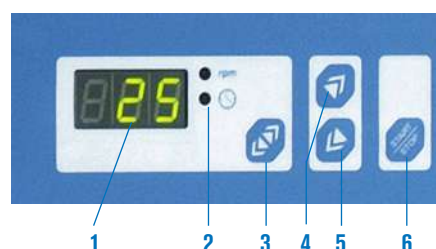
CONTROL PANEL

1. Digital display indicator of osc./min. and time.
2. Parameter display selector.
3. Parameter selector, speed or time.
4. Push button increase value.
5. Push button decrease value.
6. Push button start-stop.



MODEL

Part No.	Oscillations p.m.	Maximum capacity Kg	Height / Width / Depth (exterior) cm	Power W	Weight Kg
7000384	100 - 950	4	23 77 27	34	11



ACCESSORIES

2 in 1. Platform support for Erlenmeyer flasks.

Platform support for Erlenmeyer flasks, made from AISI 304 stainless steel with clip adapter position holes for 50 ml to 1000 ml flasks. Platform dimensions: 38 cm long x 19 cm wide.

Weight: 2 Kg.

Platform capacity:

- 18 Erlenmeyer flasks of 50 ml.
- 12 Erlenmeyer flasks of 100 ml.
- 8 Erlenmeyer flasks of 250 ml.
- 6 Erlenmeyer flasks of 500 ml.
- 3 Erlenmeyer flasks of 1000 ml.

Part No. **3001221**



Model Vibromatic with adapter platform.

Adapters for Erlenmeyer flasks.

Made from tempered stainless steel.

Part No.

- | | | |
|----------------|-------------|----------|
| 1001003 | Adapter for | 50 ml. |
| 1000978 | Adapter for | 100 ml. |
| 1000979 | Adapter for | 250 ml. |
| 1000980 | Adapter for | 500 ml. |
| 1000981 | Adapter for | 1000 ml. |





COMMON FEATURES

External ABS case with adapter platform for the different models.
 Innovative single button to select start, shaking speed, time and stop.
 Digital display of time and shaking speed.
 Maintenance free induction drive motor which produces a uniform movement according to the rotation speed program.
 Acoustic notification at the end of the cycle.

CONTROL PANEL

Main switch.
 Single button selector for shaking speed and time.
 Display indicating the shaking speed.
 Display indicating the programmed time.
 Measures: Alto 10 x Ancho 28 x fondo 26

TECHNICAL INFORMATION

Rotation frequency: 50-250 r.p.m.
 Timer from 1 min to 99h 59 min
 Rotation amplitude: 20mm
 Power: 50 W.
 Power supply: 220V/50Hz
 Load capacity: till 2,5Kg
 Measures cm: Height 10 x Width 28 x Depth 26



Shaker for Petri plates “AG-200”

With non-slip rubber platform of 24cm width and 20cm depth.
 Capacity for 4 Petri plates.
 Useful for slides and little flasks shaking.
 Weight (Kg): 7.
 Part no: **5312010**



Incubator for Petri capsules. See page: 153

Shaker for bottles “AG-200-A”

With non-slip rubber platform of 26cm width and 22cm depth, with 3 adjustable rubber retaining bars suitable for any kind of glasses: Erlenmeyer, flasks, bottles, etc.
 Weight (Kg): 8
 Part no: **5312011**



Shaker for Erlenmeyer flasks “AG-200-B”

Tempered aluminium base of 27cm width and 22cm depth, with multi-adapter location holes to support different capacities flasks from 50ml to 2000ml.
 Weight (Kg): 8.
 Part no: **5312012**

Erlenmeyer flasks adapters

Made of stainless steel with upper spring.
 Part no. **5312013** Adapter for 50 ml.
 Platform capacity: 12 units
 Part no. **5312014** Adapter for 100 ml.
 Platform capacity: 8 units
 Part no. **5312015** Adapter for 250 ml.
 Platform capacity: 6 units
 Part no. **5312016** Adapter for 500 ml.
 Platform capacity: 4 units
 Part no. **5312017** Adapter for 1000 ml.
 Platform capacity: 2 units





Orbital and linear motion shaker "Rotaterm"

WITH HEATED PLATFORM TOP PLATE.
ELECTRONIC DIGITAL SPEED AND TEMPERATURE DISPLAY.
INCLUDES A SAFETY OVER TEMPERATURE DEVICE.
TEMPERATURE STABILITY ± 1 °C.



2 in 1 System suitable for orbital or linear motion

FEATURES

Adjustable temperature range from ambient +5 °C. to 250 °C.

Electronic 3 digit temperature display, monitored by a Pt 100 temperature probe.

Resolution: 1 digit.

Electronic digital speed control from 20 to 230 oscillations per minute and timer from 1 to 999 minutes or continuous operation.

Adjustable oscillation amplitude: 15 or 20 mm.

Choice of: orbital or linear motion.

Epoxy covered external casing.

Aluminium top plate platform with evenly distributed heater elements.

The upper platform is made of AISI 304 stainless steel with adjustable tensile spring clips that allow all kinds of glassware, flasks, Erlenmeyer flasks, racks, etc. to be held in position.

Digital calibration temperature circuit.



Part No 3000435 with platform and tensile spring clips.

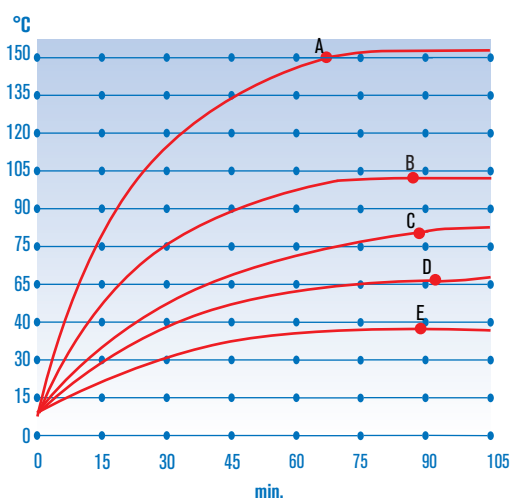
CONTROL PANEL

Temperature control.

1. Digital temperature display.
2. Push button increase temperature.
3. Push button reduce temperature.
4. Push button start-stop heater.
5. Over temperature alarm.

Temperature and speed control.

6. Digital display of oscillation per minute and time (in minutes).
7. Displayed parameter.
8. Push button select displayed parameter, speed or time function.
9. Push button increase parameter value.
10. Push button decrease parameter value.
11. Push button start-stop shaker.



MODEL

Part No.	Platform	Width /Depth (platform) cm	Height / Width /Depth (exterior) cm	Power W	Weight Kg
3000435	Spring clip	41 31	30 46 38	2300	32

Diagram of Temperature Vs Time.
For 500ml Erlenmeyer flasks.
A. Plate to 250 °C: Silicon 150 °C.
B. Plate to 200 °C: H₂O 97 °C.
C. Plate to 150 °C: H₂O 82 °C.
D. Plate to 100 °C: H₂O 61 °C.
E. Plate to 50 °C: H₂O 37 °C.



Orbital and horizontal shaker "Rotabit"

ELECTRONIC DIGITAL CONTROL OF SPEED AND RUN TIME.



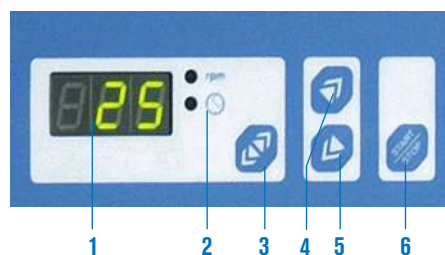
2 in 1 system, versatile orbital and horizontal shaker

FEATURES

Speed control from 20 to 230 oscillations per minute with timer from 1 to 999 minutes or continuous operation.
 Shaking amplitude of: 15 and 20 mm.
 Choice of orbital movement or a horizontal "To and Fro" motion.
 Load capacity: till 30 Kg
 Easy to interchange platforms, see accessories for platform selection.
 Epoxy covered outer casing.

CONTROL PANEL

1. Digital display showing oscillations and time.
2. Displayed parameter.
3. Push button, select parameter function, speed or time.
4. Push button increase parameter value.
5. Push button reduce parameter value.
6. Push button Start- Stop.



MODEL

Part No.	Control oscillations p.m.	Height / Width / Depth (exterior) cm	Power W	Load capacity Kg	Weight Kg
3000974	20 - 230	20 42 43	80	30	13.5

This shaker can be coupled to the "Boxcult" incubation chamber with platform Part No. 3000975 (see page 38).

NOTE: This shaker has multiple options and accessories, a flow chart for easy selection of the accessories can be found at the end of this section.

ACCESSORIES

Universal platforms with non-slip surface with four adjustable silicon covered retaining bars suitable for all types of glassware, Erlenmeyer flasks, etc. to be held in position.

Part No.	Height / Width/ Depth (exterior) cm	Weight Kg
3000975	9 42 35	5
3000976	9 70 35	7



Platform Part No. 3000975



Platform Part No. 3000976

Base for Erlenmeyer flask clips.

Made from AISI 304 stainless steel with multi-adapter location holes to support Erlenmeyer flask clips. Capacities 50, 100, 250, 500 and 1000 ml.

Part No.	For platform number Part No.	Width /Depth (platform) cm	Capacity, No. of positions					Weight Kg
			50 ml	100 ml	250 ml	500 ml	1000 ml	
3000977	3000975	40 34	36	25	16	9	5	1.5
3001010	3000976	69 34	66	45	21	18	10	2,2

Erlenmeyer flasks spring clips.

Made with tempered stainless steel.

Part No.

- 1001003** Adapter for 50 ml.
- 1000978** Adapter for 100 ml.

- 1000979** Adapter for 250 ml.
- 1000980** Adapter for 500 ml.
- 1000981** Adapter for 1000 ml.



ACCESSORIES



Orbital To & Fro shaker "Rotabit" complete with accessory. "Boxcult" incubation chamber.

Incubation chamber "Boxcult"

The "Boxcult" can be fitted onto the "Rotabit", Part No. 3000974, with the universal platform, (SMALL) Part No. 3000975. Forced air fan circulation. Adjustable temperature, ambient +5 °C to 57 °C. Homogeneity ±2.5% Stability ±0.5% Built of transparent Perspex, access is through a wide hinged front door which provides easy access for loading and unloading. Samples can be viewed without opening the incubator maintaining a constant homogeneous temperature.

Part No.	Height / Width / Depth (interior) cm		Height / Width / Depth (exterior) cm		Power W	Weight Kg		
3000957	50	47	47	61	51	51	220	11

See incubator section for more details (page 129).

Set of 5 reduction rings adapters for separating flasks of 50 to 100 ml. Part No. **6000620**

Separating funnel device.

Two positions, for mixing Horizontal to Vertical for easy decanting. Capacity: 5 separating funnels of 250 to 500 ml or 2 funnels of 1000 ml. Part No. **6000619**

This accessory can only be fitted to the platform Part No. 3000976. The "Rotabit" Part No. 3000974 and platform need to be ordered separately.



Double platform part no 3001011, with shaker Part No. 3000974

Double platform.

Two levels. Fits onto the "Rotabit" Part No. 3000974. Complete with anti slide mats and four support bars that support the upper level. Each platform has four silicon clamping bars.

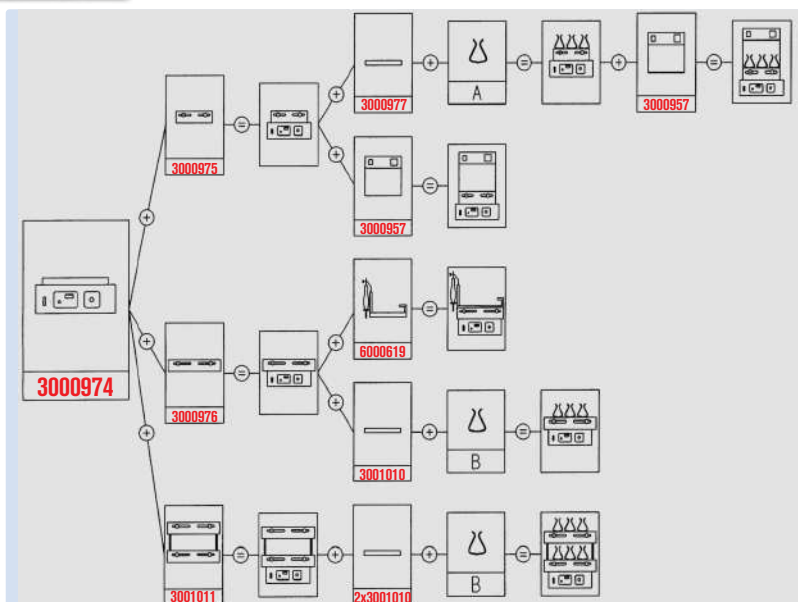
Part No.	Width / Depth (platform) cm		Total combined height cm
3001011	55	35	40



Separating funnel decanting accessory Part No. 6000619 Fits onto platform Part No. 3000976.



Flow diagram of the selection of accessories for the "Rotabit" To & Fro Orbital Shaker



SUITABLE FOR ERLLENMEYER			
Capacity	Part No.	A	B
50 ml	1001003	36	48
100 ml	1000978	25	30
250 ml	1000979	16	20
500 ml	1000980	9	12
1000 ml	1000981	5	8



Overhead stirrer "SE-100"

FOR BLENDS, HOMOGENIZATIONS, SUSPENSIONS, SOLUTIONS GASIFICATION AND SUBSTANCES RECIRCULATION. DESIGNED FOR CONTINUOUS WORK.

BRUSHLESS MOTORS FREE OF MAINTENANCE AND SPARKS.

PARTIALLY SEALED ENCAPSULATED CASES AGAINST SUBSTANCES AND AGGRESSIVE VAPOURS.

THERMAL PROTECTION FOR OVERHEATING WITH AUTO POWER OFF AND LED INDICATOR.

FEATURES

Excellent blending results in an accurate and repeatable control.

Stirring by electronic control of speed, **from 60 to 2000 rpm.**

Specially designed for those samples in which its viscosity changes during the process.

Max stirring volume: **Up to 40 L** (in H₂O)

Max stirring viscosity: **Up to 1.000.000 mPas.**

Speed digital reading and pre-selection (rpm).

Adaptable spindle to stirring rods up to 9.5 mmØ.

MODEL

Part No.	Height/Width/Depth (external) cm	Power W	Weight Kg
7000385	17,5 7,5 13,5	100	2,8

Base and shaft not included.

COMPLEMENT

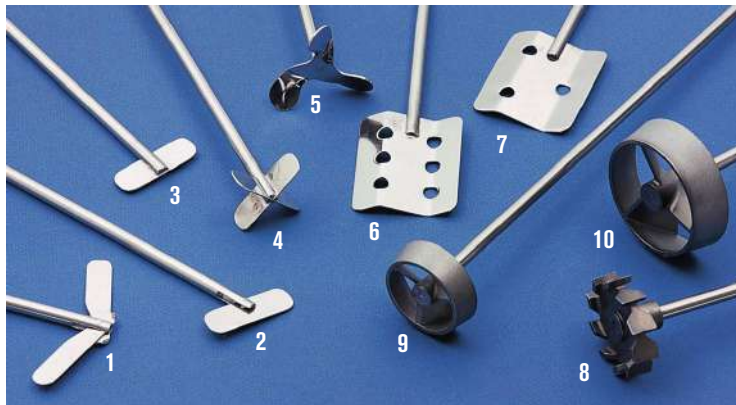
Automatic elevator for rod stirrers.

Specially designed to ease the use of the overhead stirrer, rising and descending to the height required by the user.

Part No.	Height / Width / Depth (exterior) cm	Lift max. cm	Weight Kg
6000412	74 41 42	25,5	8



OVERHEAD STIRRER ACCESSORIES



STIRRING SHAFTS WITH ROTORS

Shaft with AISI 304 stainless steel rotor. Shaft: 7mm Ø.

Part No.	Rotor type	Ø shaft mm	Total length mm	Features
6002891	1	90	400	Double fly vane
6002892	2	60	400	Fly vane
6002893	3	50	400	Fixed blade
6002894	4	50	400	Double cross vane
6002895	5	58	400	Helix
6002896	6	70	450	Six hole paddle
6002897	7	70	450	Three hole paddle
5050921	8	46	400	Radial turbine
5050932	9	45	400	Turbo helix 45 mm Ø
5050933	10	66	400	Turbo helix 66 mm Ø



Bosshead "MAXIM"

For large diameters. Chrome plated with one opening to hold rods up to 30 mm Ø. Second opening up to 20 mm Ø.

Part No. **7000408**



410 mm

Double base support T "MAXI"

Rod of AISI 304 stainless steel of 20 Ø x 800 mm high. Designed to support weights up to 20 Kg at 300 mm height from the base. Useful for stirrers.

Weight: 7 Kg. Part No. **6000410**



SHAFTS WITH PTFE PADDLES

Shaft of 8 mm Ø.

Part No.	Rotor type	Ø shaft mm	Total Length mm	Features	Speed range r.p.m.
5050934	11	50	500	Helix PTFE	500
5050935	12	80	500	Anchor PTFE	500



ADJUSTABLE HEIGHT SHAFT STIRRERS

Shafts made of AISI 304 stainless steel coated in PTFE and PTFE stirrer paddles. Shaft: 7 mm Ø. Adjustable height paddles using a locking thread.

Can be used with differing paddles on the same shaft to create a multiple mixing action.

Part No.	Rotor type	Ø shaft mm	Total Length mm	Features
5050936	13	70	400	Shaft PTFE
5050937	14	40	400	Helix PTFE
5050938	Shaft PTFE Spare or additional paddle for multiple stir effect			
5050939	Helix PTFE Spare or additional paddle for multiple stir effect			