

Thermo Scientific VARIOMAG® Magnetic Stirrers
Wear-free operation for peace of mind

**Reliability, safety
and performance for
stirring applications**



Reliable, No-Compromise Stirring Performance

Thermo Scientific Variomag magnetic stirrers are designed to provide unmatched reliability, safety and performance.

Renowned the world over for their outstanding quality and durability, our Thermo Scientific stirrers are available in a range of sizes, with drive systems to match the application or process need.

Powerful magnetic couplings ensure precise, reproducible stirring performance for both general and specialist applications.

Thermo Scientific Variomag stirrers are available with easy-to-use direct or external control, and offer safe, low-voltage operation. Many models feature hermetically-sealed drive housings that facilitate cleaning and allow operation in challenging laboratory environments.



Thermo Scientific Variomag Magnetic Stirrers – safe, dependable operation

Maintenance-free, inductive-drive stirrers for general lab applications

Inductive-drive stirrers operate without moving parts, making them uniquely wear- and maintenance-free.

- Hermetically-sealed drives for safe operation in demanding environments, easier cleaning, and contamination prevention
- Single- and multi-point stirring configurations

see pages 3 to 8



Multipoint 15 inductive-drive stirrer.

Power for the largest volumes

Disc motor-drive stirrers provide the power to mix media volumes up to 600 liters, or stir highly viscous liquids.

- Sealed stainless steel housings for safe operation under high humidity conditions
- Ideally suited for system integration with process equipment

see pages 9 to 11



Mobil Direct disc motor-drive stirrer.

Heat-free operation for valuable cell and tissue cultures

Stepper-drive stirrers offer heatless operation and slow mixing speeds to protect valuable cell and tissue cultures from damage.

- Sealed stainless steel housings for safe operation under high humidity conditions and impermeability to micro-organisms
- Single-point and multi-point stirring configurations

see pages 12 to 13



Biosystem 4 stepper-drive stirrer.

Thermo Scientific Variomag inductive-drive stirrers span single-point and multi-point models which are direct or remote controlled.

100%
maintenance
and wear-free



Single-point stirrers with direct control for general laboratory applications

Thermo Scientific Variomag Mono Direct and Maxi Direct

With no moving parts to maintain, our space-saving Mono Direct and Maxi Direct inductive-drive stirrers consistently deliver reliable, reproducible, wear-free operation for general laboratory applications. Pre-selectable power settings optimize stirring efficiency for different liquid volumes and minimize heat output.

- Large, easy-to-clean working surfaces
- Automatic start-up for safe stirrer acceleration
- Compact, durable design

Our Maxi Direct single-point stirrer generates a powerful magnetic field for smooth stirring of large volumes and highly viscous media. Most recent settings are stored in memory.



Our Mono Direct single-point stirrer features rotary knob control for basic stirring tasks.

Maxi Direct – offering precise speed control

- Sealed stainless steel housing is easily cleaned under running water
- Easy-to-use microprocessor control and bright digital display
- Speeds from 80 to 2,000 rpm
- Stirring volume up to 5,000 mL

Mono Direct – for basic single-point stirring

- Rugged, powder-coated stainless steel housing
- Speeds from 130 to 1,000 rpm
- Stirring volume up to 3,000 mL
- Rotary knob control

Mono Direct and Maxi Direct

Thermo Scientific Variomag Single-Point Stirrers with Direct Control								
Model	Stirring Points	Stirring Volume per Point (mL)	Stirring Power Settings (W)	Speed (rpm)	Operating Conditions (°C)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Mono Direct	1	1 – 3,000	1/5	130 – 1,000	-10 to +40 @ 95% rH	IP 32	180 x 215 x 35	1.4
Maxi Direct	1	1 – 5,000	5/10/15/20	80 – 2,000	-10 to +40 @ 95% rH	IP 64	180 x 215 x 35	2.5

Komet stirring bars and other accessories are listed on pages 16 to 17. Equipment order numbers are listed on pages 18 to 19.

Multi-point stirrers with direct control for general laboratory applications

Thermo Scientific Variomag Poly 15 and Multipoint 6/15

Our compact Variomag Poly 15 and Multipoint inductive-drive stirrers provide up to 15 stirring points for general laboratory and mass screening applications. Digital displays clearly show set stirring speeds. Most recent settings are stored in memory, even when power is shut off.

- Easy-to-use microprocessor control
- Fully synchronized speeds for 100% comparability of samples
- Automatic start-up for safe stirrer acceleration

*100%
maintenance
and wear-free*

Poly 15 – for basic multi-point stirring

- Rugged, powder-coated steel housing
- Speeds from 130 to 990 rpm
- Stirring volumes up to 800 mL per stirring point
- Suitable for 15 x 250 mL beakers or 6 x 1 L flasks

Multipoint 6/15 – flexible speeds for more demanding applications

- Sealed stainless steel housing is easily cleaned under running water
- Speeds from 80 to 2,000 rpm
- Stirring volumes up to 3 L per stirring point
- Suitable for 250 mL beakers, 1 L flasks and larger single vessels



Poly 15 and Multipoint 15 inductive-drive stirrers feature up to 15 stirring points for beakers and flasks. They provide smooth stirring, even at low speeds. Model shown: Multipoint 15.

Poly 15 and Multipoint 6/15

Thermo Scientific Variomag Multi-Point Inductive-Drive Stirrers with Direct Control

Model	Stirring Points	Gap Between Points (mm)	Stirring Volume per Point (mL)	Stirring Power Settings (W)	Speed (rpm)	Operating Conditions (°C)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Poly 15	15	65	1 – 800	10	130 – 990	-10 to +40 @ 95% rH	IP 32	240 x 420 x 35	6.0
Multipoint 6	6	130	1 – 3,000	5/10/15/20	80 – 2,000	-10 to +40 @ 95% rH	IP 64	240 x 420 x 35	7.5
Multipoint 15	15	65	1 – 3,000	5/10/15/20	80 – 2,000	-10 to +40 @ 95% rH	IP 64	240 x 420 x 35	7.5

Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Ultra-compact single-point stirrers for small volume applications

Thermo Scientific Variomag Mini and Micro

Equipped with easy-to-use external control units, our Variomag Mini and Micro inductive-drive stirrers are small enough to work in the tiniest of spaces.

Variomag Mini and Micro stirrers are ideally suited for system integration with analytical devices. Micro Series models can also be used with aggressive media, in high humidity environments, and submerged in water.

100%
maintenance
and wear-free



Ultra-compact Micro Series stirrers feature hermetically-sealed, stainless steel housings that resist aggressive media, micro-organisms and dust.

Micro and Micro 20 – for demanding environments and operation submerged in water baths

- High temperature resistance up to 95°C submerged in water and 120°C in air
- 48 x 48 x 16 mm (W x D x H) - no larger than a matchbox
- Speeds from 130 to 1,400 rpm
- Stirring volume up to 1,000 mL

Mini and Mini 20 – perfect for cuvette stirring

- 12 x 12 x 5 mm (W x D x H) - no larger than a thumbnail
- Speeds from 130 to 1,400 rpm
- Stirring volume up to 5 mL
- Ideal for integration with cuvette holders and photometers



Mini Series stirrers are ideal for system integration with analytical devices.

Mini Series and Micro Series

Thermo Scientific Variomag Single-Point Inductive-Drive Stirrers with External Control

Model	External Control Unit*	Stirring Points	Stirring Volume per Point (mL)	Stirring Power Settings (W)	Speed (rpm)	Operating Conditions (°C) (Submerged in Water)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Mini	Telemodul	1	0.1 – 5.0	0.1	130 – 1,000	-10 to +56 @ 95% rH (n/a)	IP 68	12 x 12 x 5	0.02
Mini 20	Telemodul 20 C	1	0.1 – 0.5	0.05/0.1/0.15/0.2	130 – 1,400	-10 to +56 @ 95% rH (n/a)	IP 68	12 x 12 x 5	0.02
Micro	Telemodul	1	1 – 800	3	130 – 1,000	-10 to +120 @ 100% rH (0 to +95)	IP 68	48 x 48 x 16	0.2
Micro 20	Telemodul 20 C	1	1 – 1,000	2/4/6/8	130 – 1,400	-10 to +120 @ 100% rH (0 to +95)	IP 68	48 x 48 x 16	0.2

*Stirrer power settings, speeds and functions depend on the control unit included. External controller functions and specifications are detailed on pages 14 and 15. Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Multi-point stirrers for demanding environments and operation in water baths

Thermo Scientific Variomag Telesystem Series

Equipped with easy-to-use external control units, our Variomag Telesystem multi-point inductive-drive stirrers provide 6, 15 or 60 stirring points. They are ideally suited for general laboratory and mass screening applications.

- Outstanding mechanical, physical, chemical and thermal resistance
- For use submerged in water baths at temperatures up to 50°C
- Large surface is easy to clean under running water
- Automatic start-up for safe stirrer acceleration
- Perfect for integration with incubators and climatic chambers

*100%
maintenance
and wear-free*

Telesystem 06.07/15.07/60.07 with Telemodul external control

- Speeds from 130 to 1,000 rpm
- Stirring volumes up to 800 mL per stirring point

Telesystem 06.20/15.20/60.20 with Telemodul 20 C external control

- Speeds from 130 to 1,400 rpm
- Stirring volumes up to 1,500 mL per stirring point

Telesystem 06.40/15.40/60.40 with Telemodul 40 C external control

- Speeds from 100 to 2,000 rpm
- Stirring volumes up to 2,000 mL per stirring point



*Telemodul
external
controller.*



*Telemodul 20 C
external controller.*

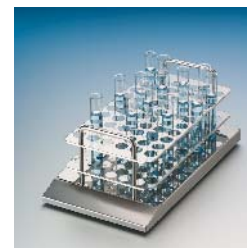
Versions for use in ovens at temperatures up to 200°C, or submerged in water baths up to 95°C, are available on request.

100%
maintenance
and wear-free



Telesystem Series stirrers are designed for use with aggressive media, in high humidity environments, and can even be submerged in a water bath.

Telesystem stirrers feature hermetically-sealed, stainless steel housings that resist aggressive media, micro-organisms and dust.



Telesystem accessories include test tube racks, waterbath mounts and thermostats (see page 17).

Telesystem Series

Thermo Scientific Variomag Multi-Point Inductive-Drive Stirrers with External Control

Model	External Control Unit*	Stirring Points	Gap Between Points (mm)	Stirring Volume per Point (mL)	Power Settings (W)	Stirring Speed (rpm)	Operating Conditions (°C) (Submerged in Water)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Telesystem 06.07	Telemodul	6	130	1 – 800	7	130 – 1,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	7.5
Telesystem 06.20	Telemodul 20 C	6	130	1 – 1,500	5/10/15/20	130 – 1,400	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	7.5
Telesystem 06.40	Telemodul 40 C	6	130	1 – 2,000	4 – 40	100 – 2,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	8.0
Telesystem 15.07	Telemodul	15	65	1 – 500	7	130 – 1,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	7.5
Telesystem 15.20	Telemodul 20 C	15	65	1 – 1,000	5/10/15/20	130 – 1,400	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	7.5
Telesystem 15.40	Telemodul 40 C	15	65	1 – 1,200	4 – 40	100 – 2,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	8.0
Telesystem 60.07	Telemodul	60	32.5	0.1 – 10	7	130 – 1,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	7.5
Telesystem 60.20	Telemodul 20 C	60	32.5	0.1 – 50	5/10/15/20	130 – 1,400	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	7.5
Telesystem 60.40	Telemodul 40 C	60	32.5	0.1 – 100	4 – 40	100 – 2,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	240 x 420 x 35	8.0

*Stirrer power settings, speeds and functions depend on the control unit included. External controller functions and specifications are detailed on pages 14 and 15. Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Unmatched physical, chemical and thermal resistance for general laboratory applications

Thermo Scientific Variomag Compact and Maxi

Equipped with easy-to-use external controllers, our Variomag Compact and Maxi inductive-drive stirrers are ideal for direct placement in a water bath or integration with incubators and other laboratory equipment.

- Outstanding mechanical, physical, chemical and thermal resistance
- Hermetically-sealed, stainless steel housing resists aggressive media and micro-organisms, and is easily cleaned under running water
- For use submerged in water baths at temperatures to 50°C
- Customized versions for use in ovens up to 200°C, or submerged in water baths up to 95°C, are available on request

100%
maintenance
and wear-free



Thermo Scientific Variomag Maxi magnetic stirrers offer a large surface area and far-reaching magnetic field for stirring volumes up to 5 L. Model shown: Maxi 20, supplied with Telemodul 20 C.



Our Compact Series stirrers can be used for applications inside ovens and incubators, at temperatures up to 56°C. Model shown: Compact stirrer, supplied with Telemodul external controller.



Compact Series and Maxi Series

Thermo Scientific Variomag Single-Point Inductive-Drive Stirrers with External Control									
Model	External Control Unit*	Stirring Points	Stirring Volume per Point (mL)	Stirring Power Settings (W)	Speed (rpm)	Operating Conditions (°C) (Submerged in Water)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Compact	Telemodul	1	1 – 1,000	5	130 – 1,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	120 x 120 x 35	1.0
Compact 20	Telemodul 20 C	1	1 – 1,500	3/6/9/12	130 – 1,400	-10 to +56 @ 100% rH (0 to +50)	IP 68	120 x 120 x 35	1.0
Maxi	Telemodul	1	250 – 2,000	6	130 – 1,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	180 x 180 x 35	2.3
Maxi 20	Telemodul 20 C	1	250 – 4,000	4.5/9/13.5/18	130 – 1,400	-10 to +56 @ 100% rH (0 to +50)	IP 68	180 x 180 x 35	2.3
Maxi 40	Telemodul 40 C	1	250 – 5,000	3 – 36	100 – 2,000	-10 to +56 @ 100% rH (0 to +50)	IP 68	180 x 180 x 35	2.3

*Stirrer power settings, speeds and functions depend on the control unit included. External controller functions and specifications are detailed on pages 14 and 15. Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Thermo Scientific Variomag disc motor-drive stirrers incorporate a low-wear motor with the power to stir very large liquid volumes and mix even highly viscous media. They provide a single stirring point, and are available with direct or external control.

*power for
large volumes*

General purpose, large volume stirring

Thermo Scientific Variomag Mobil 10/25 and Power Direct

Ultra-flat, Mobil 10 and Mobil 25 single-point stirrers with external control* provide power for large-volume stirring. Our direct-controlled Power Direct model stirs single volumes up to 40 liters.

- Compact, space-saving design
- Automatic start-up for safe stirrer acceleration
- Safe, low operating voltage
- Quick-stop function stops drive within two seconds, minimizing after-run and risk of vessel breakage



Mobil 10 and Mobil 25 stirrers easily mix even viscous media. Model shown: Mobil 25 with Telemodul 10 M external controller.*

Mobil 10 – for volumes up to 10 L

- Speeds from 100 to 1,000 rpm
- Easy-to-clean housing

Mobil 25 – for volumes up to 10 L

- Resistant to high temperature (121°C) and pressure (2 Bar)
- Can be used in water baths, sterilizers and climatic chambers
- Sealed stainless steel housing is easily cleaned under running water

Power Direct – for volumes up to 40 L

- Speeds from 100 to 2,000 rpm
- Sealed stainless steel housing is easily cleaned under running water



Our Power Direct stirrer features a digital display to facilitate precise speed setting. Most recent settings are stored in memory.

Mobil 10/25 and Power Direct

Thermo Scientific Variomag Single-Point Disc Motor-Drive Stirrers with External or Direct Control

Model	External Control Unit*	Stirring Points	Stirring Volume per Point (L)	Stirring Power Settings (W)	Speed (rpm)	Operating Conditions (°C)	Protection Class	Dimensions Ø x H or W x D x H (mm)	Weight (kg)
Mobil 10	Telemodul 10 M	1	0.1 – 10.0	–	100 – 1,000 ¹	-10 to +56	IP 66	128 x 32	0.7
Mobil 25	Telemodul 10 M	1	0.1 – 10.0	–	100 – 1,000 ¹	-10 to +121	IP 68	128 x 32	1.7
Power Direct	n/a	1	0.1 – 40.0	5/10/15/20	100 – 2,000	-10 to +40	IP 22	240 x 295 x 35	2.5

¹Speed achievable with Komet 50 stirring bars. *Telemodul 10 M external controller ordered separately, see page 15. External controller functions and specifications are detailed on pages 14 and 15. Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

*power for
large volumes*



Large volume stirring

Thermo Scientific Variomag Mobil Direct

Capable of stirring volumes up to 150 liters, our Mobil Direct disc motor-drive stirrer is designed for operation in pilot plants, or for use with thick-bottomed vessels, round flasks and double-walled containers.

- Sealed stainless steel housing is easily cleaned under running water
- Automatic start-up for safe stirrer acceleration
- Quick-stop function stops drive within 3 seconds, minimizing after-run and risk of vessel breakage
- Low profile design
- Reliable performance
- Safe, low operating voltage



Mobil Direct single point stirrer with large, easy-to-clean surface.

Mobil Direct

Thermo Scientific Variomag Single-Point Disc Motor-Drive Stirrer with Direct Control

Model	Stirring Points	Stirring Volume per Point (L)	Stirring Power Settings (W)	Speed (rpm)	Max. Shaft Torque (Ncm)	Operating Conditions (°C)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Mobil Direct	1	1 – 150	40	100 – 1,000	30	-10 to +40 @ 95% rH	IP 64	330 x 330 x 80	16.0

Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Unmatched stirring power for high-volume applications

Thermo Scientific Variomag Mobil 200 and 600

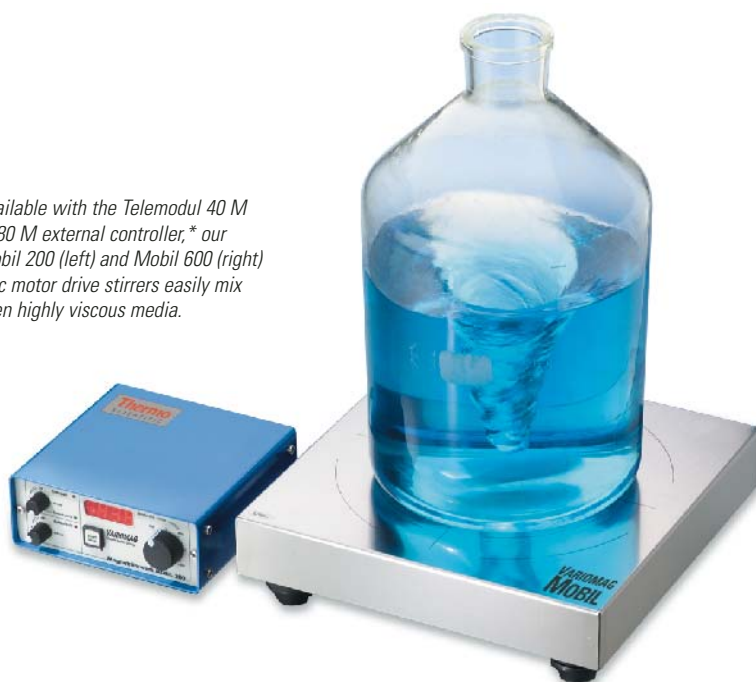
Ideally suited for system integration with process equipment and stirring volumes up to 600 L, Variomag Mobil 200 and 600 single-point stirrers feature sealed stainless steel housings for operation under high humid conditions.

- Sealed stainless steel housing is easily cleaned under running water
- Outstanding mechanical, physical and chemical resistance
- Adjustable automatic start-up for safe stirrer acceleration
- External control
- Overload protection prevents overheating
- Quick-stop function stops drive within 3 seconds, minimizing after-run and the risk of vessel breakage
- Safe, low operating voltage

*power for
large volumes*



Available with the Telemodul 40 M or 80 M external controller,* our Mobil 200 (left) and Mobil 600 (right) disc motor drive stirrers easily mix even highly viscous media.



Mobil 200 and 600

Thermo Scientific Variomag Single-Point Disc Motor-Drive Stirrers with External Control (Telemodul 40/80 M*)

Model	Stirring Points	Stirring Volume per Point (L)	Stirring Power Settings (W)	Speed (rpm)	Max. Shaft Torque (Ncm)	Operating Conditions (°C)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Mobil 200	1	1 – 200	80	100 – 1,000	50	-10 to +56 @ 100% rH	IP 65	180 x 180 x 80	6.0
Mobil 600	1	1 – 600	80	100 – 1,000	50	-10 to +56 @ 100% rH	IP 65	330 x 330 x 80	16.0

*Telemodul external controllers ordered separately, see page 15. Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Thermo Scientific Variomag Biosystem and Biosystem 4 stirrers generate little to no heat. Thermally-sensitive cultures and cell suspensions can gently be stirred with complete confidence.

Gentle stirring for valuable cultures

Thermo Scientific Variomag Biosystem Direct and Biosystem 4 Direct

Our Variomag Biosystem Direct and Biosystem 4 Direct stepper-drive units turn stirring bars gently and evenly to preserve valuable cultures. The Biosystem Direct has a single stirring point, while the Biosystem 4 Direct offers 4 synchronized stirring points in a rectangular arrangement.

- Sealed stainless steel housing for use in high humidity environments
- Compact, flat design
- Automatic start-up for safe stirrer acceleration
- Easy to clean under running water

heat-free operation



Biosystem Direct and Biosystem 4 Direct stirrers feature easy-to-use direct control. They mix microcarrier cultures, culture broths and cell suspensions without destroying cells.



Biosystem Direct (culture flask not included).

Above Left: Biosystem Direct. Below Right Biosystem 4 Direct with 4 synchronized stirring points.

Biosystem Direct and Biosystem 4 Direct

Thermo Scientific Variomag Single/Multi-Point Stepper-Drive Stirrers with Direct Control									
Model	Stirring Points	Gap Between Points (mm)	Stirring Volume per Point (mL)	Stirring Power Settings (W)	Speed (rpm)	Operating Conditions (°C)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Biosystem Direct	1	-	25 – 5,000	1	5 – 120	-10 to +40 @ 95% rH	IP 64	180 x 180 x 60	3.4
Biosystem 4 Direct	4	185	25 – 2,000	4 x 0.5	5 –120	-10 to +40 @ 95% rH	IP 64	330 x 330 x 60	11.0

Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Heatless operation in incubators

Thermo Scientific Variomag Biosystem and Biosystem 4

Combined with the Biomodul 40 B external controller, Variomag Biosystem and Biosystem 4 stepper-drive stirrers are ideally suited for long-term, heatless operation in incubators. Hermetically-sealed, stainless steel housings resist aggressive media and are impermeable to micro-organisms.

- Outstanding mechanical, physical, chemical and thermal resistance
- Ideally suited for system integration
- Automatic start-up for safe stirrer acceleration
- Stirring bars turn slowly and evenly to protect cultures
- Safe, low operating voltage

heat-free operation



Biosystem and Biosystem 4 stirrers operate at low speeds to preserve sensitive cultures from damage.



Our Biosystem 4 provides four synchronized stirring points. The Biomodul 40 B controller can synchronize two single-point Biosystem drives. Model shown: Biosystem 4 (culture flasks not included).

Biosystem and Biosystem 4

Thermo Scientific Variomag Single/Multi-Point Stepper-Drive Stirrers with External Control (Biomodul 40 B*)

Model	Stirring Points	Gap Between Points (mm)	Stirring Volume per Point (mL)	Stirring Power Settings (W)	Speed (rpm)	Operating Conditions (°C) (Submerged in water)	Protection Class	Dimensions W x D x H (mm)	Weight (kg)
Biosystem	1	-	25 – 20,000	0.4 – 4	5 – 120	-10 to +56 @ 100% rH (0 to +50)	IP 68	180 x 180 x 60	3.4
Biosystem 4	4	185	25 – 5,000	0.4 – 4	5 – 120	-10 to +56 @ 100% rH (0 to +50)	IP 68	330 x 330 x 60	9.4

*Biomodul 40 B external controller ordered separately, see page 15. Komet stirring bars and other accessories are listed on pages 16 and 17. Equipment order numbers are listed on pages 18 to 19.

Accessories

Versatile and easy to use

Thermo Scientific Variomag External Control Units

external control units



Telemodul 20



The space-saving Telemodul controller provides stirring power for small to medium volumes of low-viscosity liquids.

- Adjustable speeds from 130 to 1,000 rpm
- Automatic start-up for safe stirrer acceleration
- Continuous speed selection, OFF position

Telemodul 20 C



The versatile Telemodul 20 C controller features user-friendly, menu-driven microprocessor controls.

- Single-handed operation with straightforward, 'turn-and-press' adjustment wheel
- 3 individually programmable program keys for rapid start-up
- Recent settings are stored in memory
- Vertical mixing with shake mode

Telemodul 40 C



The Telemodul 40 C controller offers all the functionality of the Telemodul 20 C, with power output boosted to 40 Watts for more demanding stirring tasks.

- 10 power settings
- RS-232 interface for data transfer and PC control
- TC-IP network integration option

Telemodul External Control Units

	Telemodul	Telemodul 20 C	Telemodul 40 C
Speed Control Range (rpm)	130 – 1,000	130 – 1,400	100 – 2,000
Speed Control Accuracy (%)	± 3	± 1	± 1
Rated Power (W)	7	20	40
Stirring Power relative to Rated Power (%)	100	25/50/75/100 (4 levels)	10 – 100 (10 levels)
Stirring Times	-	5 s to 60 min	5s to 60 min
Pause Times	-	5 s to 60 min	5s to 60 min
Starting Times	-	-	-
Output Voltage (VDC)	12	20	36
Supply Voltage (VAC)	115 or 230	100 – 240	100 – 240
Ambient Temperature Range (°C)	0 to +40 @ 80% rH	0 to +40 @ 80% rH	0 to +40 @ 80% rH
Dimensions W x D x H (mm)	63 x 96 x 50	155 x 165 x 95	155 x 165 x 95
Weight (kg)	0.4	0.6	0.7

Accessory order numbers are listed on page 19.

Telemodul 10 M



Mobil 10 and Mobil 25 stirrers require the Telemodul 10 M external controller.

- Adjustable speeds from 100 to 1,000 rpm
- Automatic start-up for safe stirrer acceleration

Telemodul 40 M



The powerful Telemodul 40 M controller equips Mobil 200 and Mobil 600 stirrers for the most demanding mixing tasks.

- Adjustable speeds from 100 to 1,000 rpm
- Constant speeds, even during viscosity changes
- High-visibility digital display
- Adjustable start-up times
- Thermal and electrical overload protection, with fault alert

Telemodul 80 M



The Telemodul 80 M controller offers all the functionality of the Telemodul 40 M, with power output boosted to 80 Watts for more demanding stirring tasks.

- Adjustable speeds from 100 to 1,000 rpm
- Constant speeds, even during viscosity changes
- High-visibility digital display
- Adjustable start-up times
- Thermal and electrical overload protection, with fault alert

Biomodul 40 B



Biosystem and Biosystem 4 stirrers require the Biomodul 40 B control unit.

- Adjustable speeds from 5 to 120 rpm
- High-visibility digital display
- High power settings for viscous media
- Adjustable stirring and pause times with rotation sense inversion
- Enables synchronized operation of two stirring drives

Telemodul External Control Units

	Telemodul 10 M	Telemodul 40 M	Telemodul 80 M	Biomodul 40 B
Speed Control Range (rpm)	100 – 1,000	100 – 1,000	100 – 1,000	5 – 120
Speed Control Accuracy (%)	± 1	± 1	± 1	± 1
Rated Power (W)	10	40	80	4 – 40
Stirring Power relative to Rated Power (%)	100	-	-	-
Stirring Times	-	5 s to 60 min or continuous	5 s to 60 min or continuous	-
Pause Times	-	-	-	-
Starting Times	-	5 s to 60 s	5 s to 60 s	-
Output Voltage (VDC)	12	30	30	30
Supply Voltage (VAC)	115 or 230	115 or 230	115 or 230	115 or 230
Ambient Temperature Range (°C)	0 to +40 @ 80% rH	0 to +40 @ 80% rH	0 to +40 @ 80% rH	0 to +40 @ 80% rH
Dimensions W x D x H (mm)	63 x 96 x 50	180 x 180 x 70	180 x 180 x 70	255 x 180 x 90
Weight (kg)	0.5	3.5	4.0	3.5

Accessory order numbers are listed on page 19.

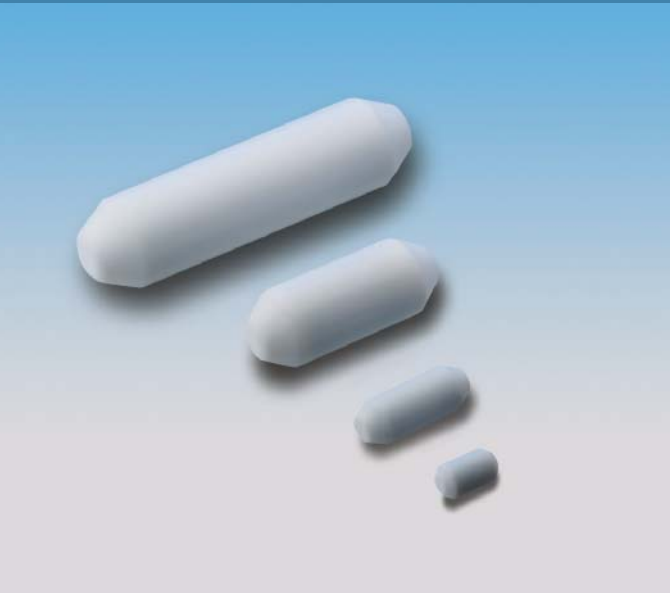
Accessories

*uniquely powerful
Komet magnetic
stirring bars*

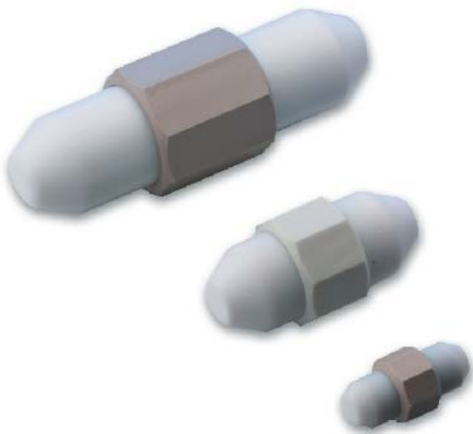
Up to three times the torque of conventional bars

Thermo Scientific Variomag Super-strong Komet Magnetic Stirring Bars

- High energy Samarium-Cobalt (SmCo) magnetic core
- Superior mixing action at high speeds, and with viscous media
- Evenly coated PTFE surface prevents residue deposits
- Steam sterilizable to 121°C
- Long-life stirring bars with wear-resistant glide ring
- Significantly enhanced stirrer performance and applications versatility



Standard Komet stirring bars are available in four different sizes.



Our Komet glide-ring stirring bars offer highest wear resistance.

Komet Magnetic Stirring Bars

Model	Shape	Diameter (mm)	Length (mm)
Komet 90, 1 pack	Round	25	90
Komet 50, 1 pack	Round	21	50
Komet 30, 5 pack	Round	13	30
Komet 15, 5 pack	Round	9	15
Komet Glide-Ring 90, 1 pack	Round, with glide ring	31	90
Komet Glide-Ring 50, 1 pack	Round, with glide ring	26	50
Komet Glide-Ring 30, 1 pack	Round, with glide ring	17	30

Accessory order numbers are listed on page 19.

**For Mini,
Micro,
Compact and
Maxi Series
Stirrers**

Benchtop Distributors

Benchtop distributors ensure identical operating conditions for multiple stirrer installations.

- Simultaneous control of 2, 4, 6 or 8 Mini, Micro or Compact Series stirrers using a single Telemodul 20 C or 40 C external controller
- Simultaneous control of 4 Maxi Series stirrers using a single Telemodul 20 C or 40 C external controller
- Even power distribution for synchronized stirring

Description	Catalog No.
4-Fold Distributor	50091720
8-Fold Distributor	50091721



Bath Mounts

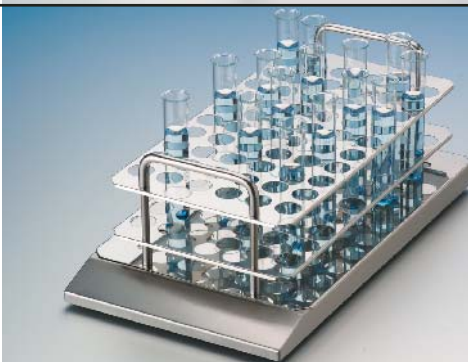
Description	Dimensions W x D x H (mm)	Bath Volume (L)	Operating Temperature (°C)	Catalog No.
Transparent Acrylic Bath Mount	330 x 610 x 185	15	0 to +60	50087880
Stainless Steel Bath Mount	315 x 520 x 160	15	-10 to +200	50087882



Test Tube Racks

Stainless steel test tube racks ensure that test tubes are precisely centred over stirring points.

Description	Tube Capacity	Catalog No.
Rack for 25 mm Ø tubes	60	50087955
Rack for 20 mm Ø tubes	60	50087957
Rack for 16 mm Ø tubes	60	50087960



Thermostats

Our thermostats are equipped with a circulation pump and digital temperature display.

Description	Catalog No.
Thermostat 60° C, 230 V	50087884
Thermostat 95° C, 230 V	50087875



**Extension
Cables**

Description	Dimensions L (m)	Catalog No.
4-Pin Extension Cable	3	50088016
6-Pin Extension Cable	3	50088021
8-Pin Extension Cable	3	50088102

Equipment order numbers are listed on pages 18 to 19.

Ordering Information

Description	Catalog No.
Variomag Mono Direct, with power supply, 230 V	50094711
Variomag Mono Direct, with power supply, 230 V Australia	50097289
Variomag Mono Direct, with power supply, 100 V Japan	50095921
Variomag Mono Direct, with power supply, 230 V UK	50096203
Variomag Mono Direct, with power supply, 115 V USA	50095601
Variomag Maxi Direct, with power supply, 100-240 V	50094713
Variomag Poly 15, with power supply, 100-240 V	50094596
Variomag Multipoint 6, with power supply, 100-240 V	50093557
Variomag Multipoint 15, with power supply, 100-240 V	50093538
Variomag Mini, with Telemodul, 230 V	50088130
Variomag Mini, with Telemodul, 100 V Japan	50088126
Variomag Mini, with Telemodul, 115 V USA	50088118
Variomag Mini, with Telemodul, 230 V UK	50088132
Variomag Mini 20, with Telemodul 20 C, 100-240 V	50088120
Variomag Micro, with Telemodul, 230 V	50088162
Variomag Micro, with Telemodul, 230 V Australia	50088155
Variomag Micro, with Telemodul, 100 V Japan	50088149
Variomag Micro, with Telemodul, 230 V UK	50088151
Variomag Micro, with Telemodul, 115 V USA	50088150
Variomag Micro 20, with Telemodul 20 C, 100-240 V	50088148
Variomag Telesystem 06.07, with Telemodul, 230 V	50088091
Variomag Telesystem 06.07, with Telemodul, 100 V Japan	50101997
Variomag Telesystem 06.07, with Telemodul, 230 V UK	50088074
Variomag Telesystem 06.07, with Telemodul, 115 V USA	50088075
Variomag Telesystem 06.20, with Telemodul 20 C	50088077
Variomag Telesystem 06.40, with Telemodul 40 C	50088078
Variomag Telesystem 15.07, with Telemodul, 230 V	50088030
Variomag Telesystem 15.07, with Telemodul, 230 V Australia	50094112
Variomag Telesystem 15.07, with Telemodul, 100 V Japan	50101978
Variomag Telesystem 15.07, with Telemodul, 230 V UK	50088031
Variomag Telesystem 15.07, with Telemodul, 115 V USA	50088033
Variomag Telesystem 15.20, with Telemodul 20 C	50088034
Variomag Telesystem 15.40, with Telemodul 40 C	50088036
Variomag Telesystem 60.07, with Telemodul, 230 V	50088025
Variomag Telesystem 60.07, with Telemodul, 100 V Japan	50101981
Variomag Telesystem 60.07, with Telemodul, 230 V UK	50088027
Variomag Telesystem 60.07, with Telemodul, 115 V USA	50088017
Variomag Telesystem 60.20, with Telemodul 20 C	50088009
Variomag Telesystem 60.40, with Telemodul 40 C	50088011

Description	Catalog No.
Variomag Compact, with Telemodul, 230 V	50088152
Variomag Compact, with Telemodul, 230 V Australia	50094111
Variomag Compact, with Telemodul, 100 V Japan	50088154
Variomag Compact, with Telemodul, 230 V UK	50088153
Variomag Compact, with Telemodul, 115 V USA	50088142
Variomag Compact 20, with Telemodul 20 C, 100-240 V	50088133
Variomag Maxi, with Telemodul, 230 V	50088143
Variomag Maxi, with Telemodul, 100 V Japan	50088146
Variomag Maxi, with Telemodul, 230 V UK	50088145
Variomag Maxi, with Telemodul, 115 V USA	50088147
Variomag Maxi 20, with Telemodul 20 C, 100-240 V	50088135
Variomag Maxi 40, with Telemodul 40 C, 100-240 V	50088122
Variomag Mobil Direct, with power supply, 230 V	50088128
Variomag Mobil Direct, with power supply, 115 V USA	50088131
Variomag Mobil Direct, with power supply, 100 V Japan	50088129
Variomag Mobil Direct, with power supply, 230 V UK	50100547
Variomag Mobil 200, without controller	50088125
Variomag Mobil 600, without controller	50088112
Variomag Mobil 10, without controller	50100440
Variomag Mobil 25, without controller	50100441
Variomag Power Direct, with power supply, 100 - 240 V	50098760
Variomag Biosystem Direct, with power supply, 230 V	50088071
Variomag Biosystem Direct, with power supply, 230 V Australia	50088064
Variomag Biosystem Direct, with power supply, 100 V Japan	50101524
Variomag Biosystem Direct, with power supply, 230 V UK	50088057
Variomag Biosystem Direct, with power supply, 115 V USA	50088058
Variomag Biosystem 4 Direct, with power supply, 100-240 V	50088061
Variomag Biosystem, without controller	50088068
Variomag Biosystem 4, without controller	50088059



Multipoint 15 inductive-drive stirrers feature up to 15 stirring points for beakers and flasks. They provide smooth stirring, even at low speeds.

Stirring Bath Systems

Description	Catalog No.
Variomag Telesystem 06.20, with Telemodul 20 C controller, transparent bath mount and thermostat, 230 V	50088081
Variomag Telesystem 06.20, with Telemodul 20 C controller, transparent bath mount and thermostat, 115 V USA	50088049
Variomag Telesystem 06.40, with Telemodul 40 C controller, transparent bath mount and thermostat, 230 V	50088052
Variomag Telesystem 06.40, with Telemodul 40 C controller, transparent bath mount and thermostat, 115 V USA	50088054
Variomag Telesystem 15.20, with Telemodul 20 C controller, transparent bath mount and thermostat, 230 V	50088040
Variomag Telesystem 15.20, with Telemodul 20 C controller, transparent bath mount and thermostat, 115 V USA	50088042
Variomag Telesystem 15.40, with Telemodul 40 C controller, transparent bath mount and thermostat, 230 V	50088044
Variomag Telesystem 15.40, with Telemodul 40 C controller, transparent bath mount and thermostat, 115 V USA	50088045
Variomag Telesystem 60.20, with Telemodul 20 C controller, transparent bath mount and thermostat, 230 V	50088028
Variomag Telesystem 60.20, with Telemodul 20 C controller, transparent bath mount and thermostat, 115 V USA	50088032
Variomag Telesystem 60.40, with Telemodul 40 C controller, transparent bath mount and thermostat, 230 V	50088035
Variomag Telesystem 60.40, with Telemodul 40 C controller, transparent bath mount and thermostat, 115 V USA	50088019

Ordering Information for Accessories

Description	Catalog No.
Variomag Telemodul Control Unit, 230 V	50087966
Variomag Telemodul Control Unit, 230 V Australia	50087967
Variomag Telemodul Control Unit, 100 V Japan	50087969
Variomag Telemodul Control Unit, 230 V UK	50087968
Variomag Telemodul Control Unit, 115 V USA	50087970
Variomag Telemodul 20 C Control Unit, 100-240 V	50090773
Variomag Telemodul 40 C Control Unit, 100-240 V	50090774
Variomag Telemodul 10 M Control Unit, 230 V	50100442
Variomag Telemodul 10 M Control Unit, 115 V USA	50101107
Variomag Telemodul 40 M Control Unit, 230 V	50087956
Variomag Telemodul 40 M Control Unit, 110 V Japan	50087958
Variomag Telemodul 40 M Control Unit, 115 V USA	50087959
Variomag Telemodul 80 M Control Unit, 230 V	50087961
Variomag Telemodul 80 M Control Unit, 100 V Japan	50087950
Variomag Telemodul 80 M Control Unit, 115 V USA	50087939
Variomag Biomodul 40 B Control Unit, 230 V	50087910
Variomag Biomodul 40 B Control Unit, 115 V USA	50087904

Description	Catalog No.
Komet 90 Stirring Bar, 1 pack	50087902
Komet 50 Stirring Bar, 1 pack	50087909
Komet 30 Stirring Bar, 5 pack	50087930
Komet 15 Stirring Bar, 5 pack	50087924
Komet Glide-Ring 90, 1 pack	50093336
Komet Glide-Ring 50, 1 pack	50093335
Komet Glide-Ring 30, 1 pack	50093334



Stirring bath systems include a Telesystem stirring drive, Telemodul controller, transparent bath mount, and a thermostat with a circulation pump and digital temperature display.

About Thermo Fisher Scientific

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