

LABSOLUTIONS



STIRRING LINE

**MAGNETIC
STIRRERS**

**HEATING
MAGNETIC
STIRRERS**
ALUMINUM TOP
CERAMIC TOP

THERMOREGULATORS

HEATING PLATES
ALUMINUM TOP
CERAMIC TOP

**OVERHEAD
STIRRERS**

**VORTEX
MIXERS/SHAKERS**

HOMOGENIZER

MAGNETIC STIRRERS

MAGNETIC STIRRERS

Specially designed for chemical, biotechnological, pharmaceutical, microbiological and medical applications such as growing microorganisms, dissolving nutrients and solids and preventing suspended matter from settling during titration. VELP Scientifica's magnetic stirrers offer solutions for diversified laboratory applications and the **highest safety standards** available on the market, with sample volumes ranging from 250 ml to 25 liters.

MST

The **MST** magnetic stirrer with ABS structure is a **small, simple** and **efficient** stirrer. Extremely useful where a small but **reliable** instrument is needed, the white surface makes it particularly suitable for microtitrations. The MST magnetic stirrer **remains cold** even after several days of continuous use, a feature that is highly appreciated in microbiology and biochemistry.

Electronic speed regulation: up to 1100 rpm
Stirring volume (H₂O): up to 5 L

UK and AU adapter plugs are available on request.

INSTRUMENT	POWER SUPPLY	CODE No
MST	100÷240 V / 50-60 Hz	F203A0440



MST Digital

The **MST Digital** is a small magnetic stirrer equipped with a bright **digital display** to set the stirring speed. It has outstanding chemical resistance, is ideal for microtitration stirrings and is extremely useful in a great variety of application including microbiology, biochemistry and BOD analysis. The **SpeedServo™** ensures constant speed, counter reacting to viscosity changes, and the **auto-reverse** ensures enhanced mixing. The MST Digital remains cold even after several hours of continuous working. It is the perfect solution for every laboratory ensuring versatility and a compact design.

On board **timer** for unattended operations
Electronic speed regulation: up to 1500 rpm
Stirring volume (H₂O): up to 5 L

UK and AU adapter plugs are available on request.

INSTRUMENT	POWER SUPPLY	CODE No
MST Digital	100÷240 V / 50-60 Hz	F203A0450



MICROSTIRRER

The **MICROSTIRRER** is a small and efficient magnetic stirrer specially designed for Microtitration with epoxy painted **metal structure** resistant to chemicals.

Electronic speed regulation: up to 1100 rpm
Stirring volume (H₂O): up to 5 L

INSTRUMENT	POWER SUPPLY	CODE No
MICROSTIRRER	100÷240 V / 50-60 Hz	F203A0161



ESP

The **ESP** is a **maintainance-free ultraflat** magnetic stirrer with no moving mechanical components. The stirring consist of coils that induce a rotating magnetic field. High resistance to chemicals.

Electronic speed regulation: up to 1100 rpm
Stirring volume (H₂O): up to 5 L

INSTRUMENT	POWER SUPPLY	CODE No
ESP	100÷240 V / 50-60 Hz	F206A0179



MULTISTIRRER

The **MULTISTIRRER** is multi-position magnetic stirrer available in 6 or 15 positions for beakers with a maximum diameter of 85 mm and 64 mm, respectively. The MULTISTIRRER **remains cold** even after several days of continuous operation and is ideal for thermostating the samples when used with a recirculating water bath.

Electronic speed regulation: from 80 to 1500 rpm
SpeedServo™ : constant speed even when the viscosity changes

MULTISTIRRER 6

Stirring volume (H₂O): up to 400 ml per position
Distance between stirring position centres: 100 mm

MULTISTIRRER 15

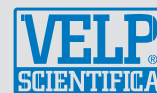
Stirring volume (H₂O): up to 250 ml per position
Distance between stirring position centres: 74 mm

UK and AU adapter adapter plugs are available on request.

INSTRUMENT	POWER SUPPLY	CODE No
MULTISTIRRER 6	100÷240 V / 50-60 Hz	F203A0177
MULTISTIRRER 15	100÷240 V / 50-60 Hz	F203A0178



MULTISTIRRER DIGITAL



The **MULTISTIRRER Digital** provides synchronized stirring on 6 or 15 samples. A **digital display** ensures a precise setting of stirring speed, constantly. One of its most appreciated features, in microbiology and biochemistry, is that it **remains cold**. Its versatility is extended by the possibility to be combined with a recirculating water bath to thermostat the samples.

Electronic speed regulation: from 80 to 1500 rpm
SpeedServo™ : constant speed even when the viscosity changes
Adjustable auto-reverse function ensures enhanced mixing
On board timer for unattended operations

MULTISTIRRER 6 Digital

Stirring volume (H₂O): up to 400 ml per position
Distance between stirring position centres: 100 mm

MULTISTIRRER 15 Digital

Stirring volume (H₂O): up to 250 ml per position
Distance between stirring position centres: 74 mm

UK and AU adapter adapter plugs are available on request.

INSTRUMENT	POWER SUPPLY	CODE No
MULTISTIRRER 6 Digital	100÷240 V / 50-60 Hz	F203A0179
MULTISTIRRER 15 Digital	100÷240 V / 50-60 Hz	F203A0180



AGE AND ATE

AGE and ATE are highly resistant magnetic stirrers with epoxy painted metal structure.

Electronic speed regulation: up to 1200 rpm
Stirring volume (H₂O): up to 8 L

INSTRUMENT	POWER SUPPLY	CODE No
AGE	230 V / 50 Hz	F20320164
AGE	230 V / 60 Hz	F20330164
AGE	115 V / 60 Hz	F20340164



Electronic speed regulation: up to 1200 rpm
Stirring volume (H₂O): up to 25 L

INSTRUMENT	POWER SUPPLY	CODE No
ATE	230 V / 50-60 Hz	F20300165
ATE	115 V / 50-60 Hz	F20310165



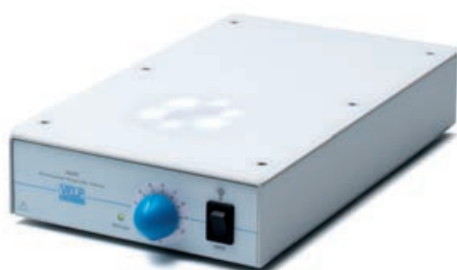
AMI

The **AMI** is an **illuminated** single-position magnetic stirrer particularly useful for titrations where **optimum lighting conditions** are needed in order to identify the colorimetric end point. It is especially recommended for titrations that have slight color changes.

Electronic speed regulation: up to 1100 rpm
Stirring volume (H₂O): up to 5 L

UK and AU adapter adapter plugs are available on request.

INSTRUMENT	POWER SUPPLY	CODE No
AMI	100÷240 V / 50-60 Hz	F204A0167



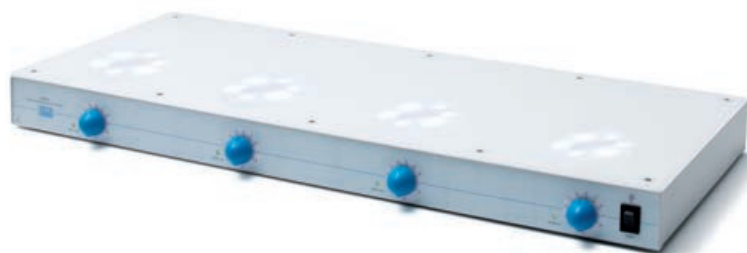
AMI 4

The **AMI 4** is an **illuminated** magnetic stirrer with 4 separately controlled positions. It is particularly useful for titrations where **optimum lighting conditions** are needed in order to identify the colorimetric end point. It is especially recommended for titrations that have slight color changes.

Electronic speed regulation: up to 1100 rpm
Stirring volume (H₂O): up to 5 L per position
Distance between stirring position centres: 150 mm

UK and AU adapter adapter plugs are available on request.

INSTRUMENT	POWER SUPPLY	CODE No
AMI 4	100÷240 V / 50-60 Hz	F204A0168



	STIRRING SPEED rpm	STIRRING VOLUME L	DIMENSIONS (WxHxD) mm (in)	WEIGHT Kg (lb)	POWER SUPPLY	POWER
MST	up to 1100	up to 5	120x50x145 (4.7x1.97x5.7)	0.4 (0.9)	100÷240 V	0.6 W
MST Digital	up to 1500	up to 5	120x50x145 (4.7x1.97x5.7)	0.6 (1.3)	100÷240 V	0.6 W
MICROSTIRRER	up to 1100	up to 5	120x48x128 (4.7x1.9x5.0)	0.55 (1.1)	100÷240 V	0.6 W
ESP	up to 1100	up to 5	160x33x230 (6.3x1.3x9.0)	0.9 (2.0)	100÷240 V	5W
AGE	up to 1200	up to 8	171x75x190 (6.7x2.9x7.5)	1.8 (4.0)	115 or 230 V	40 W
ATE	up to 1200	up to 25	250x120x285 (9.8x4.7x11.2)	3.7 (8.1)	115 or 230 V	15 W
MULTISTIRRER	from 80 to 1500	up to 0.4 (x 6) / 0.25 (x 15)	230x51.5x370 (9.0x2.0x14.5)	1.75 (3.8) / 2.1 (4.6)	100÷240 V	3.6 / 9 W
MULTISTIRRER Digital	from 80 to 1500	up to 0.4 (x 6) / 0.25 (x 15)	230x51.5x370 (9.0x2.0x14.5)	1.75 (3.8) / 2.1 (4.6)	100÷240 V	3.6 / 9 W
AMI	up to 1100	up to 5	150x55x270 (5.9x2.2x10.6)	1.2 (2.6)	100÷240 V	1.2 W
AMI 4	up to 1100	up to 5 (x 4 pos.)	600x55x270 (23.6x2.2x10.6)	4 (8.8)	100÷240 V	4.8 W

MST, MST DIGITAL, MICROSTIRRER, ESP, AGE, ATE, MULTISTIRRER, MULTISTIRRER DIGITAL, AMI, AMI4 ACCESSORIES

INTERCHANGEABLE PLUGS	CODE No
UK plug	10003084 *
Australian plug	10003085 *

* for MST, MST Digital, MICROSTIRRER, MULTISTIRRER, MULTISTIRRER Digital, AMI, AMI4 and ESP

OPTIONAL ACCESSORIES	CODE No
Magnetic stir bar, Ø 6x20 mm	A00001057 *
Magnetic stir bar, Ø 6x35 mm	A00001056 **
Magnetic stir bar, Ø 9.5x60 mm	A00001061 ***
Magnetic stir bar, Ø 8x40 mm	A00000356 ****
Thermostatic bath for samples, 408x240x85 mm	A00001055 *****

* for MST, MST Digital, MICROSTIRRER, AGE, MULTISTIRRER, MULTISTIRRER Digital, AMI and AMI4; ** for MST, MST Digital, MICROSTIRRER, AGE, ATE, MULTISTIRRER, MULTISTIRRER Digital, AMI and AMI4; *** ATE only; **** ESP only; ***** for MULTISTIRRER, MULTISTIRRER Digital

HEATING MAGNETIC STIRRERS



ALUMINUM ROUND TOP - Ø 135 mm

VELP Scientifica offers a wide range of heating magnetic stirrers with aluminum top. Aluminum top ensures **excellent conductivity** and **temperature homogeneity** and **good resistance to chemicals**. As always VELP Scientifica ensures the **most advanced safety standards**.

Aluminum Alloy, Premium Material and Excellent Heat Transfer

Aluminum alloy top plate ensures outstanding temperature homogeneity and CerAlTop™ ensures enhanced chemical resistance.

User Friendly Interface

Both the analog and digital user interface ensure the clear redout of the working conditions.

Powerful Magnet

The Alnico magnet guarantees enhanced performance and leading magnetic coupling.

Advanced Thermoregulation

Extremely precise temperature control of the sample and the plate.

ARE-6

The ARE-6 is a versatile hot plate stirrer, widely used in worldwide laboratories. It has an aluminum alloy heating plate ensuring **uniform heat distribution and excellent temperature homogeneity**.

The ARE-6 has the most advanced features in terms of safety. The **Illuminated Safety Heating Switch** prevents unintentional activation of the temperature, and the **hot top illuminated icon** informs that the plate temperature is above 50°C preventing unintentional burnings.

The ARE-6 is IP 42 certified and the resistant die-cast housing ensures high protection of the internal parts from potential damages.

Powerful Brushless Motor

Alnico Magnet for superior magnetic coupling

Electronic speed regulation: up to 1700 rpm

Stirring volume (H₂O): up to 20 L

Temperature: up to 370 °C

SpeedServo™: constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
ARE-6	230 V / 50-60 Hz	F20500462
ARE-6	115 V / 60 Hz	F20510462



ARE-6 ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Protective cover ARE/ALEX-6 series	A00000335
Magnetic stir bar, Ø 3x6 mm	A00001062
Magnetic stir bar, Ø 4.5x12 mm	A00001063
Magnetic stir bar, Ø 6x20 mm	A00001057
Magnetic stir bar, Ø 6x35 mm	A00001056
Magnetic stir bar, Ø 8x40 mm	A00000356
Magnetic stir bar, Ø 10x60 mm	A00001061
Magnetic cross shape stir bar, Ø 10x5 mm	A00000336
Magnetic cross shape stir bar, Ø 20x8 mm	A00000352
Magnetic disc stir bar, Ø 10x6 mm	A00000354
Magnetic disc stir bar, Ø 20x10 mm	A00000355
Magnetic octagonal stir bar, Ø 10x13 mm	A00000357
Support rod	A00001069
Extension for support rod ARE - ALEX	A00000382

AREX-6

The AREX-6 is a safe and powerful ceramic coated aluminum (CerAlTop™) hot plate stirrer, with PID software controlled thermoregulation for fast, accurate and stable temperature control.

The connection for VTF and VTF EVO external digital thermoregulators ensures direct temperature control of the sample with 0,5 °C accuracy.

The AREX-6 has an independent **illuminated safety heating switch** which prevents unintentional activation of the temperature, and a **hot top illuminated icon** which informs that the plate temperature is above 50°C preventing unintentional burnings.

The AREX-6 is **IP 42** certified, the resistant die-cast housing and the run-off groove ensures high protection of the internal parts from potential damages.

Powerful Brushless Motor
 Alnico Magnet for superior magnetic coupling
 Electronic speed regulation: up to 1700 rpm
 Stirring volume (H₂O): up to 20 L
 Temperature: up to 370 °C
 SpeedServo™: constant speed even when the viscosity changes



INSTRUMENT	POWER SUPPLY	CODE No
AREX-6	230 V / 50-60 Hz	F20500463
AREX-6	115 V / 60 Hz	F20510463
AREX-6 with VTF - Package	230 V / 50-60 Hz	SA20500463*
AREX-6 with VTF - Package	115 V / 60 Hz	SA20510463*
AREX-6 with VTF EVO - Package	230 V / 50-60 Hz	SB20500463**
AREX-6 with VTF EVO - Package	115 V / 60 Hz	SB20510463**

* Support Rod Included

** Support Rod and Wireless DataBox™ Included



AREX-6 with VTF EVO

AREX-6 ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Protective cover ARE/AREX-6 series	A00000335
Magnetic stir bar, Ø 3x6 mm	A00001062
Magnetic stir bar, Ø 4.5x12 mm	A00001063
Magnetic stir bar, Ø 6x20 mm	A00001057
Magnetic stir bar, Ø 6x35 mm	A00001056
Magnetic stir bar, Ø 8x40 mm	A00000356
Magnetic stir bar, Ø 10x60 mm	A00001061
Magnetic cross shape stir bar, Ø 10x5 mm	A00000336
Magnetic cross shape stir bar, Ø 20x8 mm	A00000352
Magnetic disc stir bar, Ø 10x6 mm	A00000354
Magnetic disc stir bar, Ø 20x10 mm	A00000355
Magnetic octagonal stir bar, Ø 10x13 mm	A00000357
Support rod	A00001069
VTF Digital Thermoregulator	F208B0063
VTF EVO Digital Thermoregulator with wireless DataBox™	SA208B0064
VTF EVO Digital Thermoregulator	F208B0064
Extension for support rod ARE - AREX	A00000382

AREX-6 DIGITAL AND AREX-6 DIGITAL PRO



The AREX-6 Digital and Digital PRO guarantee superior heating & mixing performance and absolute safety. The AREX-6 Digital and Digital PRO are provided with two independent safety circuits that switch-off the heat preventing possible hazard in all cases of overtemperature.

The **CerAlTop™** plate of ceramic coated aluminum alloy offers high resistance to scratches and chemical corrosion.

Best in class thermoregulation extremely stable, fast and with minimal overshoot thanks to the powerful PID thermoregulation software. The AREX-6 Digital PRO have connection for **VTF**, **VTF EVO** and **Pt100 Probe** for extremely precise and accurate control of the temperature of the medium ($\pm 0,5$ °C with VTF/VTF EVO and ± 1 °C with Pt100). The AREX-6 Digital can be combined with the Pt 100 probe.

The AREX-6 Digital and Digital PRO come with the exclusive **integrated timer** for unattended operations and the **auto-reverse option** to enhance the kinetics by changing the stirring direction.

Powerful Brushless Motor
Alnico Magnet for superior magnetic coupling
Electronic speed regulation: up to 1700 rpm
Stirring volume (H₂O): up to 20 L
Temperature: up to 370 °C
SpeedServo™: constant speed even when the viscosity changes

AREX-6 Digital with Probe



AREX-6 Digital PRO with VTF



INSTRUMENT	POWER SUPPLY	CODE No
AREX-6 Digital with Probe Package	230 V / 50-60 Hz	SA20500461
AREX-6 Digital with Probe Package	115 V / 60 Hz	SA20510461
AREX-6 Digital with Probe, Rod and clamp - Package	230 V / 50-60 Hz	SB20500461
AREX-6 Digital with Probe, Rod and clamp - Package	115 V / 60 Hz	SB20510461
AREX-6 Digital PRO with VTF Package	230 V / 50-60 Hz	SB20500460*
AREX-6 Digital PRO with VTF Package	115 V / 60 Hz	SB20510460*
AREX-6 Digital PRO with VTF EVO - Package	230 V / 50-60 Hz	SC20500460**
AREX-6 Digital PRO with VTF EVO - Package	115 V / 60 Hz	SC20510460**

*Support Rod Included
**Support Rod and Wireless DataBox™ Included



	HEATING PLATE	HEATING PLATE DIMENSIONS mm (in)	STIRRING SPEED rpm	STIRRING VOLUME L	TEMPERATURE REGULATION °C	DIMENSIONS (WxHxD) mm (in)	WEIGHT Kg (lb)	POWER SUPPLY	POWER
ARE-6	Aluminum Alloy	135 (5.3)	Up to 1700	Up to 20	Room temp. 370 °C	160x105x280 (6.5x4.1x11)	2.6 Kg (5.7 lb)	115 or 230 V	630 W
AREX-6	CerAlTop™	135 (5.3)	Up to 1700	Up to 20	Room temp. 370 °C	160x105x280 (6.5x4.1x11)	2.6 Kg (5.7 lb)	115 or 230 V	630 W
AREX-6 DIGITAL	CerAlTop™	135 (5.3)	Up to 1700	Up to 20	Room temp. 370 °C	160x105x280 (6.5x4.1x11)	2.6 Kg (5.7 lb)	115 or 230 V	630 W
AREX-6 DIGITAL PRO	CerAlTop™	135 (5.3)	Up to 1700	Up to 20	Room temp. 370 °C	160x105x280 (6.5x4.1x11)	2.6 Kg (5.7 lb)	115 or 230 V	630 W

AREX-6 DIGITAL, DIGITAL PRO ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Protective cover ARE/AREX-6 series	A00000335
Magnetic stir bar, Ø 3x6 mm	A00001062
Magnetic stir bar, Ø 4.5x12 mm	A00001063
Magnetic stir bar, Ø 6x20 mm	A00001057
Magnetic stir bar, Ø 6x35 mm	A00001056
Magnetic stir bar, Ø 8x40 mm	A00000356
Magnetic stir bar, Ø 10x60 mm	A00001061
Magnetic cross shape stir bar, Ø10x5 mm	A00000336
Magnetic cross shape stir bar, Ø20x8 mm	A00000352
Magnetic disc stir bar, Ø10x6 mm	A00000354
Magnetic disc stir bar, Ø20x10 mm	A00000355
Magnetic octagonal stir bar, Ø10x13 mm	A00000357
Support rod	A00001069
VTF Digital Thermoregulator	F208B0063
VTF EVO Digital Thermoregulator	F208B0064
VTF EVO Digital Thermoregulator with wireless DataBox™	SA208B0064
Temperature Probe AISI 316 Ti Ø3 mm	A00000268
Temperature Probe glass-coated Ø5 mm	A00000349
Extension for support rod ARE - AREX	A00000382

ACCESSORIES FOR ALUMINUM ROUND TOP PLATE Ø 135 mm

ALUBLOCKS™

The new MonoAluBlock™ and MultiAluBlock™ permits to perform numerous reactions, reducing time and bench space achieving the highest stirring and heating performances.

- **MonoAluBlock™** are the ideal solution for all the applications that require to stir multiple vials of the same dimensions.
- **MultiAluBlock™** consists of small combinable segments which can accommodate different sizes of vials at the same time. The user can select the most suitable mix for his application.



OPTIONAL ACCESSORIES

CODE No

MultiAluBlock™ Base	A00000323
MultiAluBlock™ 4 pos. Ø 28xh.43 mm	A00000324
MultiAluBlock™ 4 pos. Ø 28xh.30 mm	A00000325
MultiAluBlock™ 4 pos. Ø 28xh.24 mm	A00000326
MultiAluBlock™ 4 pos. Ø 21xh.31 mm	A00000327
MultiAluBlock™ 8 pos. Ø 17xh.26 mm	A00000328
MultiAluBlock™ 11 pos. Ø 15xh.20 mm	A00000329

MultiAluBlock™ 11 pos. Ø 12xh.14 mm	A00000337
MonoAluBlock™ 17 pos. Ø 28xh.43 mm	A00000340
MonoAluBlock™ 17 pos. Ø 28xh.30 mm	A00000339
MonoAluBlock™ 17 pos. Ø 28xh.24 mm	A00000338
MonoAluBlock™ 40 pos. Ø 12xh.14 mm	A00000341
Handle for AluBlock™ Removal	A00000351

HEMISPHERIC BOWLS™

The **Hemispheric Bowls** are the most suitable solution to replace oil baths and mantles in order to perform clean and safe analysis with round bottom flasks.

VELP Hemispheric Bowls precisely fit the **135 mm diameter** plate and the flask surface, ensuring the **fastest heat transfer**.



OPTIONAL ACCESSORIES

CODE No

Hemispheric bowl for 50 ml flasks	A00000330
Hemispheric bowl for 100 ml flasks	A00000331
Hemispheric bowl for 250 ml flasks	A00000332
Hemispheric bowl for 500 ml flasks	A00000333
Hemispheric bowl for 1000 ml flasks	A00000334
Hemispheric bowl 3L flasks	A00000374
Hemispheric bowl 5L flasks	A00000375
Hemispheric bowl 25 ml flasks	A00000373

PTFE Safety Cover Hemispheric Bowl 50 ml	A00000342*
PTFE Safety Cover Hemispheric Bowl 100 ml	A00000343*
PTFE Safety Cover Hemispheric Bowl 250 ml	A00000344*
PTFE Safety Cover Hemispheric Bowl 500 ml	A00000345*
PTFE Safety Cover Hemispheric Bowl 100 ml	A00000346*

*not available in USA

ALUMINUM ROUND TOP - Ø 155 mm

VELP Scientifica offers a wide range of heating magnetic stirrers with aluminum top. Aluminum top ensures **excellent conductivity** and **temperature homogeneity** and **good resistance to chemicals**. As always VELP Scientifica ensures the **most advanced safety standards**.

Optimum Heat Transfer, Premium Homogeneity

Aluminum alloy top plate ensures outstanding temperature homogeneity and optimum heat transfer across the entire surface.

Intuitive Front Panel

With temperature and speed selector; the inclination of the front panel has been carefully studied to facilitate use.

Maximum Protection

High safety standard according to IP 42; overtemperature protection and dedicated run-off groove for leakages.

Eye-catching Design, Outstanding Comfort

Innovative low profile and attractive design for maximum comfort.

ARE

The **ARE** is widely used in research and development, industrial and university laboratories worldwide. It has an aluminum alloy heating plate coated with a protective coating in order to ensure **uniform heat distribution** and **excellent resistance** to chemicals.

The ARE is **designed to last** and equipped to ensure **maximum protection** against leakages with the elevated front panel and dedicated run-off groove.

The control panel is separated from the hot plate, this feature increases the **safety** rating during use and the **durability** of the instrument. The inclination of the front panel has been carefully studied to **facilitate use**.

Electronic speed regulation: up to 1500 rpm
 Stirring volume (H₂O): up to 15 L
 Temperature: up to 370 °C
 SpeedServo™ : constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
ARE	230 V / 50-60 Hz	F20500162
ARE	115 V / 60 Hz	F20510162



AM4 AND AM4X

The **AM4** is a multiple-position heating magnetic stirrer with four separately controlled stirring plates. The **aluminum alloy heating plates** are coated with a special protective layer and ensure **uniform heat distribution** and **excellent resistance** to chemicals.

The **AM4X** is designed to be combined with **VTF Vertex digital thermoregulator**, with integrated **timer**, for a precise temperature control of the liquid up to 300 °C (± 0.5 °C).

Electronic speed regulation: up to 1500 rpm
 Stirring volume (H₂O): up to 15 L per position
 Temperature: up to 370 °C
 Distance between stirring position centres: 186 mm
 SpeedServo™ : constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
AM4	230 V / 50-60 Hz	F20600420
AM4X	230 V / 50-60 Hz	F20600421



AREX

The **AREX** has an aluminum alloy heating plate to ensure **uniform heat distribution** over the entire surface, with a **special protective white ceramic coating** that ensures easiness of cleaning and excellent resistance to chemicals, scratches and surface abrasions. This hot plate stirrer ensures **precise thermoregulation** of the heating plate as well as a high degree of **reliability** and **safety**. The AREX is **designed to last** and equipped to ensure **maximum protection** against leakages with the elevated front panel and dedicated run-off groove.

The control panel is separated from the hot plate, this feature increases the **safety** rating during use and the **durability** of the instrument.

The inclination of the front panel has been carefully studied to **facilitate use**.

The **AREX** has a socket for the connection of a **VTF/VTF EVO** Vertex digital thermoregulators for direct temperature control of the liquid.

Electronic speed regulation: up to 1500 rpm

Stirring volume (H₂O): up to 20 L

Temperature: up to 370 °C

SpeedServo™: constant speed even when the viscosity changes



INSTRUMENT	POWER SUPPLY	CODE No
AREX	230 V / 50-60 Hz	F20500413
AREX	115 V / 60 Hz	F20510413
AREX with VTF - Package	230 V / 50-60 Hz	SA20500413 *
AREX with VTF - Package	115 V / 60 Hz	SA20510413 *

* Support rod included



AREX with VTF

ALUBLOCKS™ - for Ø 155 mm plate

The **AluBlocks™** allow lab technicians to perform different heating and stirring experiments with the widest flexibility, on different types of tubes.

AluBlocks™ are made by aluminum, for an excellent heat transmission and homogeneity, they can be mixed and matched to get any combination of vessel: use different vessel types and sizes at the same time for clean, safe and reliable synthesis.

OPTIONAL ACCESSORIES	CODE No
Green AluBlock™, 4 pos., Ø 28 x h 30 mm	A00000230*
Red AluBlock™, 4 pos., Ø 21.6 x h 31.7 mm	A00000232*
Black AluBlock™, 4 pos., Ø 28 x h 24 mm	A00000231*
Orange AluBlock™, 4 pos., Ø 28 x h 43 mm	A00000229*
Blue AluBlock™, 6 pos., Ø 17.8 x h 26 mm	A00000233*
Gold AluBlock™, 11 pos., Ø 15.2 x h 20 mm	A00000234*
AluBlocks™ Base	A00000228*

*For ARE, AREX, AREX Digital and AREX Digital PRO



AREX DIGITAL AND AREX DIGITAL PRO



The AREX Digital and AREX Digital PRO are equipped with digital display to precisely set and monitor the stirring speed and the temperature.

The aluminum alloy heating plate provides uniform heat distribution over the entire surface, with a special protective white ceramic coating that ensures easiness of cleaning and excellent resistance to chemicals, scratches and surface abrasions.

The AREX Digital is designed to be combined with external probe Pt100, whilst AREX Digital PRO can even support VTF Vertex digital thermoregulator or to a temperature control probe.

VTF offers maximum performance for a perfect and precise thermoregulation up to 300 °C (± 0.5 °C) with an integrated timer, whilst with the external probe up to 250 °C (± 1.0 °C).

Electronic speed regulation: up to 1500 rpm

Stirring volume (H₂O): up to 20 L Temperature: up to 370 °C

SpeedServo™ : constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
AREX Digital with Probe - Package	230 V / 50-60 Hz	SA20500411
AREX Digital with Probe - Package	115 V / 60 Hz	SA20510411
AREX Digital PRO with VTF-Package	230 V / 50-60 Hz	SB20500410*
AREX Digital PRO with VTF-Package	115 V / 60 Hz	SB20510410*

* Support Rod included



AREX Digital with Probe



AREX Digital PRO with VTF

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	HEATING PLATE	HEATING PLATE DIMENS. mm (in)	STIRRING SPEED rpm	STIRRING VOLUME L	TEMPERATURE REGULATION °C	DIMENSIONS (WxHxD) mm (in)	WEIGHT Kg (lb)	POWER SUPPLY	POWER SUPPLY
ARE	Aluminum Alloy	155 (6.1)	Up to 1500	Up to 15	Ambient to 370 °C	166x115x280 (6.5x4.5x11.0)	2.6 (5.7)	115 or 230 V	630 W
AREX	CerAlTop™	155 (6.1)	Up to 1500	Up to 20	Ambient to 370 °C	166x115x280 (6.5x4.5x11.0)	2.7 (5.9)	115 or 230 V	630 W
AREX Digital with PROBE	CerAlTop™	155 (6.1)	Up to 1500	Up to 20	Ambient to 370 °C	166x115x280 (6.5x4.5x11.0)	2.6 (5.7)	115 or 230 V	630 W
AREX Digital PRO with VTF	CerAlTop™	155 (6.1)	Up to 1500	Up to 20	Ambient to 370 °C	166x115x280 (6.5x4.5x11.0)	2.6 (5.7)	115 or 230 V	630 W
AM4	Aluminum Alloy	155 (6.1)	Up to 1500	Up to 15 (x 4 pos.)	Ambient to 370 °C	715x115x246 (28.1x4.5x9.7)	8.6 (18.9)	230 V	2550 W

ARE, AREX, AREX Digital, AREX Digital PRO, AM4, AM4X ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Magnetic stir bar, Ø3x6 mm	A00001062***
Magnetic stir bar, Ø4,5x12 mm	A00001063***
Magnetic stir bar, Ø6x35 mm	A00001056***
Magnetic stir bar Ø8x40 mm	A00000356
Magnetic stir bar, Ø10x60 mm	A00001061
Magnetic cross shape stir bar, Ø10x5 mm	A00000336***
Magnetic cross shape stir bar, Ø20x8 mm	A00000352***
Magnetic disc stir bar, Ø10x6 mm	A00000354***
Hemispheric bowl for 50 ml flasks	A00000273
Hemispheric bowl for 100 ml flasks	A00000258

Hemispheric bowl for 250 ml flasks	A00001071
Hemispheric bowl for 500 ml flasks	A00001072
Hemispheric bowl for 1000 ml flasks	A00001073
Temperature Probe glass-coated Ø5 mm	A00000349*
Temperature Probe AISI 316 Ti Ø3 mm	A00000268*
Support rod	A00001069**
Clamp with probe support	A00000280*
VTF Digital Thermoregulator	F208B0063**
VTF EVO Digital Thermoregulator	F208B0064**
Protective cover ARE/AREX	A00000284

* for AREX Digital/PRO, ** for AREX, AREX Digital/PRO, AM4X, *** for ARE, AREX, AREX Digital/PRO

HEATING MAGNETIC STIRRERS

CERAMIC TOP

AREC Series is the first heating magnetic stirrer to have an innovative technopolymer body, ideal for **premium resistance to acids, bases and solvents**. AREC Series is **designed to last** and equipped to ensure **maximum protection** against leakages with the elevated front panel, dedicated run-off groove and the "Hot Plate Warning". The control panel is separated from the hot plate, this feature increases the **safety** rating during use and the **durability** of the instrument. The inclination of the front panel has been carefully studied to **facilitate use**.

Powerful Motor, Counter-reaction

Able to stir volumes at very high speeds; counter-reaction technology provides constant speed even when the viscosity changes.

Innovative Technopolymer Body

Technopolymer structure ensures premium resistance to acids, bases and solvents. New premium materials for innovative solutions.

Remarkable Resistance, Extremely Easy to Clean

Ceramic, which is an inert and very hard material, offers outstanding resistance to almost any type of chemical or mechanical aggression.

Intuitive Front Panel, Bright Digital Display

Repeatable and precise results; the inclination of the front panel has been carefully studied to facilitate use.

Maximum Protection, "Hot Plate Warning"

High safety standard according to IP 42; dedicated run-off groove for leakages and high temperature digital warning, that remains displayed until the plate has cooled down to 50 °C.

Eye-catching Design, Outstanding Comfort

Highly innovative low profile and attractive design for maximum comfort.

HSC

The **HSC** is an **analog hot plate stirrer** with **white a ceramic heating plate**, that ensures **excellent resistance** to chemicals and scratches and is **extremely easy to clean**.

Electronic speed regulation: up to 1300 rpm
Stirring volume (H₂O): up to 15 L
Temperature: up to 400 °C

INSTRUMENT	POWER SUPPLY	CODE No
HSC	230 V / 50-60 Hz	F20500101
HSC	115 V / 60 Hz	F20510101



AREC

The **AREC** is a **digital heating magnetic stirrer** with a **white ceramic hot plate**, that ensures **excellent resistance** to chemicals and scratches and is **extremely easy to clean**.

A microprocessor ensures constant speed even when the viscosity changes (**counter-reaction**). Microprocessor technology ensures **fast heating** and provides **precise speed and temperature setting**, as the digital display constantly shows set temperature.

The AREC has an **ergonomic and innovative design** with a **clear and bright digital display**.

Electronic speed regulation: up to 1500 rpm
Stirring volume (H₂O): up to 15 L
Temperature: up to 550 °C
SpeedServo™: constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
AREC	230 V / 50-60 Hz	F20500011
AREC	115 V / 60 Hz	F20510011



AREC.X



The AREC.X is a **digital heating magnetic stirrer** with a **white ceramic hot plate**, that ensures **excellent resistance** to chemicals and scratches and is **extremely easy to clean**. A microprocessor ensures constant speed even when the viscosity changes (**counter-reaction**). Microprocessor technology ensures **fast heating** and provides **precise speed and temperature setting**, as the digital display constantly shows set temperature. The AREC.X has an **ergonomic and innovative design** with a clear and **bright digital display**.

AREC.X can also be used **stand-alone**, or for precise thermoregulation of the liquid, it **can be connected** to **VTF/VTF EVO** Vertex digital thermoregulator or to a temperature control probe. VTF offers maximum performance for a **perfect and precise** thermoregulation up to 300 °C (± 0.5 °C) with an **integrated timer**, whilst with the external probe up to 250 °C (± 1.0 °C).

Electronic speed regulation: up to 1500 rpm
 Stirring volume (H₂O): up to 15 L
 Temperature: up to 550 °C
 SpeedServo™: constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
AREC.X	230 V / 50-60 Hz	F20500061
AREC.X	115 V / 60 Hz	F20510061
AREC.X with Probe - Package	230 V / 50-60 Hz	SA20500061
AREC.X with Probe - Package	115 V / 60 Hz	SA20510061
AREC.X with VTF - Package	230 V / 50-60 Hz	SB20500061*
AREC.X with VTF - Package	115 V / 60 Hz	SB20510061*
AREC.X with VTF EVO-Package	230 V / 50-60 Hz	SC20500061**
AREC.X with VTF EVO-Package	115V / 60 Hz	SC20510061**

* Support rod included

** Support Rod and Wireless DataBox™ included



AREC.X with Probe



AREC.X with VTF

AREC.T

The AREC.T is a **digital heating magnetic stirrer** with a **white ceramic hot plate**, that ensures **excellent resistance** to chemicals and scratches and is **extremely easy to clean**.

A microprocessor ensures constant speed even when the viscosity changes (**counter-reaction**).

Microprocessor technology ensures **fast heating** and provides **precise speed and temperature setting**, as the digital display constantly shows set temperature.

The AREC.T has an **ergonomic and innovative design** with a clear and **bright digital display**.

The digital heating magnetic stirrer AREC.T has an **integrated programmable timer** up to 999 minutes with **automatic switch off** of the heating and stirring phases.

Electronic speed regulation: up to 1500 rpm
 Stirring volume (H₂O): up to 15 L
 Temperature: up to 550 °C
 SpeedServo™: constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
AREC.T	230 V / 50-60 Hz	F20500051
AREC.T	115 V / 60 Hz	F20510051





	HEATING PLATE	HEATING PLATE DIMENSIONS mm (in)	STIRRING SPEED rpm	STIRRING VOLUME L	TEMPERATURE REGULATION °C	SPEEDSERVO™	OVERTEMP. PROTECTION	DIMENSIONS (WxHxD)	WEIGHT Kg (lb) mm (in)	POWER SUPPLY	POWER
AREC	Ceramic	180x180 (7.1x7.1)	Up to 1500	Up to 15	Ambient to 550	•	•	203x94x344 (8.0x3.7x13.5)	3.3 (7.3)	115 or 230 V	800 W
HSC	Ceramic	180x180 (7.1x7.1)	Up to 1300	Up to 15	Ambient to 400	•	•	203x94x344 (8.0x3.7x13.5)	3.3 (7.3)	115 or 230 V	800 W
AREC.X	Ceramic	180x180 (7.1x7.1)	Up to 1500	Up to 15	Ambient to 550	•	•	203x94x344 (8.0x3.7x13.5)	3.3 (7.3)	115 or 230 V	800 W
AREC.T	Ceramic	180x180 (7.1x7.1)	Up to 1500	Up to 15	Ambient to 550	•	•	203x94x344 (8.0x3.7x13.5)	3.3 (7.3)	115 or 230 V	800 W

AREC, AREC.X, AREC.T, HSC ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Hemispheric bowl for 50 ml flask	A00000273
Hemispheric bowl for 100 ml flasks	A00000258
Hemispheric bowl for 250 ml flasks	A00001071
Hemispheric bowl for 500 ml flasks	A00001072
Hemispheric bowl for 1000 ml flasks	A00001073
Magnetic stir bar, 6x35 mm	A00001056
Magnetic stir bar, 8x40 mm	A00000356

Magnetic stir bar, 10x60 mm	A00001061
VTF Vertex, digital Thermoregulator	F208B0063*
Support rod	A00001069
Clamp for PT100 probe	A00000280*
External probe for AREC.X	A00000268*
Temperature Probe AISI 316 Ti Ø3 mm	A00000268*
Temperature Probe glass-coated	A00000349*

*AREC.X only

HEATING PLATES ALUMINUM AND CERAMIC TOP

RC AND RC2

Single (**RC**) and double (**RC2**) heating plates with **temperature regulation**. The **aluminum alloy heating plates** are coated with a special protective layer that ensures **uniform heat distribution** over the entire surface and **excellent resistance** to chemicals.

Temperature: up to 370 °C

Distance between stirring position centres (RC2): 186 mm

INSTRUMENT	POWER SUPPLY	CODE No
RC	230 V / 50-60 Hz	F20700431
RC	115 V / 60 Hz	F20710431
RC2	230 V / 50-60 Hz	F20700430
RC2	115 V / 60 Hz	F20710430



REC

The **REC** is a **digital hot plate** with **white ceramic heating plate**, that ensures **excellent resistance** to chemicals and scratches and is **extremely easy to clean**. REC has an innovative technopolymer body, ideal for **premium resistance to acids, bases and solvents**. The REC is **designed to last** and equipped to ensure **maximum protection** against leakages with the elevated front panel, dedicated run-off groove and **"Hot Plate Warning"**. Microprocessor technology ensures **fast heating** and provides **precise temperature setting**.

Temperature: up to 550 °C

INSTRUMENT	POWER SUPPLY	CODE No
REC	230 V / 50-60 Hz	F20700081
REC	115 V / 60 Hz	F20710081



RC, RC2, REC ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Hemispheric bowl for 50 ml flask	A00000273
Hemispheric bowl for 100 ml flasks	A00000258
Hemispheric bowl for 250 ml flasks	A00001071
Hemispheric bowl for 500 ml flasks	A00001072
Hemispheric bowl for 1000 ml flasks	A00001073
Support Rod	A00001069*
Green AluBlock™, 4 pos., Ø 28 x h. 30 mm	A00000230**

Red AluBlock™, 4 pos., Ø 21.6 x h. 31.7 mm	A00000232**
Black AluBlock™, 4 pos., Ø 28 x h. 24 mm	A00000231**
Orange AluBlock™, 4 pos., Ø 28 x h. 43 mm	A00000229**
Blue AluBlock™, 6 pos., Ø 17.8 x h. 26 mm	A00000233**
Gold AluBlock™, 11 pos., Ø 15.2 x h. 20 mm	A00000234**
AluBlock™ Base	A00000228**

* for REC and RC
** for RC and RC2

VTF VERTEX DIGITAL THERMOREGULATOR

The **VTF** uses **Fuzzy Logic technology** and is suitable for many applications where precise thermoregulation is required. A **user-friendly** probe positioning system allows the operator to adjust the position of the probe **easily** and **quickly**. Thanks to the derivation element PW 10, the VTF can be used with all types of heating devices such as water and oil baths, heating plates, etc. The VTF Vertex comes complete with temperature probe and power cable for direct connection to the hot plate stirrers **AREX** and **AREC.X**. VTF offers the **highest standards on the market**, in terms of accuracy and performance: **perfect and precise thermoregulation** up to 300°C, with premium accuracy of ± 0.5 °C, and **exclusive timer**, which means that the thermoregulation time can be pre-set.

INSTRUMENT	POWER SUPPLY	CODE No
VTF	12 V dc	F208B0063



i GENERAL FEATURES AND PERFORMANCE

THERMOREGULATION RANGE °C	from -10 to +300°
RESOLUTION °C	0.2
ACCURACY °C	± 0.5
TIMER HH:MM	from 00:00 to 24:59
PROTECTION RATING CEI EN 60529	IP54
DIMENSIONS (WxHxD)	75x145x120 mm (3.0x5.7x4.7 in)
WEIGHT Kg (lb)	0.3 (0.7)

Not cNemkoUS certified

OPTIONAL ACCESSORIES	CODE No
Derivation element PW 10	A00000001
Probe extension cable, 1 m	A00000002
Glass probe	A00000003
Clamp for PT100 probe	A00000280
TEMPSoft™*	A00000244

* only for VTF EVO, including Wireless DataBox™ and cable

VTF EVO WIRELESS DIGITAL THERMOREGULATOR

The **VTF EVO** is a unique wireless temperature **data logging** system offering state-of-the-art technology, reliability and flexibility. Thanks to the **wireless connection** of the Vertex and the **TEMPSoft™** software is now possible to control the temperature of the sample and adjust all the temperature parameters **directly from the computer**. The operator can easily set working ramps (different time and temperature) and the desired set points with the possibility of minimum and maximum temperature alarm thresholds along with **data collection and monitoring**. The VTF EVO sends the data to the Wireless **DataBox™** that allows the communication between the VTF EVO and the PC allowing unattended operations and increasing the productivity. The VTF EVO is equipped with the VELP unique integrated system to simplify the installation on the support rod and can be used combined with the most common heating magnetic stirrers for unparalleled performance.

INSTRUMENT	POWER SUPPLY	CODE No
VTF EVO	12 V dc	F208B0064
VTF EVO with Wireless DataBox	12 V dc	SA208B0064



i GENERAL FEATURES AND PERFORMANCE

THERMOREGULATION RANGE °C	from -10 to +400°
RESOLUTION °C	0.2
ACCURACY °C	± 0.5
TIMER HH:MM	from 00:00 to 24:59
PROTECTION RATING CEI EN 60529	IP54
DIMENSIONS (WxHxD)	75x145x120 mm (3.0x5.7x4.7 in)
WEIGHT Kg (lb)	0.3 (0.7)

Not cNemkoUS certified



A00000001

A00000002

A00000003

A00000280

OVERHEAD STIRRERS

VELP Scientifica offers a complete range of overhead stirrers with a technopolymer structure, ideal for premium resistance to acids, bases and solvents. **Many reliable solutions are available, according to different requirements in terms of viscosity and volume.** All the models are equipped with a **user-friendly self-locking chuck**, that simplifies assembly and the gentle start-up ensures **optimum progression of the stirring speed**. As always VELP Scientifica ensures the **most advanced safety standards**.

ES

ES is the entry-level solution, ideal for **low volumes and low/medium viscosity**.

Electronic speed regulation: from 50 up to 1300 rpm
 Stirring volume (H₂O): up to 15 L
 Viscosity: up to 1,000 mPa*s

INSTRUMENT	POWER SUPPLY	CODE No
ES	110-230 V / 50-60 Hz	F201A0152



LS

LS offers reliable performance on **medium viscosity and low volumes**.

Electronic speed regulation: from 50 up to 2000 rpm
 Stirring volume (H₂O): up to 25 L
 Viscosity: up to 25,000 mPa*s

INSTRUMENT	POWER SUPPLY	CODE No
LS	110-230 V / 50-60 Hz	F201A0151
LS - Package	110-230 V / 50-60 Hz	SA201A0151*

* Support rod and base, double clamp and stirring shaft with fixed blade included



LH

LH offers excellent performance on **medium viscosity liquids and medium volumes**.

Electronic speed regulation: from 50 to 2000 rpm
 Stirring volume (H₂O): up to 40 L
 Viscosity: up to 50,000 mPa*s

INSTRUMENT	POWER SUPPLY	CODE No
LH	110-230 V / 50-60 Hz	F201A0156



PW

PW is suggested for **high viscosity** and it is able to process **high volumes**.

Electronic speed regulation: from 20 to 1200 rpm
 Stirring volume (H₂O): up to 70 L
 Viscosity: up to 100,000 mPa*s

INSTRUMENT	POWER SUPPLY	CODE No
PW	110-230 V / 50-60 Hz	F201A0150



DLS

The **DLS** is a digital overhead stirrer for **medium viscosity** liquids.

A bright and easy-to-read display shows current speed set speed, torque and time.

The **digital timer** offers the possibility of unattended operation.

Electronic speed regulation: from 50 up to 2000 rpm
 Stirring volume (H₂O): up to 25 L
 Viscosity: up to 25,000 mPa*s
 SpeedServo™: constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
DLS	110-230 V / 50-60 Hz	F201A0155
DLS - Package	110-230 V / 50-60 Hz	SA201A0155*

* Support rod and base, double clamp and stirring shaft with propeller included



DLH



The **DLH** is a digital overhead stirrer for **medium viscosity** liquids.

A bright and easy-to-read display shows current speed set speed, torque and time.

The **digital timer** offers the possibility of unattended operation.

Electronic speed regulation: from 50 up to 2000 rpm
 Stirring volume (H₂O): up to 40 L
 Viscosity: up to 50,000 mPa*s
 SpeedServo™: constant speed even when the viscosity changes

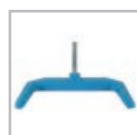
INSTRUMENT	POWER SUPPLY	CODE No
DLH	110-230 V / 50-60 Hz	F203A0179



①	STIRRING SPEED rpm	STIRRING VOLUME L	MAX. VISCOSITY mPa*s	MAX. TORQUE Ncm	MAX. SHAFT Ø THROUGH MEMBRANE mm	MAX. SHAFT Ø CHUCK mm	DIGITAL TIMER	SPEEDSERVO™	DIMENSIONS (WxHxD) mm (in)	WEIGHT Kg (lb)	POWER SUPPLY	POWER
ES	from 50 to 1300	Up to 15	1,000	15	8	10			80x160x220 (3.1x6.3x7.9)	1.3 (2.9)	110-230 V / 50-60 Hz	30 W
LS	from 50 to 2000	Up to 25	25,000	40	8	10			80x215x196 (3.1x8.5x7.7)	2.3 (5.1)	110-230 V / 50-60 Hz	120 W
DLS	from 50 to 2000	Up to 25	25,000	40	8	10	•	•	80x215x196 (3.1x8.5x7.7)	2.5 (5.5)	110-230 V / 50-60 Hz	120 W
LH	from 50 to 2000	Up to 40	50,000	80	8	10			80x230x196 (3.1x9.0x7.7)	2.9 (6.4)	110-230 V / 50-60 Hz	190 W
DLH	from 50 to 2000	Up to 40	50,000	80	8	10	•	•	80x230x196 (3.1x9.0x7.7)	3.0 (6.6)	110-230 V / 50-60 Hz	190 W
PW	from 20 to 1200	Up to 70	100,000	120	8	10			80x230x196 (3.1x9.0x7.7)	2.9 (6.4)	110-230 V / 50-60 Hz	190 W

ES, LS, DLS, LH, DLH, PW ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Support rod and base	A00001300
Double clamp	A00001301
Ribbon clamp	A00001302
H-stand with strap clamp, bosshead clam	A00000045



A00001300



A00001301



A00001302



A00000045



STIRRING SHAFTS

Stirring shaft with floating blades

Code No A00001304

Characteristics: The two blades that open as the speed rises generate an axial flow in the container, from the top towards the bottom. Particularly recommended for stirring in narrow-neck containers, e.g. flasks.



Stirring shaft with 6-hole paddle

Code No A00001308

Characteristics: It generates a tangential flow with reduced turbulence and with gentle mixing of the product.



Stirring shaft with folding blade

Code No A00001305

Characteristics: The blade that automatically falls into line during rotation generates an axial flow in the container, from the top towards the bottom. Particularly recommended for stirring in narrow-neck containers.



Stirring shaft with turbine blade

Code No A00001309

Characteristics: It generates a radial flow with suction of the product from the top towards the bottom, with high turbulence and high shearing forces.



Stirring shaft with fixed blade

Code No A00001306

Characteristics: It generates an axial flow in the container, from the top towards the bottom. Employment: Use at medium-high speed for whirling light solids, for flocculations, mixing thickening agents, stirring sludge, etc.



Stirring shaft with turbo propeller

Code No A00001310

Characteristics: It generates an axial flow in the container with suction of the substance from the top towards the bottom with low shearing forces. Limited danger of any contact of the blade with the walls of the product's container.



Stirring shaft with propeller

Code No A00001307

Characteristics: Standard stirring shaft. It generates an axial flow in the container with suction of the substance from the bottom towards the top and localized occurrence of shearing forces.



Stirring shaft with anchor

Code No A00001311

Characteristics: It generates a tangential flow with high shearing forces on the ends. The flow generated limits the possibility of sedimentation on the walls of the container.



DESCRIPTION	CODE No	BLADES NUMBER	BLADES Ø mm	SHAFT Ø mm	LENGTH OF SHAFT mm	SPEED RANGE	VISCOSITY RANGE
Stirring shaft with floating blades, stainless steel	A00001304	2	93	7	400	M-H	VL-L
Stirring shaft with folding blade, stainless steel	A00001305	1	60	7	400	M-H	VL-L
Stirring shaft with fixed blade, stainless steel	A00001306	1	50	7	400	M-H	VL-L-M
Stirring shaft with propeller, stainless steel	A00001307	3	60	7	400	M-H	VL-L-M
Stirring shaft with paddle, six holes, stainless steel	A00001308	1	69	7	450	L-M	L-M
Stirring shaft with turbine, stainless steel	A00001309	10	49	7	450	M-H	M-H
Stirring shaft with turbo propeller, stainless steel	A00001310	3	46	7	450	M-H	M-H
Stirring shaft with anchor, stainless steel	A00001311	2	45	8	450	L-M	M-H

Choosing the correct shaft

Stirring shafts must be chosen bearing in mind the stirrer power, the volume of substances to be stirred and its viscosity. The technical features and the application fields of the stirring shafts are summarized in the following tables:

SPEED RANGE	rpm
Low (L)	< 250
Medium (M)	250 – 800
High (H)	> 800

VISCOSITY RANGE	mPa*s
Very low (VL)	0 – 100
Low (L)	100 – 1,000
Medium (M)	1,000 – 10,000
High (H)	10,000 – 100,000

VISCOSITY mPa*s	SUBSTANCE
1	Water
5	Milk
10	Kerosene
100	Lubricating oil
1,000	Castor oil, Glycerine
7,000	Refined honey
25,000	Chocolate syrup
50,000	Ketchup
100,000	Molasses

VORTEX MIXERS/SHAKERS

Vortex mixers are suitable for mixing substances in any shape or size of test tube thanks to the orbital movement of the rubber cup **manual, continuous or IR sensor operating modes** in order to meet the multiple needs of every laboratory with **high safety standards**. VELP Scientifica is the first company in the world to manufacture and market the unique and **patented INFRARED vortex mixer** which uses a **special IR sensor system** to activate vibration **without the need to apply pressure**. The ergonomic and highly innovative design along with the zinc base ensure an **excellent stability** on the bench, usable on many surfaces.

RX3

The **RX3** is a **modern basic vortex mixer** that runs at a **single, fixed stirring speed in touch mode**.
RX3, a long-lasting mixer for basic mixing requirements.

Electronic speed regulation: constant, 3000 rpm
 Operating mode: touch

INSTRUMENT	POWER SUPPLY	CODE No
RX3	100÷240 V / 50-60 Hz	F202A0171



ZX3

The **ZX3** is a **modern and universal vortex mixer with variable stirring speed** and two operating modes, **touch or continuous**. The **best-seller ZX3** offers an **excellent flexibility**, thanks to the **broad range of accessories**. **Incredibly adjustable and long-lasting**, ZX3 offers **the highest performance for an excellent mixing**.

Electronic speed regulation: up to 3000 rpm
 Operating modes: touch, continuous

INSTRUMENT	POWER SUPPLY	CODE No
ZX3	100÷240 V / 50-60 Hz	F202A0176
ZX3 - Package	100÷240 V / 50-60 Hz	SA202A0176*

*A00000012, A00000013, A00000016 Included



ZX4

PATENTED

The **ZX4** is an **advanced vortex mixer with adjustable stirring speed** and two operating modes, **sensor or continuous**. Thanks to the revolutionary IR sensor mode, an **infrared system (IR) detects the presence of the test tube and the vortex mixer automatically starts vibrating! No press, No stress!**

Thanks to a **broad range of accessories**, ZX4 is ideal for many applications including mixing of many kind of tubes/containers. **Incredibly versatile, long-lasting and unique**, ZX4 offers the **highest performance for an excellent mixing**.

Electronic speed regulation: up to 3000 rpm
 Operating modes: IR sensor, continuous

INSTRUMENT	POWER SUPPLY	CODE No
ZX4	100÷240 V / 50-60 HZ	F202A0280
ZX4 - Package	80÷260 V / 50-60 Hz	SA202A0280*

* A00000012, A00000013, A00000016 included



TX4

PATENTED

The **TX4** is a **digital vortex mixer** with **adjustable stirring speed** and two operating modes, **sensor or continuous**, for an outstanding repeatability. Thanks to the revolutionary IR sensor mode, **an infrared system (IR) detects the presence of the test tube and the vortex mixer automatically starts vibrating! No press, No stress!**

Thanks to the **timer**, the user can set the operating time. The **bright display** constantly shows the most important info and ensures a **simple setting** of different parameters, such as time and speed.

Thanks to a **broad range of accessories**, TX4 is ideal for many applications including mixing of many kind of tubes/containers. **Incredibly adjustable, long-lasting and unique**, TX4 offers **the highest performance for an excellent and precise mixing**. TX4, **the state of the art vortex mixer**.

Electronic speed regulation: up to 3000 rpm
Operating modes: IR sensor, continuous

INSTRUMENT	POWER SUPPLY	CODE No
TX4	100÷240 V / 50-60 Hz	F202A0270



A00000012
ZX3, ZX4, TX4



A00000013
ZX3, ZX4, TX4



A00000014
ZX3, ZX4, TX4



A00000015
ZX3, ZX4, TX4



A00000016
for all the models



A00000017
ZX3



A00000019
ZX3, ZX4, TX4

CLASSIC

The **CLASSIC** offers the ideal solution for different mixing requirements and combines the **highest performance** ratings in terms of speed with **excellent reliability** and **safety**.

The two operating modes, the possibility to change the vibration frequency and a wide range of accessories makes this laboratory mixer the ideal solution for a large variety of needs.

Touch mode - mixing starts when a small amount of pressure is applied to the rubber cup.

Continuous mode - a wide range of accessories are available for use in continuous mode making CLASSIC the ideal solution for a large variety of needs.

A dedicated selector switch ensures maximum stability of the vortex mixer for the operating mode selected.

Its advanced performance places this laboratory mixer at the high-end of the market.

Electronic speed regulation: from 0 to 3000 rpm
Operating modes: touch, continuous

INSTRUMENT	POWER SUPPLY	CODE No
CLASSIC	100÷240 V / 50-60 Hz	F202A0173



The **WIZARD** represents a **technological innovation** in the evolutionary process of vortex mixers. Optical technology provides an innovative operating mode that is **absolutely unique** on the laboratory mixer market.

Thanks to the **revolutionary IR sensor mode**, an infrared system (IR) detects the presence of the test tube and the instrument automatically starts vibrating!

The Wizard features a **highly innovative and ergonomic design** which, combined with the special materials used, ensures **high stability** and **increased user comfort**. The instrument offers two operating modes as well as the possibility to regulate the speed of vibration:

Sensor mode - an infrared system automatically activates the vortex mixer so the laboratory technician does not have to apply any pressure!

Continuous mode - continuous operating mode that can be used with a wide range of accessories.

Electronic speed regulation: from 0 to 3000 rpm

Operating modes: continuous, IR sensor

INSTRUMENT	POWER SUPPLY	CODE No
WIZARD	100÷240 V / 50-60 Hz	F202A0175



A00000012
CLASSIC,
WIZARD

A00000013
CLASSIC,
WIZARD

A00000014
CLASSIC,
WIZARD

A00000015
CLASSIC,
WIZARD

A00000016
CLASSIC,
WIZARD

A00000017
CLASSIC

A00000019
CLASSIC,
WIZARD

①

	STIRRING SPEED rpm	ORBITAL DIAMETER mm	OPERATING MODE Touch	OPERATING MODE Continuous	OPERATING MODE IR Sensor	DIGITAL DISPLAY TIMER	PROTECTION RATING CEI EN 60529	SUPPORT SYSTEM	DIMENSIONS (WxHxD) mm (in)	WEIGHT Kg (lb)	POWER SUPPLY	POWER
RX3	3000	4,5	•				IP 42	4 anti-sliding feet	150x130x165 (5.9x5.1x6.5)	2.7 (5.9)	100÷240 V	15 W
ZX3	0÷3000	4,5	•	•			IP 42	4 anti-sliding feet	150x130x165 (5.9x5.1x6.5)	2.7 (5.9)	100÷240 V	15 W
ZX4	0÷3000	4,5		•	•		IP 42	4 anti-sliding feet	150x130x165 (5.9x5.1x6.5)	2.7 (5.9)	100÷240 V	15 W
TX4	0÷3000	4,5		•	•	•	IP 42	4 anti-sliding feet	150x130x165 (5.9x5.1x6.5)	2.7 (5.9)	100÷240 V	15 W
CLASSIC	0÷3000	4,5	•	•			IP 42	3 anti-sliding feet	180x70x220 (7.1x2.8x8.7)	2.2 (4.9)	100÷240 V	15 W
WIZARD	0÷3000	4,5		•	•		IP 42	3 anti-sliding feet	180x70x220 (7.1x2.8x8.7)	2.2 (4.9)	100÷240 V	15 W

RX3, ZX3, ZX4, TX4, CLASSIC, WIZARD ACCESSORIES

INTERCHANGEABLE PLUGS	CODE No
UK plug	10003084
Australian plug	10003085

OPTIONAL ACCESSORIES	CODE No
Foam stand for 19 microvials Eppendorf, 1.5 ml	A00000012 *
Customizable soft foam top	A00000013 *
Foam stand for 5 test tubes Ø 16 mm	A00000014 *
Foam stand for microtiter	A00000015 *
Foam stand for 4 tubes Ø 29 mm	A00000019 *
Small rubber supporting plate Ø 50 mm	A00000016 **
Rubber supporting plate Ø 94 mm	A00000017 ***

* for ZX3, ZX4, TX4, CLASSIC and WIZARD

** for RX3, ZX3, ZX4, TX4, CLASSIC and WIZARD

*** for ZX3 and CLASSIC

HOMOGENIZER

OV5

The **OV5** homogenizer is the ideal solution for dispersing, homogenizing, mixing and grinding biological tissue samples (cells, animal and plant tissues), pharmaceutical products, cosmetics and food products. The OV5 is characterized by a **high versatility** that makes it unique on the market. A single shaft can be combined with a wide selection of stator and rotor configurations according to the specific application for which it is to be used. **Flexible, easy-to-use, rapid** and **user-friendly** stator and rotor **interchangeability**: a single instrument for a wide range of uses that ensures **excellent performance** and **safety**.

The OV5 homogenizer has an **ergonomic design** for simple handling. A built-in electronic motor control offers the possibility to adjust the speed from **10,000 to 30,000 rpm**. The **soft start** prevents spillage whilst the automatic overload protection increases the life-span of the instrument.

The OV5 homogenizer has one shaft for all applications, simply configure it with the most suitable rotor and stator. The shaft ensures **high strength** and **excellent durability**. It connects easily and quickly to the drive body through a snap hook. The rotor/stator configuration can also be assembled in a few seconds and without the use of tools, consisting of a high-speed rotor with sharp blades lodged within a stationary stator with openings. The OV5 is suitable for the most diverse applications thanks to the wide range of rotor/stator configurations available.



INSTRUMENT	POWER SUPPLY	CODE No
OV5	230 V / 50 Hz	R20900010
OV5 - Package	230 V / 50 Hz	SA20900010*

* H-stand, strap clamp, bosshead clamp and VSS2CSR2 dispersing tool included
Not cNemkoUS certified

CHOOSE THE MOST SUITABLE DISPERSING TOOL



Shaft



Stator



Rotor

LEGEND

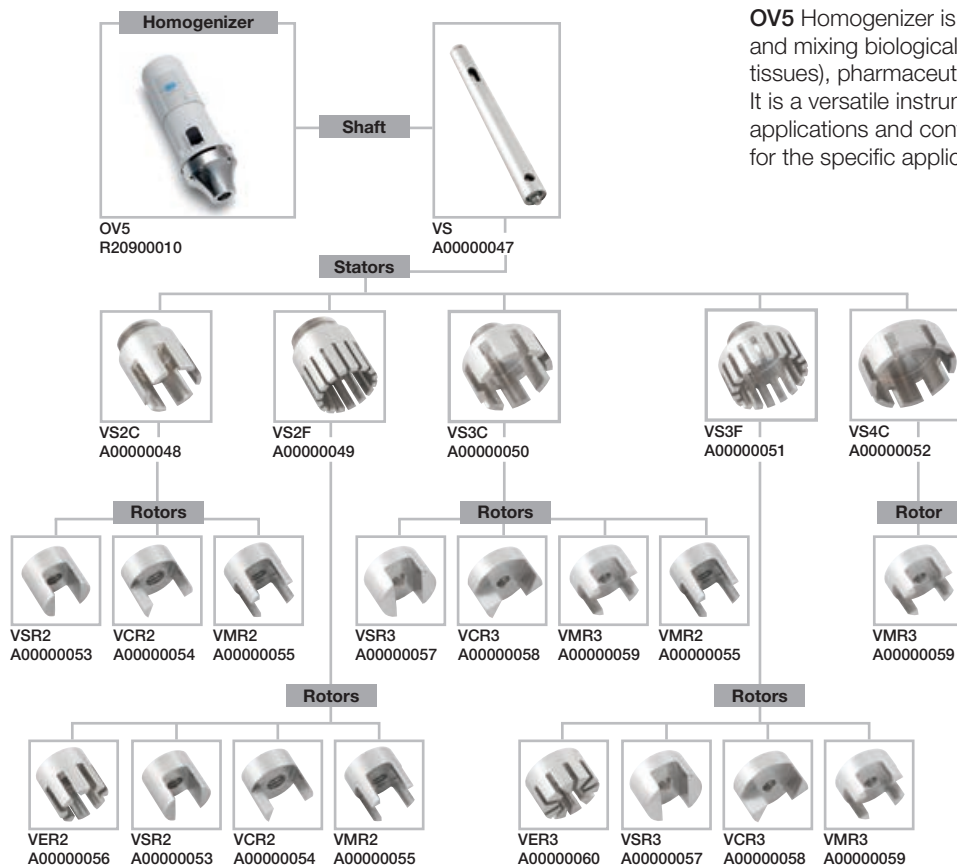
Example composition:
VSS2CSR2

VS	S2C	SR2
Shaft	Stator	Rotor
VS	VS2C	VSR2

OPTIONAL ACCESSORIES

	CODE No
H-stand with strap clamp, bosshead clamp	A0000045
Support rod and base	A00001300
Double clamp	A00001301
Strap clamp	A0000044
Stator rotor release kit	A00000279

POSSIBLE COMBINATIONS



A STAND ALONE SOLUTION FOR A WIDE RANGE OF APPLICATIONS

OV5 Homogenizer is the right solution for dispersing, homogenizing and mixing biological tissue samples (cells, animal and vegetal tissues), pharmaceutical pro-ducts, cosmetics and food products. It is a versatile instrument: the same model of shaft suitable for all the applications and configurable with different models of rotor and stator, for the specific application of the customer.

AVAILABLE CONFIGURATIONS

i	MODEL	CODE NO	APPLICATION FIELD***	FUNCTION +++	TREATABLE VOLUME (WATER) ml	MAX. CIRCUM. SPEED m/s	Ø ROTOR mm	Ø STATOR mm	TOOL LENGTH mm	MIN/MAX IMMERSION DEPTH mm	ULTIMATE FINENESS µm	
											SUSPENSION	EMULSION
	*VSS2CSR2	A00000026	CE,IF,PC,SI	A	100-5000	22,7	15	20	220	40/175	10 - 50	1 - 10
	VSS2CCR2	A00000027	CT,IA,IT,M,SI	B	100-5000	22,7	15	20	220	40/175	10 - 50	1 - 10
	VSS2CMR2	A00000028	CE,VE	A	100-5000	22,7	15	20	220	40/175	10 - 50	1 - 10
	*VSS2FER2	A00000029	CT,IF,SI,VE	C	100-5000	22,7	15	20	220	40/175	10 - 50	1 - 10
	VSS2FCR2	A00000031	BT,CT,IA,IT,M,SI	B	100-5000	22,7	15	20	220	40/175	10 - 50	1 - 10
	VSS2FMR2	A00000032	CE,CT,IA,IC,PC,VE	A	100-5000	22,7	15	20	220	40/175	10 - 50	1 - 10
	*VSS3CSR3	A00000033	CT,IA,IF,M,SI	A	100-8000	34,9	23	30	220	40/175	5 - 25	1 - 5
	VSS3CCR3	A00000034	CT,IA,IF,M,SI	B	100-8000	34,9	23	30	220	40/175	5 - 25	1 - 5
	VSS3CMR3	A00000035	CE,VE	A	100-8000	34,9	23	30	220	40/175	5 - 25	1 - 5
	VSS3CMR2	A00000036	CE,IA,SI	D	250-20000	34,9	15	30	220	40/175	High speed mixer	
	*VSS3FER3	A00000037	CT,IF,SI,VE	C	100-8000	34,9	23	30	220	40/175	5 - 25	1 - 5
	VSS3FSR3	A00000038	CT,IF,SI,VE	A	100-8000	34,9	23	30	220	40/175	5 - 25	1 - 5
	VSS3FMR3	A00000040	CE,IA,IC,IF,IT	A	100-8000	34,9	23	30	220	40/175	5 - 25	1 - 5
	*VSS4CMR3	A00000041	CE,IA,SI	D	1000-40000	34,9	23	40	220	40/175	High speed mixer	
	**VSS5CSR4	A00000046	BT,M	A	0,2-50	6,3	4	5	128	10/60	10 - 50	1 - 10

* Most used model

** The dispersing tool works with Ø 4 mm rotor and Ø 5 mm stator for microbiological applications (e.g. suitable for Eppendorf, cuvettes, etc.)

*** BT = biotechnology, CE = ceramic industry, CT = paper & tissue industry, IA = food industry, IC = cosmetic industry, IF = pharmaceutical industry, IT = tobacco industry, M = medicine, PC = petrochemistry industry, SI = sewage pollution control, VE = paint industry

**** A = dispersing tool for solid/liquid media, B = dispersing tool with blades for fibrous/stringy materials, C = dispersing tool for water/oil or oil/water emulsions, D = stirring shaft



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FOOD&FEED LINE



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Rev. 05.08.2018



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