

STIRRING LINE

MAGNETIC STIRRERS

HEATING MAGNETIC STIRRERS ALUMINUM TOP CERAMIC TOP

THERMOREGULATOR

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 (H_2O): 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	F203A0160

MICROSTIRRER

The **MICROSTIRRER** is a magnetic stirrer with epoxy painted metal structure that ensures a **high resistance** to chemical agents. A **small, simple** and **efficient** stirrer specially designed for microtitrations. The MICROSTIRRER **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 (H_2O): up to 5 L

UK and AU adapter plugs are available on request.

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



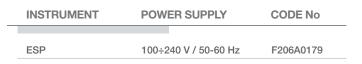
ESP

The **ESP** is an **ultraflat** magnetic stirrer with no moving mechanical components, it is therefore **maintenance-free**.

The stirring system consists of coils that induce a rotating magnetic field. A gentle start-up ensures optimum progression of the stirring speed whilst its **modern, ergonomic structure** is made of materials that ensure a **high resistance** to chemical reagents.

Electronic speed regulation: up to 1100 rpm Stirring volume (H $_2$ O):up to 5 L

UK and AU adapter adapter plugs are available on request.





MULTISTIRRER

MULTISTIRRER DIGITAL



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 thermostatting the samples when used with a recirculating water bath.

Electronic speed regulation: from 50 to 850 rpm SpeedServo™: constant speed even when the viscosity changes

MULTISTIRRER 6

Stirring volume (H_2O): up to 400 ml per position Distance between stirring position centres: 100 mm

MULTISTIRRER 15

INSTRUMENT

MULTISTIRRER 6

MULTISTIRRER 15

Stirring volume (H $_2$ O): up to 250 ml per position Distance between stirring position centres: 74 mm

UK and AU adapter adapter plugs are available on request.

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

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	



POWER SUPPLY

100÷240 V / 50-60 Hz

100÷240 V / 50-60 Hz

CODE No

F203A0177

F203A0178



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 (H_2O): 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 (H_2O): up to 25 L $\,$

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



AMI		AMI 4		-	
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 (H ₂ O): up to 5 L		 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.		UK and AU adapter adapter plugs are available on request.		on request.	
INSTRUMENT	POWER SUPPLY	CODE No	INSTRUMENT	POWER SUPPLY	CODE No
AMI	100÷240 V / 50-60 Hz	F204A0167	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	130x50x150 (5.1x2.0x5.9)	0.4 (0.9)	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	5 W
_	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 50 to 850	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, MICROSTIRRER, ESP, AGE, ATE, MULTISTIRRER 6, MULTISTIRRER 15, AMI, AMI 4 ACCESSORIES

INTERCHANGEABLE PLUGS	CODE No	OPTIONAL ACCESSORIES	CODE No
UK plug	10003084 *	Magnetic stirring bar, 6x20 mm	A00001057 *
Australian plug	10003085 *	Magnetic stirring bar, 6x35 mm	A00001056 **
* for MST, MICROSTIRRER, MULTISTIRRER 6, MULTISTIRRER 15, AMI, AMI 4 and ESP		Magnetic stirring bar, 9.5x60 mm	A00001061 ***
		Magnetic stirring bar, 10x40 mm	A00001060 ****
		Thermostatic bath for samples, 408x240x85 mm	A00001055 *****
		* for MST, MICROSTIRRER, AGE, MULTISTIRRER 15, AMI ar ** for MST, MICROSTIRRER, AGE, ATE, MULTISTIRRER 6, M *** ATE only	

**** ESP only ***** for MULTISTIRRER 6 and MULTISTIRRER 15

HEATING MAGNETIC STIRRERS



ALUMINUM TOP

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 grove.

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 $300 \degree C (\pm 0.5 \degree C)$.

Electronic speed regulation: up to 1500 rpm Stirring volume (H_2O): up to 15 L per position Temperature: up to 370 °C

Distance between stirring position centres: 186 mm SpeedServo™: constant speed evenhen the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
AM4	230 V / 50-60 Hz	F20500420
AM4X	230 V / 50-60 Hz	F20500421

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 grove.

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** Vertex digital thermoregulator 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 SpeedServoTM: constant speed even when the viscosity changes



* Support rod included







ALUBLOCKS™

AluBlocks[™] 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	A0000231
Orange AluBlock™, 4 pos., Ø 24 x h 43 mm	A00000229
Blue AluBlock™, 6 pos., Ø 17.8 x h 26 mm	A0000233
Gold AluBlock™, 11 pos., Ø 15.2 x h 20 mm	A00000234
AluBlocks™ Base	A00000228

AREX DIGITAL AND AREX DIGITAL PRO



The AREX Digital and AREX Digital PRO offers the most advanced technology, as they 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

AREX Digital with Probe

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 PRO with VTF

(i) HEATING PLATE HEATING PLATE DIMENSIONS STIRRING VOLUME L TEMPERATURE REGULATION °C POWER SUPPLY STIRRING DIMENSIONS WEIGHT POWER SPEED rpm (WxHxD) mm (in) Kg (lb) mm (in) ARE Ø 155 (6.1) up to 1500 Ambient to 370 165x115x280 (6.5x4.5x11.0) 2.6 (5.7) 115 or 230 V 630 W Aluminum alloy up to 15 AREX Aluminum alloy with ceramic coating Ø 155 (6.1) 165x115x280 (6.5x4.5x11.0) up to 1500 Ambient to 370 2.7 (5.9) 115 or 230 V 630 W up to 20 **AREX Digital with PROBE** Aluminum alloy with ceramic coating Ø155 (6.1) up to 1500 up to 20 Ambient to 370 165x115x280 (6.5x4.5x11.0) 2.6 (5.7) 115 or 230 V 630 W AREX Digital PRO with VTF Aluminum alloy with ceramic coating Ø155 (6.1) up to 1500 up to 20 Ambient to 370 165x630x280 (6.5x24.8x11.0) 2.6 (5.7) 115 or 230 V 630 W AM4 Ø 155 (6.1) up to 1500 up to 15 (x 4 pos.) Ambient to 370 715x115x246 (28.1x4.5x9.7) 230 V Aluminum allov 8.6 (18.9) 2550 W

ARE, AREX, AREX Digital, AREX Digital PRO, AM4 ACCESSORIES **CODE No**

OPTIONAL ACCESSORIES

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 stirring bar, 6x35 mm	A00001056
Magnetic stirring bar, 9.5x60 mm	A00001061

*	AREX	and	AREX	Digital	PRO
---	------	-----	------	---------	-----

Magnetic stirring bar, 9.5x60 mm	A00001061
Magnetic stirring bar, 10x40 mm	A00001060
VTF Vertex, digital Thermoregulator	F208B0063 *
Spiral cable for other Thermoregulators	40000781 *
Support rod	A00001069
External probe for AREX Digital	A0000268

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 runoff grove 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 (H_2O): 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** Vertex digital thermoregulator or to a temperature control probe.

VTF offers maximum performance for a **perfect and precise** thermoregulation up to 300 °C (\pm 0.5 °C) with an **integrated timer**, whilst with the external probe up to 250 °C (\pm 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 - Packag	je 230 V / 50-60 Hz	SA20500061 *
AREC.X with Probe - Packag	je 115 V / 60 Hz	SA20510061 *
AREC.X with VTF - Package	e 230 V / 50-60 Hz	SB20500061 **
AREC.X with VTF - Package	e 115 V / 60 Hz	SB20510061 **

Support rod and clamp for Pt100 probe included

** Support rod included



AREC.X with support rod and external probe



AREC.X with support rod and VTF

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



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



(j)		HEATING PLATE	HEATING PLATE DIMENSIONS mm (in)	STIRRING SPEED rpm	STIRRING VOLUME L	TEMPERATURE SF REGULATION °C	PEEDSERVO™	OVERTEMP. PROTECTION	DIMENSIONS (WxHxD) mm (in)	WEIGHT Kg (lb)	POWER SUPPLY	POWER
	AREC	Ceramic	180x180 (7.1x7.1)	up to 1500	up to 15	Ambient to 550	٠	•	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	٠	•	203x94x344 (8.0x3.7x13.5)	3.3 (7.3)	115 or 230 V	800 W

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

CODE No

OPTIONAL ACCESSORIES

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 stirring bar, 6x35 mm	A00001056
Magnetic stirring bar, 9.5x60 mm	A00001061
Magnetic stirring bar, 10x40 mm	A00001060

OPTIONAL ACCESSORIES

CODE No

VTF Vertex, digital Thermoregulator	F208B0063 *
Spiral cable for other Thermoregulators	40000781 *
Support rod	A00001069
Clamp for PT100 probe	A0000004 *
External probe for AREC.X	A00000268 *

* AREC.X only



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 / 50-60 Hz	F20710431
RC2	230 V / 50-60 Hz	F20700430
RC2	115 V / 50-60 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 grove 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 / 50-60 Hz	F20710081





RC, RC2, REC ACCESSORIES

OPTIONAL ACCESSORIES	CODE No
Hemispheric bowl for 100 ml flasks	A0000258
Hemispheric bowl for 250 ml flasks	A00001071
Hemispheric bowl for 500 ml flasks	A00001072
Hemispheric bowl for 1000 ml flasks	A00001073

OPTIONAL ACCESSORIES	CODE No
Support rod	A00001069 *
* for REC and RC	

THERMOREGULATOR



THERMOREGULATOR

The VELP Scientifica thermoregulator uses electronic "Fuzzy Logic" meaning that thermoregulation is **automatically** adapted to various factors such as power, load and thermal dispersion.

VTF VERTEX DIGITAL THERMOREGULATOR WITH FUZZY LOGIC TECHNOLOGY

The **VTF** uses **Fuzzy Logic technology** and is suitable for many applications where precise thermoregulation is required. The instrument can be combined with the most common hot plate

stirrers and is ready for use.

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 \pm 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		



() 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)

CODE No
A0000001
A0000002
A0000003
A0000004

AREX with VTF AREX Digital PRO ARI

with VTF

AREC.X with VTF

A0000002 A

A0000001

~

A0000003 A0000004

- A

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 (H_2O): up to 15 L Viscosity: up to 1,000 mPa*s

INSTRUMENT	NSTRUMENT POWER SUPPLY CODE				
ES	80÷260 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 (H $_2$ O): up to 25 L Viscosity: up to 25,000 mPa*s

INSTRUMENT	POWER SUPPLY	CODE No
LS	80÷260 V / 50-60 Hz	F201A0151
LS - Package	80÷260 V / 50-60 Hz	SA201A0151*
* Support rod and base, dou and stirring shaft with fixed		

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	80÷260 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	80÷260 V / 50-60 Hz	F201A0150

DLH



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	80÷260 V / 50-60 Hz	F201A0155		
DLS - Package	80±260 V / 50-60 Hz	SA201A0155*		

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





CODE No

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	80÷260 V / 50-60 Hz	F201A0157		
DLH	80÷260 V / 50-60 HZ	F201A0157		



(j)		STIRRING SPEED rpm		MAXIMUM VISCOSITY mPa*s	MAXIMUM 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			80x160x200 (3.1x6.3x7.9)	1.3 (2.8)	80 ÷ 260 V	30 W
_	LS	from 50 to 2000	up to 25	25,000	40	8	10			80x215x196 (3.1x8.5x7.7)	2.3 (5.0)	80 ÷ 260 V	120 W
_	DLS	from 50 to 2000	up to 25	25,000	40	8	10	•	•	80x215x196 (3.1x8.5x7.7)	2.5 (5.5)	80 ÷ 260 V	120 W
_	LH	from 50 to 2000	up to 40	50,000	80	8	10			80x230x196 (3.1x9.0x7.7)	2.9 (6.4)	80 ÷ 260 V	190 W
_	DLH	from 50 to 2000	up to 40	50,000	80	8	10	•	•	80x230x196 (3.1x9.0x7.7)	3.0 (6.6)	80 ÷ 260 V	190 W
	PW	from 20 to 1200	up to 70	100,000	120	8	10			80x230x196 (3.1x9.0x7.7)	2.9 (6.4)	80 ÷ 260 V	190 W

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

OPTIONAL ACCESSORIES

A00001300
A00001301
A00001302





STIRRING SHAFTS

Stirring shaft with floating blades

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.



Code No A00001304

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 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.

Y

Stirring shaft with propellerCode No A00001307Characteristics: 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 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 turbine bladeCode No A00001309Characteristics:It generates a radial flow with suction of the productfrom the top towards the bottom, with high turbulence and high shearingforces.



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 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 Ømm	SHAFT Ømm	LENGHT (SHAFT mr		
Stirring shaft with floating blades, stainless s	steel A00001	1304 2	93	7	400	M-H	VL-L
Stirring shaft with folding blade, stainless ste	eel A00001	1305 1	60	7	400	M-H	VL-L
Stirring shaft with fixed blade, stainless steel	A00001	1306 1	50	7	400	M-H	VL-L-M
Stirring shaft with propeller, stainless steel	A00001	1307 3	60	7	400	M-H	VL-L-M
Stirring shaft with paddle,six holes, stainless	steel A00001	1308 1	69	7	450	L-M	L-M
Stirring shaft with turbine, stainless steel	A00001	1309 10	49	7	450	M-H	M-H
Stirring shaft with turbo propeller, stainless s	steel A00001	1310 3	46	7	450	M-H	M-H
Stirring shaft with anchor, stainless steel	A00001	1311 2	45	8	450	L-M	M-H
Choosing the correct shaft Stirring shafts must be chosen	SPEED RAM	NGE rpm	VISCOSITY RANGE	mPa*s		VISCOSITY mPa*s	SUBSTANCE
bearing in mind the stirrer power,	Low (L)	< 250	Very low (VL)	0 – 100		1	Water
stirred and its viscosity. The	Medium (M)	250 - 800	Low (L)	100 – 1,00	0	5	Milk
technical features and the	High (H)	> 800	Medium (M)	1,000 – 10	,000	10	Kerosene
application fields of the stirring			High (H)	10,000 – 1	00,000	100	Lubricating oil
shafts are summarized in the						1,000	Castor oil, Glicerin
following tables:						7,000	Refined honey
						25,000	Chocolate syrup
						50,000	Ketchup
						100,000	Molasses





CODE No

F202A0176

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

ZX3

INSTRUMENT

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.

POWER SUPPLY

100÷240 V / 50-60 Hz

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

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



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					



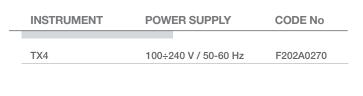
TX4

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







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



WIZARD



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.

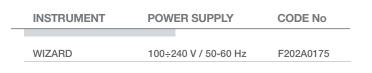
Thanks to the **revolutionary IR sensor mode**, an infrared system (IR) detects the presence of the test tube and the instrument automatically starts vibrating!

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













A00000012 A00000013 CLASSIC, CLASSIC, WIZARD WIZARD

3 A00000014 CLASSIC, WIZARD

 00014
 A00000015

 SIC,
 CLASSIC,

 RD
 WIZARD

A00000016 CLASSIC, WIZARD

CLASSIC, WIZARD

	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		•	٠		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		•	٠		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

CLASSIC

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

INTERCHANGEABLE PLUG

EABLE PLUG CODE N	0
-------------------	---

UK plug	
Australian plug	

10003084 10003085

Foam stand for 19 microvials Eppendorf, 1.5 ml	A0000012 *
Customizable soft foam top	A0000013 *
Foam stand for 5 test tubes Ø 16 mm	A0000014 *
Foam stand for microtiter	A0000015 *
Foam stand for 4 tubes Ø 29 mm	A0000019 *
Small rubber supporting plate Ø 50 mm	A0000016 **
Rubber supporting plate Ø 94 mm	A0000017 ***
* for ZX3, ZX4, TX4, CLASSIC and WIZARD	

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

OPTIONAL ACCESSORIES

CODE No

^{***} 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 bog	shead clamp and VSS2CSB2 dis	persing tool included

* H-stand, strap clamp, bosshead clamp and VSS2CSR2 dispersing tool included





H-stand with strap clamp, bosshead clamp	A0000045
	400001000
Support rod and base	A00001300
Double clamp	A00001301
Strap clamp	A00000044
Stator rotor release kit	A00000279
	A0000275

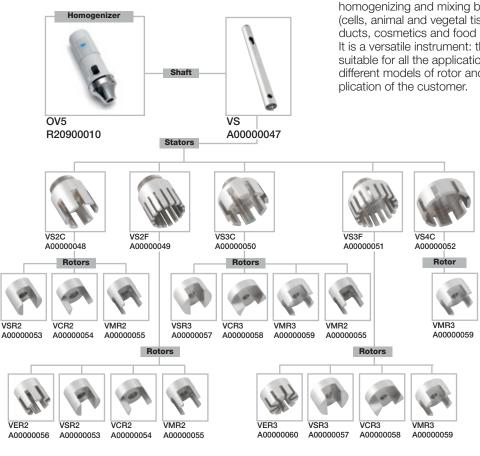
CODE No

OPTIONAL ACCESSORIES



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 products, 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.



CHOOSE THE MOST SUITABLE DISPERSING TOOL

POSSIBLE COMBINATIONS

(i) TREATABLE VOLUME (WATER) ml MODEL CODE No APPLICATION FIELDS *** FUNCTION MAX CIRCUM. SPEED m/s Ø ROTOR Ø STATOR TOOL LENGHT MIN/MAX IMMERSION SUSPENSION EMULSION mm mm mm DEPTH mm *VSS2CSR2 CE.IE.PC.SI 1-10 A0000026 100-5000 22.7 20 220 40/175 10 - 50 Δ VSS2CCR2 A0000027 CT,IA,IT,M,SI В 100-5000 22,7 15 20 220 40/175 10 - 50 1-10 100-5000 VSS2CMR2 A0000028 15 220 40/175 10 - 50 CF.VF А 20 1-10 *VSS2FER2 A0000029 CT,IF,SI,VE 100-5000 15 20 220 40/175 10 - 50 1-10 VSS2FCR2 A0000031 BT,CT,IA,IT,M,SI 100-5000 В 15 20 40/175 10 - 50 1-10 CF.CT.IA.IC.PC.VE VSS2FMR2 A0000032 А 100-5000 22.7 15 20 220 40/175 10 - 50 1-10 *VSS3CSR3 A0000033 CT,IA,IF,M,SI А 100-8000 34,9 23 30 220 40/175 5 - 25 1 - 5 A0000034 CT,IA,IF,M,SI 100-8000 40/175 VSS3CCR3 В 34,9 23 30 220 5 - 25 1 - 5 VSS3CMR3 A0000035 CE,VE 100-8000 34,9 30 220 40/175 5 - 25 1 - 5 А 23 VSS3CMR2 A0000036 CE,IA,SI 220 40/175 250-20000 34,9 30 High speed mixer *VSS3FER3 A0000037 CT, IF, SI, VE 100-8000 34.9 23 30 220 40/175 5 - 25 1 - 5 VSS3FSR3 A0000038 CT,IF,SI,VE A 100-8000 34,9 23 30 220 40/175 5 - 25 1 - 5 A00000040 CE,IA,IC,IF,IT 220 VSS3FMR3 А 100-8000 34,9 30 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 0.2-50 128 10/60 1-10 А 6,3 4 5 10-50

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

STIRRING LINE 19

ULTIMATE FINENESS µm



VELP Scientifica srl Via Stazione 16 20865 Usmate (MB) Italy Tel +39 039 628811 Fax +39 039 6288120 inse@velp.it www.velp.com





Marine Contract of the second second

Constant Commitment to Knowledge Development

Your authorized agent:		
We reserve the right to make	technical alterations	

We do not assume liability for errors in printing, typing or transmission



