OVERHEAD STIRRERS

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	POWER SUPPLY	CODE No
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_2O): up to 25 L
Viscosity: up to 10,000 mPa*s

INSTRUMENT	POWER SUPPLY	CODE No
LS	80÷260 V / 50-60 Hz	F201A0151

LH

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

Electronic speed regulation: from 50 to 2000 rpm
Stirring volume (H_2O): 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 (H_2O): up to 70 L
Viscosity: up to 100,000 mPa*s

INSTRUMENT	POWER SUPPLY	CODE No
PW	80÷260 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 (H_2O): up to 25 L
Viscosity: up to 25,000 mPa*s
Counter-reaction: constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
DLS	80÷260 V / 50-60 Hz	F201A0155

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 (H_2O): up to 40 L
Viscosity: up to 50,000 mPa*s
Counter-reaction: constant speed even when the viscosity changes

INSTRUMENT	POWER SUPPLY	CODE No
DLH	80÷260 V / 50-60 Hz	F201A0157

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**.

	STIRRING SPEED rpm	STIRRING VOLUME L	MAXIMUM VISCOSITY mPa*s	MAXIMUM TORQUE Ncm	MAX. SHAFT Ø THROUGH MEMBRANE mm	MAX. SHAFT Ø CHUCK mm	DIGITAL TIMER	COUNTER-REACTION	DIMENSIONS (WxHxD) mm (in)	WEIGHT Kg (lb)	POWER SUPPLY	POWER
ES	from 50 to 1300	up to 15	1,000	15	8.5	10			80x160x200 (3.1x6.3x7.9)	1.3 (2.8)	80 ÷ 260 V	30 W
LS	from 50 to 2000	up to 25	10,000	40	8.5	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	8.5	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	8.5	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	8.5	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	8.5	10			80x230x196 (3.1x9.0x7.7)	2.9 (6.4)	80 ÷ 260 V	190 W

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

OPTIONAL ACCESSORIES	CODE No
Support rod and base	A00001300
Double clamp	A00001301
Ribbon clamp	A00001302


A00001300


A00001301


A00001302

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 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.

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 occurence 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 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 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 Ø mm	SHAFT Ø mm	LENGHT 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, Glicerine
7,000	Refined honey
25,000	Chocolate syrup
50,000	Ketchup
100,000	Molasses