

OHS Digital & Advance Series Overhead Stirrers

VELP
SCIENTIFICA

Analytical Instruments
Raised To Excellence



The Best-In-Class Stirring Power

- ▶ Digital interfaces to precisely set and monitor the working parameters
- ▶ Leading Safety Standard (IP54 certified)
- ▶ Extremely Stable Stirring Speed available with single or double speed gear
- ▶ New SmartChuck™ for one-hand shaft accommodation without tools
- ▶ USB and Wi-Fi connection through VELP Ermes to monitor the instrument 24/7
- ▶ Real Time Torque Monitor for total control of your reactions
- ▶ Brushless motor for heavy-duty continuous operations
- ▶ Key lock function to prevent unintentional changes in working conditions
- ▶ SpeedServo™ torque compensation maintains rpm constant



Premium Technology and Durability

VELP takes Overhead Stirrer to the next level with the new OHS Series:

OHS DIGITAL	OHS ADVANCE
<ul style="list-style-type: none"> Digital Display for precise setting and monitoring Timer for unattended operations Real Time Torque Tendencies indication Easy knob to navigate the menu and start/stop operations Brushless motor to ensure high efficiency and low maintenance SmartChuck™ system to change the shaft without any tool and with one hand only USB interface to document the processes Key lock function to avoid unintended parameters changes 	<ul style="list-style-type: none"> TFT 3.5" Display encompassing a great set of information about the working conditions Timer for unattended operations Easy knob to navigate the menu and start/stop operations SmartChuck™ system to change the shaft without any tool and with one hand only Wi-Fi connection to VELP Ermes platform to monitor and control the instrument on cloud Key lock function to avoid unintended parameters changes Real Time Torque and Speed Graph Monitoring Probe connection for accurate Temperature control Programmable methods to set up to 4 Time/speed ramps State-of-the-art vibration sensor

TECHNICAL SPECIFICATIONS

	OHS 20 Digital	OHS 40 Digital	OHS 60 Digital	OHS 100 Digital	OHS 200 Digital	OHS 60 Advance	OHS 100 Advance	OHS 200 Advance
DISPLAY	LED	LED	LED	LED	LED	Graphic TFT	Graphic TFT	Graphic TFT
DISPLAY SIZE	7 Digits	7 Digits	7 Digits	7 Digits	7 Digits	3.5"	3.5"	3.5"
USER INTERFACE	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Digital
MOTOR	Brushless DC	Brushless DC	Brushless DC	Brushless DC	Brushless DC	Brushless DC	Brushless DC	Brushless DC
STIRRING VOL (H ₂ O)	Up to 25 L	Up to 25 L	Up to 40 L	Up to 100 L	Up to 100 L	Up to 40 L	Up to 100 L	Up to 100 L
SPEED GEARS	1	1	1	1	2	1	1	2
MAX TORQUE (Nm)	20	40	60	100	200	60	100	200
STIRRING SPEED RANGE	30-2000 rpm	30-2000 rpm	30-2000 rpm	30-1300 rpm	6-400 rpm 30-2000 rpm	30-2000 rpm	30-1300 rpm	6-400 rpm 30-2000 rpm
SPEED ACCURACY	1 rpm	1 rpm	1 rpm	1 rpm	1 rpm	1 rpm	1 rpm	1 rpm
SPEED CONTROL	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Digital
MAX VISCOSITY (mPa*s)	10.000	25.000	50.000	70.000	100.000	50.000	70.000	100.000
TORQUE COMPENS.	SpeedServo™	SpeedServo™	SpeedServo™	SpeedServo™	SpeedServo™	SpeedServo™	SpeedServo™	SpeedServo™
CHUCK RANGE Ø	Up to 13 mm	Up to 13 mm	Up to 13 mm	Up to 13 mm	Up to 13 mm	Up to 13 mm	Up to 13 mm	Up to 13 mm
SAFETY VIBR. SENS	-	-	-	-	-	Yes	Yes	Yes
TIMER	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
EXTERNAL PROBE CONNECTION	-	-	-	-	-	Pt 100	Pt 100	Pt 100
TEMPERATURE MEASURING RANGE	-	-	-	-	-	-10 to 350 °C	-10 to 350 °C	-10 to 350 °C
TEMPERATURE RES.	-	-	-	-	-	0.1 °C	0.1 °C	0.1 °C
INTERFACES	USB	USB	USB	USB	USB	USB / WiFi	USB / WiFi	USB / WiFi
DIMENSIONS (WxHxD)	90x285x235	90x285x235	90x285x235	90x285x235	90x315x235	90x285x235	90x285x235	90x315x235
WEIGHT (Kg)	4,1	4,1	4,1	4,1	4,6	4,1	4,1	4,6
PROTECTION CLASS DIN EN 60529	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54

Rev 0.9 12.2018



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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	7	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