

## ACHIEVER™ 5000 Overhead Stirrers



### Reliable Overhead Stirrers with Excellent Performance for Everyday Use

OHAUS Achiever 5000<sup>™</sup> Overhead Stirrers are designed for powerful, precise stirring, safety and simplicity in all applications. The sealed design has an IP54 rating and ensures safe mixing performance even in the most demanding applications. The keyless chuck and software controlled speed ramping provide easy set up and safe stirring to protect the sample and user. Select from five models with up to 200 Ncm torque and up to 100 L volume capacity.

#### **Unique Features:**

- Powerful mixing and constant speed is assured with the brushless motor and torque compensation technology - delivering accurate, controlled stirring of viscous liquids with quiet operation.
- Simplify set up with the Keyless Chuck no tools required. Change shafts quickly and easily with one handed operation. This unique design will save time and effort for everyone in the lab.
- Designed for safety. The lock button prevents accidental speed changes and the motor's overload sensing technology simply shuts off stirring before an overload condition occurs to protect the sample.
- Compact and easy to use. Simple knob control combined with the bright digital display allows for precise setting and monitoring. Customize for your application with over 12 accessories.

# **ACHIEVER™5000** Stirring Shafts



# **ACHIEVER™ 5000** *Stirring Shafts*



## PROPELLER

30586780

Can be used at high speed with medium or high viscosity materials. Excellent mixing properties for homogenization and suspensions.

Flow	Stir Spe	ed RPM	Viscosity	/	Blade	
Axial	250 – Ma	x	0 - 10,000 (	:Р	60 x 9 m	
Overall	Length	Shaft D	iameter	Ma	aterial	

7 mm

**Overall Length** 400 mm



## **TURBO PROPELLER**

30586782

Ring protects dip tubes or sensors in vessel

Blade Flow Stir Speed RPM Viscosity 1,000 - 100,000 cP 46 x 14 mm Axial 250 – Max

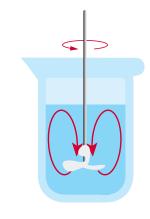
**Overall Length** 400 mm

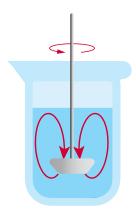
**Shaft Diameter** 7 mm

Material 316 Stainless Steel

x 9 mm

316 Stainless Steel







## **PADDLE, 6 Holes**

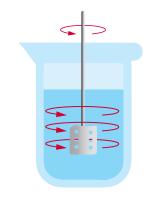
30586779

For use at low to medium speeds. Ideal for gentle mixing.

**Stir Speed RPM** Viscosity Blade Flow 0 - 10.000 cP 69 x 75 mm Tangential Up to 800

**Overall Length** Shaft Diameter 510 mm 7 mm

Material 316 Stainless Steel



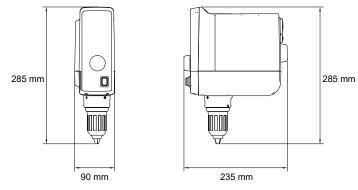


# Achiever™5000

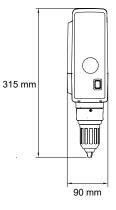
Model	e-A51ST020	e-A51ST040	e-A51ST060	e-A51ST100	e-A51ST200					
Part Number	30586763	30586764	30586765	30586766	30586767					
Stirring Speed Range		6-400 rpm (l) 30-2000 rpm (ll)								
Stirring Volume (H2O)	up to	o 25L	up to 40L	up to 1	00L					
Maximum Viscosity (cP or mPa's)	10,000	10,000 25,000		70,000	100,000					
Maximum Torque (Ncm)	20	40	60	100	200					
Speed Gears			1		2					
Speed Accuracy			1 rpm							
Speed Control		Digital								
Display		LED								
Timer		Yes								
Lock Button			Yes							
Chuck Range (Diameter)			1 - 13 mm							
Shaft Pass Through (Diameter)			up to 8.5 mm							
Ingress Protection			IP54							
Dimensions (H x L x W)		28.5 x 23	5 x 9.0 cm		31.5 x 23.5 x 9.0 cm					
Net Weight		4.1	kg		4.6 kg					
Power Supply			230V, 50/60Hz							
Power Input			190W (230V)							
Working Environment		5 °C – 4	0 °C, 80 % RH, non-conder	ising						

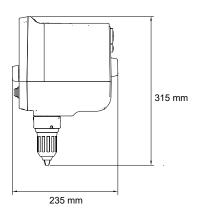
#### **Dimensional Drawings**

e-A51ST020, e-A51ST040, e-A51ST060, e-A51ST100



#### e-A51ST200





## Other Standard Features & Equipment

Speed accuracy of 1 rpm, sealed housing with IP54 rating, digital display, timer, torque tendency LED indicator, digital speed control, chuck range 1 to 13 mm, pass through shaft diameter up to 8.5 mm, support stand and clamp required for set up (sold separately).

#### Compliance

- Product Safety: CAN/CSA C22.2 No. 61010-1, CAN/ CSA C22.2 No. 61010-2-051, EN 61010-1, EN 61010-2-051, IEC 61010-1, IEC 61010-2-051, UL 61010-1, UL 61010-2-051
- Electromagnetic Compatibility: EN 61326-1: 2013 Class A Industrial Environment; Canada ICES-003 Class A; FCC Part 15 Class A
- Compliance Marks: CE; RCM; cNus; WEEE; CN RoHS

#### Accessories

Support Stand Universal-H						
Support Stand Telescopic-H	30586772					
Clamp Double	30586773					
Clamp Ribbon	30586774					
Chuck Cover e-A51	30586842					

A new set up requires: an Achiever unit, a Support Stand, a Clamp Double to secure the unit to the stand, and the appropriate Stirring Shaft that suits the application.





## **ACHIEVER**<sup>®</sup> **5000** Overhead Stirrer Selector Guide

## Choose the Best Overhead Stirrer for Your Application

### Choosing the Achiever 5000 Overhead Stirrer:

	Achiever 020	Achiever 040	Achiever 060	Achiever 100	Achiever 200
Trade name	e-A51ST020	e-A51ST040	e-A51ST060	e-A51ST100	e-A51ST200
Max Torque (Ncm)	20	40	60	100	200
Capacity (H <sub>2</sub> 0)	Up to 25 L	Up to 25 L	Up to 40 L	Up to 100 L	Up to 100 L
Max Viscosity (mPa $\times$ s = cP)	10,000	25,000	50,000	70,000	100,000
Speed Range	30–2,000 rpm	30–2,000 rpm	30–2,000 rpm	30–1,300 rpm	6–400 rpm 30–2,000 rpm

## -5 Questions to Ask -

- 1. Sample Type
- 2. Sample Viscosity
- 3. Sample Volume
- 4. Speed Range
- 5. Mixing Preference

### Choosing Stirring Shaft Accessory:

Stirring Shafts										
Shape				9						
Flow Diagram	63	83	CC CC CC	8						
Stirring Shaft with	Floating Blades	Fixed Blade	Folding Blade	Turbine	Propeller	Turbo Propeller	Paddle, 6 Holes	Anchor		
Item Number	30586777	30586776	30586778	30586781	30586780	30586782	30586779	30586775		
Blade (mm)	93 × 11	50 × 10	60 × 15	49×10	60 × 9	46 × 14	69 × 75	45 × 54		
Shaft Ø (mm)	7	7	7	7	7	7	7	7		
Shaft Length (mm)	400	400	400	400	400	400	510	400		
Speed Range	250 – Max	250 – Max	250 – Max	250 – Max	250 – Max	250 – Max	Up to 800	All Speeds		
Viscosity Range*	<b>♦</b> – <b>♦</b>	<b>•</b> - • • - • • •	<b>♦</b> – <b>♦</b>	<b>.</b>	<b>•</b> - • • - • • •	<b>.</b>	<b>♦ ♦ − ♦ ♦ ♦</b>	<b>.</b>		
Flow Pattern	Radial	Radial	Radial	Radial	Axial	Axial	Tangential	Tangential		
Description	Floating Blades align during stirring and create radial flow from top to bottom in the vessel. This blade is ideal for stirring in narrow neck vessels such as flasks.	Fixed Blade creates radial flow from top to bottom in the vessel. Ideal for use at medium to high speeds for stirring light solids, mixing thickening materials, flocculation, etc.	Folding Blade aligns during stirring and creates radial flow from top to bottom in the vessel. This blade is used for stirring in narrow neck vessels.	Turbine creates a high shear, high turbulence radial flow in the vessel. This flow is from top to bottom.	Propeller creates axial flow with limited shearing forces. This flow pulls the sample from top to bottom in the vessel.	Turbo Propeller creates a low shearing axial flow in the vessel. This flow pulls the sample from top to bottom and the ring limits the contact of the blade with walls of the vessel or probes.	Paddle creates a reduced turbulence radial flow in the vessel producing gentle mixing of the sample.	Anchor creates tangential flow with high shearing forces on the ends. This flow can prevent sedimentation on the walls of the vessel.		

\*Consult the Viscosity Range table (below) for values.

Viscosity Range	Very Low	Low	Medium	High	
cP Range	0–100	100–1,000	1,000–10,000	10,000-100,000	
Symbol	6	۸.			

#### Viscosity of Common Materials:

			V		CASTOR	6	•	CHECKLATE EVENING			Lard		
Material	Water	Blood	Corn Syrup	Maple Syrup	Castor Oil	Honey	Molasses	Chocolate Syrup	Ketchup	Peanut Butter	Crisco/ Lard	Silicone Sealant	Window Putty
cP Range	1–5	10	50–100	150–200	250–500	2–3,000	5–10,000	10–25,000	50–70,000	150–200,000	1–2,000,000	5–10,000,000	100,000,000



Pricing on any accessories shown can be found by keying the part number into the search box on our website. The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.