

Overhead stirrer

High-speed
High-torque

Model overview & comparison



	High-speed						High-torque					
	Analog		Digital				Analog		Digital			
	Integrated controller		Integrated controller		Remote controller		Integrated controller		Integrated controller		Remote controller	
Model	HS-50A	HS-120A	HS-30D	HS-100D	HS-30T	HS-100T	HT-50AX	HT-120AX	HT-50DX	HT-120DX	HT-50T	HT-120T
Max. stirring capacity (H ₂ O)	10 l	20 l	10 l	20 l	10 l	20 l	40 l	60 l	40 l	60 l	40 l	60 l
Max. viscosity (mPas)	10,000	50,000	10,000	50,000	10,000	50,000	100,000	150,000	100,000	150,000	100,000	150,000
Motor rating (input / output)	83/75 W (1/10 hp)	130/120 W (1/6 hp)	83/75 W (1/10 hp)	130/120 W (1/6 hp)	83/75 W (1/10 hp)	130/120 W (1/6 hp)	83/75 W (1/10 hp)	130/120 W (1/6 hp)	83/75 W (1/10 hp)	130/120 W (1/6 hp)	83/75 W (1/10 hp)	130/120 W (1/6 hp)
Max. torque (Ncm) at chuck	85	145	85	145	85	145	300	500	300	500	300	500
Max. impeller diameter	8 mm						10 mm					
Speed range (rpm)	200 - 3,000 rpm						50 - 1,000 rpm					
Motor rating	Direct driven motor						3.5 : 1 ratio; worm-gear motor					
Controller	Analog phase		Jog-Shuttle		Jog-Shuttle via remote		Analog phase		Jog-Shuttle		Jog-Shuttle via remote	
Display	-		Digital LCD (for timer, rpm and power)				-		Digital LCD (for timer, rpm and power)			
Operation environment	Temperature range: 0 - 40°C, maximal humidity: 80%											
Safety mechanism	overheat protection		overheat and overload protection				overheat protection		overheat and overload protection			
Dimensions (WxDxH mm)	90x145x180				90x100x180		90x180x130	90x210x130	90x180x130	90x210x130	155x180x110	155x230x110
Weight (kg)	4.5	5.3	4.5	5.3	3 + 2.5*	3.8 + 2.5*	3.5	4	3.5	4	3.5 + 2.5*	4 + 2.5*
Others	smooth start and change of stirring speed while operation impeller height adjustable chrome-plated stainless steel chuck CE certified and unique serial number for tracing						smooth start and change of stirring speed while operation storage function for timer and speed impeller height adjustable chrome-plated stainless steel chuck CE certified and unique serial number for tracing					
Power supply	AC 230V or AC 120V											

* weight of remote controller

Material	Viscosity (mPas)	Recommended overhead stirrer			
Water	1	HS-30D	HS-100D	HT-50DX	HT-120DX
Milk	3				
Soyabean oil	160				
Varnish	500	HS-50A	HS-120A	HT-50AX	HT-120AX
Lacquer	1,000				
Honey	3,000				
Standard viscosity	10,000	HS-30T	HS-100T	HT-50T	HT-120T
Standard viscosity	15,000				
Ketchup	30,000				
Standard viscosity	50,000				
Mustard	70,000				
Corn syrup	100,000				
Standard viscosity	150,000				
Peanut butter	250,000				

powerful DC motor for various stirring applications (direct-driven or worm-gear)

high-speed or high-torque versions available

digital feedback controller

steady and constant stirring speed

chrome-plated stainless steel chuck to prevent corrosion

anti-trembling system - the impeller is fixed at two points within the body and chuck

adjustable impeller position (height)

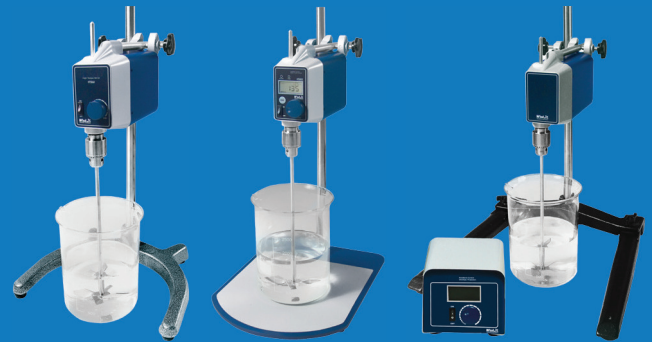
motor overload and overheat protection for highest safety and long lifetime

available as set with impeller, plate stand and clamp

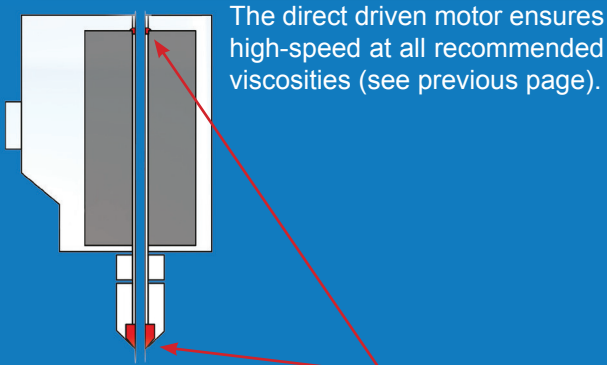
many different impellers and plate stands available (see page 122 & 123)



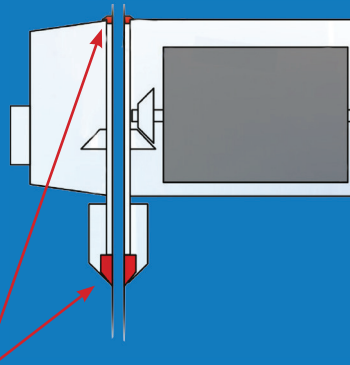
High-speed (HS models)



High-torque (HT models)



The direct driven motor ensures high-speed at all recommended viscosities (see previous page).



The worm-gear motor ensures high-torque at all recommended viscosities (see previous page).

The impeller is fixed at two points within the body to ensure smooth operation without trembling.



Anti-rust chuck - chrome-plated stainless steel

The anti-rust chuck is chrome-plated to prevent from corrosion by dropping or smoking liquids.

The chuck also fixes the impeller within the body and allows smooth operation without trembling.

Overhead stirrer | high-torque

analog, up to 40 / 60 liter, 100,000 / 150,000 mPas, up to 1,000 rpm

up to 1.000 rpm
100.000 mPas
150.000 mPas



HT-50AX Set



HT-AX high-torque analog

Ideal for:

- all mixing applications in the laboratory
- specialized for light watery solutions up to high-viscosity fluids

Features:

- maximal 40 / 60 liter
- up to 1,000 rpm
- maximal viscosity 100,000 / 150,000 mPas
- worm-gear motor (ratio 3.5:1)
- smooth start and change of stirring speed while operation
- impeller height adjustable
- chrome-plated stainless steel chuck
- CE certified and unique serial number for tracing

Safety mechanism:

- overheat protection
- operation LED

Controller:

- **Analog phase** controller with control knob

Model	HT-50AX	HT-120AX
Design	high-torque	
Controller-type	analog, integrated, phase controller	
Stirring capacity (H₂O)	max. 40 l	max. 60 l
Max. viscosity (mPas)	100,000 mPas	150,000 mPas
Max. torque (N cm) at chuck	300 N cm	500 N cm
Max. impeller shaft	Ø 10 mm	
Speed range	up to 1,000 rpm	
Controller	analog phase controller with control knob	
Permissible temperature & RH %	ambient temperature 0 ~ 40°C, 80% RH	
Safety device	overheat protection	
Dimension & weight	90x180xh130 mm, 3.5 kg	90x210xh130 mm, 4 kg
Packaging size	320x300xh180 mm, 5 kg	320x300xh180 mm, 8 kg
Material	ABS & Aluminium	
Power supply	1 Phase AC 120V, 60 Hz or AC 230V, 50/60 Hz	
Order number 230V	Unit: DH.WOS01251 Set: DH.WOS01252	Unit: DH.WOS01271 Set: DH.WOS01272
Order number 120V	Unit: DH.WOS02251 Set: DH.WOS02252	Unit: DH.WOS02271 Set: DH.WOS02272

Set includes: Unit HT-AX
Impeller PL020 4-bladed Ø90 mm
Clamp CL200
Plate stand KA1177 34x29 cm

Accessories: Impellers and plate stands on page 122 & 123