WIGGENS
THE MAGIC MOTION

Overhead stirrer

Attractive design for demanding stirrers & mixing

Our new complete range of laboratory overhead stirrers will meet your high demands every day!

High Torque / High Speed Overhead Stirrer
Pro series
WOHS-200 Pro, WOHS-400 Pro, WOHS-20H Pro

Remotely Controllable High Torque / High Speed Stirrers, Suitable for reaction
Pro F series
WOHS-200 Pro F, WOHS-40 Pro F, WOHS-20H Pro F

Remotely Controllable High Torque / High Speed Stirrers
C & EC Series
WB3000-C, WB1800-C, WB3000-EC, WB1800-EC

WB2000-C

WB2000-M

Overhead Stirrer
2000 series
WB2000-A, WB2000-M, WB2000-C

WOHS-10 Pro

WIGGENS
THE MAGIC MOTION

Overhead Stirrer

WOHS-10 Pro / WOHS-15 Pro

Overhead Stirrers of the WOHS range are perfect for stirring and mixing applications. The devices are designed to surpass the requirements of laboratories and institutions around the world with their modern technology and high quality.

NEW!

TFT Display

TFT display with vivid luminance is easy to read, even from a long distance.

Precise speed control

Easy operation of all parameters using the central turning knob and touch key

RS232 / RS485

The stirrer comes equipped with RS 232 and RS485 interface to control and document all parameters.

Working status indicator

Standby (blue) , Running (green) , Alarm (red)

Timer

0~99hr99min

Automatic timing function, after start the stirring , the display will automatically start the function: countdown the running time

Brushless DC motor

for long life span, low maintenance and quiet running

Temperature measurement

Temperature measuring range: -10~350℃

Temperature measurement resolution: 0.1℃

Keyless chuck

It allows you to quickly and easily remove the stirring elements without any tools.

Clamping range: 0.5-10mm

Direction of rotation

Clockwise or counterclockwise

Model	WOHS-10 Pro	WOHS-15 Pro
Order No.	W3041010	W3041015
Speed range [rpm]	40~2000	40~2000
Setting accuracy speed [rpm]	1	1
Deviation of speed measurement n > 300rpm	±3 %	±3 %
Speed Display	TFT display	TFT display
Clockwise or counterclockwise of stirring	Yes	Yes
Speed setting	Touch key and turning knob	Touch key and turning knob
Time setting range	99h59min59sec	99h59min59sec
Temperature measuring range	-10~350	-10~350
Stirring quantity max [L / H_2O]	15	50
Temperature measurement resolution	0.1	0.1
Working status indicator	Standby (blue) , Running (green) , Alarm (red)	Standby (blue) , Running (green) , Alarm (red)
Power [W]	30	60
Motor principle	Brushless DC motor	Brushless DC motor
Torque max. at stirring shaft [N-cm]	15	29
Stirring element fastening	Keyless chuck, easy to install and replace the shaft	Keyless chuck, easy to install and replace the shaft
Chuck range diameter [mm]	0.5~10	0.5~10
Hollow shaft, inner diameter [mm]	10.2	10.2
Fastening on stand	Extension arm	Extension arm
Housing material	Cast aluminum coating / thermoplastic polymer	Cast aluminum coating / thermoplastic polymer
Power supply	100~240VAC,50/60Hz	100~240VAC,50/60Hz

Overhead Stirrer

WB2000-M / WB2000-C

WIGGENS® offers overhead stirrers for your stirring and mixing tasks in the lab for low to high viscosities. Safety, power and intelligence are again at the core of the development of this product range. The powerful motors achieve homogeneous results with exact speed even under changing loads or high viscosity and produce little noise. Many reliable solutions are available, according to different requirements in terms of viscosity and volume.
WIGGENS® overhead stirrers process stirring quantities of up to 100 liters.

WB2000-M

WB2000-C

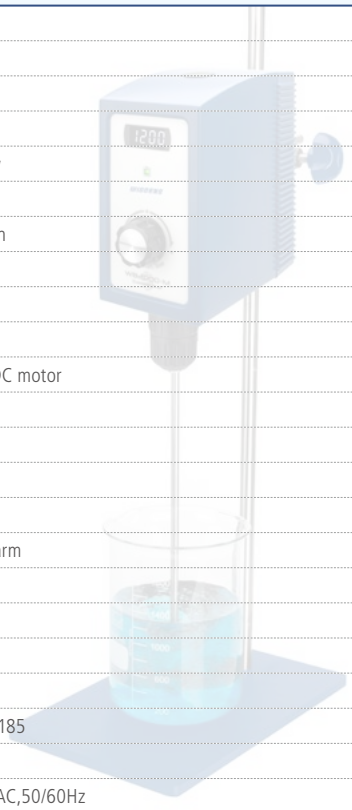
- Brushless DC motor, which is very suitable for long-term experimental applications
- Stable and accurate stirring process due to latest micro-processor technology
- Slow ramp-up and speed limits protect you from splashes
- Totally enclosed and compact casing
- The high torque ensures maximum efficiency and minimal processing time even for high-viscosity media
- Stable and quiet working process
- Internal overload protection
- Adjustable impeller shaft for different heights
- Soft start at low speed guarantees a smooth and safe stirring process
- Suitable for applications in various environments
- The standard version package entails the overhead stirrer, a stand, rod, and clamp, as well as a stainless steel impeller
- Availability of a wide range of different optional impellers

Features of the WB2000-C

- Employs all basic functions of the WB2000-M overhead stirrer
- The WB2000-C come with a reversible rotation function
- The WB2000-C employs button control and a bright LCD speed display
- Directly connectable to the computer via RS-232 cable for remote control
- Equipped with digital input/output ports and foot pedal port for various applications
- Suitable for stirring in reaction systems or stirring applications linked to other equipment
- Rotation speed can be lowered to 20 rpm for very sensitive stirring processes

Specifications

Model	WB2000-M	WB2000-C
Order No.	100300	100500
Speed range [rpm]	40~2000	40~2000
Setting accuracy speed [rpm]	1	1
Deviation of speed measurement n > 300rpm	±3 %	±3 %
Speed Display	LED display	LCD display
Clockwise or counterclockwise of stirring	No	Yes
Speed setting	Turning knob	Push button
Stirring quantity max [L / H_2O]	50	50
Input power [W]	70	70
Output power [W]	50	50
Motor principle	Brushless DC motor	Brushless DC motor
Torque max. at stirring shaft [N-cm]	66	70
Stirring element fastening	Keyless chuck, easy to install and replace the shaft.	
Chuck range diameter [mm]	0.5~10	0.5~10
Hollow shaft, inner diameter [mm]	10.2	10.2
Fastening on stand	Extension arm	Extension arm
Extension arm diameter [mm]	13	13
Extension arm length [mm]	124	124
Housing material	Cast aluminum coated	
RS232 interface	No	Yes
Dimensions (W x H x D)	105 x160 x185	105 x160 x185
Weight [kg]	11	11
Power supply	100~240VAC,50/60Hz	100~240VAC,50/60Hz



WIGGENS
THE MAGIC MOTION

High Torque / High Speed Overhead Stirrer

WB3000-D / WB1800-D / WB6000-D

Specially designed for optimum usability and the highest efficiency in the same class with advanced safety features. Offering the best mixing results, even for challenging application that needs high speed and high torque.

- > Brushless DC motor
- > Totally enclosed and compact metal casing
- > Smart and convenient on-touch control
- > TFT Display for better image quality and easy navigation
- > Bright TFT screen, which can display for monitoring set speed, actual speed and torque
- > Transmission can be switched between low speed / high torque, and high speed / low torque
- > Easily adjustable spinning chuck
- > Precise speed adjustment
- > Set speed can be maintained when viscosity of liquid changes
- > Easy and time saving impeller adjustments
- > Digital and analog interface available
- > Monitoring and control via PC software

High Torque
High Speed

Height adjustment

A through-shaft design allows for adjusting the impeller position to make height adjustment more convenient

Ease of operation

Smart and convenient on-touch control

Precise speed adjustment

Speed Range 20-3000rpm, maintenance of constant motor speed by PID feedback control system even under conditions of changing viscosity.

RS232 / RS485

The stirrer comes equipped with an RS 232 and an RS485 interface to control and document all parameters.

Brushless DC motor

for longer life span, low maintenance and higher efficiency

Keyless chuck

It allows you to quickly and easily remove the stirring elements without any tools. Clamping range: 0.5-10mm

TFT Display

for better image quality and easy navigation

High Torque / High Speed

Offering the best mixing results, even for challenging applications

Timer mode countdown running time

Set speed

Actual speed

Stirrer converts output current to torque, reflecting the load changing of motor

Control mode switch among Local, ANA.U, ANA.I, Foot, Remote Control

Function switch

Torque mode switch

Local - Controlled by the panel.
Ana.u - Controlled by analog voltage (0-10V)
Ana.i - Controlled by analog current (0-20mA)
Foot - Optional accessory, the foot pedal can start and stop the overhead stirrer.
Remote control - Controlled by digital signal, Rs 485 serial port, modbus RTU protocol.

The powerful D Series stirrer can accomplish the most demanding tasks while providing the highest safety and increased performance life!

Sealed housing guarantees longevity and maintenance-free 24-hour operation in an aggressive environment

For support stand selection, please refer to Page 119
For impeller selection, please refer to Page 112

Specifications

Please note that other overhead stirrer models are available on request, please contact Wiggens for further information.

Model	WB3000-D	WB1800-D	WB6000-D
Order No.	100400	100600	100800
Speed range [rpm] 1)	30~600 (I) 601~3000 (II)	20~360 (I) 361~1800 (II)	60~1200 (I) 1201~6000 (II)
Setting accuracy speed [rpm]	1	1	1
Deviation of speed measurement n > 300rpm	±3 %	±3 %	±3 %
Speed Display	TFT display	TFT display	TFT display
Clockwise or counterclockwise of stirring	Yes	Yes	Yes
Speed setting	Touch key and turning knob	Touch key and turning knob	Touch key and turning knob
Power [W]	150	150	150
Stirring quantity max [L / H_2O]	100	100	100
Motor principle	Brushless DC motor	Brushless DC motor	Brushless DC motor
Torque max. at stirring shaft [N-cm] 2)	339(I) / 68(II)	563(I) / 113(II)	170(I) / 34(II)
Stirring element fastening	Keyless chuck, easy to install and replace the shaft.	Keyless chuck, easy to install and replace the shaft.	Keyless chuck, easy to install and replace the shaft.
Chuck range diameter [mm]	0.5~10	0.5~10	0.5~10
Hollow shaft, inner diameter [mm]	10.2	10.2	10.2
Fastening on stand	Extension arm	Extension arm	Extension arm
Extension arm diameter [mm]	13	13	13
Extension arm length [mm]	124	124	124
Housing material	Cast aluminum coating	Cast aluminum coating	Cast aluminum coating
Interface RS-232/485 and analog connection	Yes	Yes	Yes
Dimensions (W x H x D)	200 x 95 x 230	200 x 95 x 230	200 x 95 x 230
Weight [kg]	5	5	5
Power supply	100~240VAC,50/60Hz	100~240VAC,50/60Hz	100~240VAC,50/60Hz

1) Two grades of stirring speed are for this series. The low-speed has more torque, suitable for chemical reaction system. And the high-speed is suitable for sample pretreatment. According to the set speed, it can be switched automatically between them.

2) The two speed ranges correspond to different maximum torque.

WIGGENS
THE MAGIC MOTION

Remotely Controllable High Torque / High Speed Stirrer

keyless chuck

WB3000-DF / WB1800-DF / WB6000-DF

Ideally perform your professional stirring tasks requiring high functionality, safety, and longevity. Prestige touch TFT controller, especially for applications where the remote controller is needed

Features

- With all the functions and features of D-series overhead stirrers, vibration-free and silent operation.
- Equipped with a maintenance-free BLDC motor to generate smooth, quiet, and yet powerful stirring.
- Powerful torque capable of handling high viscosity tasks.
- Maintenance of constant motor speed by control system even under conditions of changing viscosity.
- Best effort function intelligently manages its stirring speed to keep stirring even if the workload is out of its capacity.
- Prevention of accidental spills or splashes thanks to microprocessor controlled smooth start and stop functions.

A through-shaft design allows for adjusting the impeller position to make height adjustment more convenient

Keyless chuck

It allows you to quickly and easily remove the stirring elements without any tools.
Clamping range: 0.5-10mm

Specifications

Model	WB3000-DF	WB1800-DF	WB6000-DF
Order No.	100400F	100600F	100800F
Speed range [rpm] 1)	30~600 (I) 601~3000 (II)	20~360 (I) 361~1800 (II)	60~1200 (I) 1201~6000 (II)
Setting accuracy speed [rpm]	1	1	1
Deviation of speed measurement n > 300rpm	±3 %	±3 %	±3 %
Speed Display	TFT display	TFT display	TFT display
Clockwise or counterclockwise of stirring	Yes	Yes	Yes
Speed setting	Touch key and turning knob	Touch key and turning knob	Touch key and turning knob
Power [W]	150	150	150
Stirring quantity max [L / H_2O]	100	100	100
Motor principle	Brushless DC motor	Brushless DC motor	Brushless DC motor
Torque max. at stirring shaft [N-cm] 2)	339(I) / 68(II)	563(I) / 113(II)	170(I) / 34(II)
Stirring element fastening	Keyless chuck, easy to install and replace the shaft.	Keyless chuck, easy to install and replace the shaft.	Keyless chuck, easy to install and replace the shaft.
Chuck range diameter [mm]	0.5~10	0.5~10	0.5~10
Hollow shaft, inner diameter [mm]	10.2	10.2	10.2
Fastening on stand	Extension arm	Extension arm	Extension arm
Extension arm diameter [mm]	13	13	13
Extension arm length [mm]	124	124	124
Housing material	Cast aluminum coating	Cast aluminum coating	Cast aluminum coating
Interface RS-232/485 and analog connection	Yes	Yes	Yes
Dimensions of motor (W x H x D)	200 x 95 x 230	200 x 95 x 230	200 x 95 x 230
Weight	4.5	4.5	4.5
Power supply	100~240VAC,50/60Hz	100~240VAC,50/60Hz	100~240VAC,50/60Hz

1) Two grades of stirring speed are for this series. The low-speed has more torque, and is suitable for chemical reaction system. And the high-speed is suitable for sample pretreatment. According to the set speed, it can be switched automatically between them.

2) The two speed ranges correspond to different maximum torque.

High Torque / High Speed Overhead Stirrer

Pro series

Suitable for mixing medium and high viscosity liquid or solid liquid. Mainly used in chemical synthesis, pharmaceutical, physical and chemical analysis, petrochemical, chemical, cosmetics, health products, food, biotechnology, and other fields.

- > Suitable for large-volume, high-viscosity sample stirring tasks.
- > Available for different mixing speeds or torques.
- > adopts microcomputer control technology to ensure constant speed.
- > Maintenance-free brushless DC motor, suitable for long-term, high-load work in the laboratory.
- > Two speed ranges are adjustable, and the torque at low speeds can reach more than 5 times the torque at high speeds.
- > A wide range of mixing impellers are available.

High Torque
High Speed

NEW!

TFT Display

TFT display with vivid luminance is easy to read, even from a long

Precise speed control

Easy operation of all parameters using the central turning knob and touch key.
Accuracy ±1rpm

Working status indicator

Standby (blue) , Running (green) , Alarm (red)

Brushless DC motor

For long life span, low maintenance and quiet running.

Keyless chuck

It allows you to quickly and easily remove the stirring elements without any tools.
Clamping range: 0.5-10mm

RS232 / RS485

The stirrer comes equipped with RS 232 and RS485 interface to control and document all parameters.

Timer

99h59min59sec
Automatic timing function, after start the stirring, the display will automatically start the function: countdown the running time.

Temperature measurement

Temperature measuring range: -10~350°C
Temperature measurement resolution: 0.1°C

Direction of rotation

Clockwise or counterclockwise.

High Torque / High Speed

Offering the best mixing results, even for challenging applications.

The Pro Series stirrer can accomplish the most demanding tasks while providing the highest safety and increased performance life!

Sealed housing guarantees longevity and maintenance-free 24-hour operation in an aggressive environment

Specifications

Model	WOHS-200 Pro	WOHS-400 Pro	WOHS-20 HPro
Order No.	W3041030	W3041018	W3041060
Speed Range (rpm)	30~600(I)	20~360(I)	60~1200(I)
	601~3000(II)	361~1800(II)	1201~6000(II)
Torque max. at stirring shaft [N-cm]	339(I)	565(I)	170(I)
	68(II)	113(II)	34(II)
Maximum Stirring volume(L)H_20	100	100	100
Maximum stirring viscosity (cps)	100000	150000	70000
Maximum Torque [N-cm]	339	565	170
Setting accuracy speed [rpm]	1	1	1
Deviation of speed measurement n > 300rpm	±3 %	±3 %	±3 %
Speed Display	TFT	TFT	TFT
Clockwise or counterclockwise of stirring	YES	YES	YES
Speed setting	Touch key and turning knob		
Time setting range	99h59min59sec	99h59min59sec	99h59min59sec
Temperature measuring range[℃]	-10~350	-10~350	-10~350
Temperature measurement resolution[℃]	0.1	0.1	0.1
Working status indicator	Standby (blue) , Running (green) , Alarm (red)		
Interface RS-232/485 and analog connection	Yes	Yes	Yes
Power [W]	150	150	150
Motor principle	Brushless DC motor	Brushless DC motor	Brushless DC motor
Stirring element fastening	Keyless chuck, easy to install and replace the shaft	Keyless chuck, easy to install and replace the shaft	Keyless chuck, easy to install and replace the shaft
Chuck range diameter [mm]	0.5~10	0.5~10	0.5~10
Hollow shaft, inner diameter [mm]	10.2	10.2	10.2
Power supply	100~240VAC,50/60Hz	100~240VAC,50/60Hz	100~240VAC,50/60Hz

Remotely Controllable High Torque / High Speed Stirrer

Pro F series

Ideally perform your professional stirring tasks requiring high functionality, safety, and longevity. Prestige touch TFT controller.

Features

> Low vibration, noise-free operation.
> Brushless DC motor, strong and stable operation.
> High torque stirring for high viscosity samples.
> Accurate speed control.
> Microprogram control to prevent liquid splashing.

When used with a reactor or on other special occasions, it is necessary to operate the stirrer at a certain distance.

WIGGENS newly designed remotely controllable overhead stirrer combines the stirring drive unit with the control unit split assembly, the cable connection allows easy and safe operation of the stirrer at a distance.

> Handheld controller 150mm long, 100mm wide with a 2m wire.
> The connection of the handheld controller to the stirrer and the connection of the wire to the operation panel are all push-in aviation plugs.
> The handheld controller can display stirring speed, torque, stirring mode, etc.

The handheld controller

> Simple operation, TFT touchscreen control.
> When handling special samples, the stirrer can be controlled remotely without opening the fume hood and biosafety cabinet.

Security

> Aluminum housing, which can effectively absorb or dissipate the heat generated inside.
> Power adapter and main unit are separated to protect the user from the risk of electric shock.

Model	WOHS-200 Pro F	WOHS-400 Pro F	WOHS-20H Pro F
Order No.	W3041030F	W3041018F	W3041060F
Speed Range (rpm)	30~600(I)	20~360(I)	60~1200(I)
	601~3000(II)	361~1800(II)	1201~6000(II)
Torque max. at stirring shaft [N-cm]	339(I)	565(I)	170(I)
	68(II)	113(II)	34(II)
Maximum Stirring volume(L)H_20	100	100	100
Maximum stirring viscosity (cps)	100000	150000	70000
Maximum Torque [N-cm]	339	565	170
Setting accuracy speed [rpm]	1	1	1
Deviation of speed measurement n > 300rpm	±3 %	±3 %	±3 %
Speed Display	TFT	TFT	TFT
Clockwise or counterclockwise of stirring	YES	YES	YES
Speed setting	Touch key and turning knob		
Time setting range	99h59min59sec	99h59min59sec	99h59min59sec
Temperature measuring range[℃]	-10~350	-10~350	-10~350
Temperature measurement resolution[℃]	0.1	0.1	0.1
Working status indicator	Standby (blue) , Running (green) , Alarm (red)		
Interface RS-232/485 and analog connection	Yes	Yes	Yes
Power [W]	150	150	150
Motor principle	Brushless DC motor	Brushless DC motor	Brushless DC motor
Stirring element fastening	Keyless chuck, easy to install and replace the shaft	Keyless chuck, easy to install and replace the shaft	Keyless chuck, easy to install and replace the shaft
Chuck range diameter [mm]	0.5~10	0.5~10	0.5~10
Hollow shaft, inner diameter [mm]	10.2	10.2	10.2
Power supply	100~240VAC,50/60Hz	100~240VAC,50/60Hz	100~240VAC,50/60Hz

WIGGENS
THE MAGIC MOTION

Remotely Controllable High Torque / High Speed Stirrer

WB3000-C / WB1800-C / WB3000-EC / WB1800-EC

- > Suitable for reaction systems and other high torque / high speed applications
- > Set speed can be maintained when viscosity of liquid changes
- > Brushless DC motor made in Germany, for high performance stirring processes
- > Maintenance-free
- > Quiet and reliable
- > Digitally adjustable rotation speed and direction
- > Remote controller can display actual speed and actual torque as well as the set speed
- > Digital (RS-232/485) and analog communication available for remote PC or PLC control

Features

- > Vibration-free and silent operation.
- > Powerful torque capable of handling high viscosity tasks.
- > Maintenance of constant motor speed by control system even under conditions of changing viscosity.
- > Best effort function intelligently manages its stirring speed to keep stirring even if the workload is out of its capacity.
- > Prevention of accidental spills or splashes thanks to microprocessor-controlled smooth start and stop functions.

Practical external controller.

- > Intuitive and easy control with touch TFT.
- > It enables convenient and safe external control without opening the sash of the fume hood or safety cabinet.
- > Compact and slim head design for diverse flexibility in configuring other test equipment and accessories. (optional)

Safety

- > Sturdy aluminum main body efficiently absorbing and emitting the heat generated by the motor.
- > Separated adapter from the main body minimizes the risks of electrical hazards to the users.

Specifications

Model	WB3000-C	WB1800-C	WB3000-EC	WB1800-EC
Order No.	100401	100601	100402	100602
Speed range [rpm]	70~3000	20~800	70~3000	20~800
Setting accuracy speed [rpm]	1	1	1	1
Deviation of speed measurement n > 300rpm	±3 %	±3 %	±3 %	±3 %
Speed Display	TFT display	TFT display	TFT display	TFT display
Clockwise or counterclockwise of stirring	Yes	Yes	Yes	Yes
Speed setting	Touch key and turning knob	Touch key and turning knob	Touch key and turning knob	Touch key and turning knob
Stirring quantity max [L / H_2O]	100	100	100	100
Power [W]	150	150	450	450
Motor principle	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor
Torque max. at stirring shaft [N-cm]	330	1320	410	1640
Housing material	Powered coated SS housing	Powered coated SS housing	Powered coated SS housing	Powered coated SS housing
Interface RS-232/485 and analog connection	Yes	Yes	Yes	Yes
Dimensions of motor (W x H x D) [mm]	95 x 215 x 150	95 x 215 x 150	95 x 215 x 150	95 x 215 x 150
Weight (Stirrer / Controller) [kg]	3.4 / 0.5	3.4 / 0.5	3.4 / 0.5	3.4 / 0.5
Power supply	100~240VAC,50/60Hz	100~240VAC,50/60Hz	100~240VAC,50/60Hz	100~240VAC,50/60Hz

Accessories for Overhead Stirrer

Magnetic stirrer guides

Magnetic drives are designed for agitating a fully vacuumed flask.
Multi-functional and easy to replace impeller.

> Use of rare-earth elements which is Neodymium (Nd), Samarium (Sm-Co) magnet.
> High-speed rpm, vibration free.
> Specifically designed with permanent magnets which has a dynamic torque rating.
> Small size and powerful rotating magnetic drive is useful both for laboratory and manufacturing applications.

Specifications

Model	MD-24	MD-29	MD-45	MD-15	MD-25
Ground Joint	24/40	29/42	34/45	Thread #15	Thread #25
Body / Housing	SUS316L / CR-PLATE				
Bushing / Seal	PTFE/Viton				
Vacuum	1×10^{-4} mmHg				
Pressure	5 bar				
Temp	Max. 70℃ (without cooling), Max. 300℃ (with cooling)				
Shaft Size (Ø, mm)	8 mm				
Cooling in / out Size (Ø, mm)	3.2 mm				
Dimension (Ø×L, mm)	50×200mm				
Weight (kg)	1.02	1.04	1.08	1.00	1.02
Order No.	511001	511002	511003	511004	511005

Application of Magnetic Drive

Stirrer guides

Universal stirrer seal

Material : PTFE (Polytetrafluoroethylene)

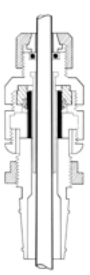
Order No.	ShaftØ (mm)	Joint Size	Height (mm)
KA22-02	24/40	8	60
KA22-03	29/42	8	60
KA22-04	34/45	8	60

Universal stirrer guide For standard taper ground glass joints

Universal stirrer guides for use with standard taper ground glass joints can be used with PTFE Shaft Stirrers, glass and metal shaft stirrers. Unique features of the design are a permanently loaded Composite PTFE/PEEK Seal, a Glass Ball-Bearing for rigidity and smoothness of operation.

> Exceptional chemical resistance
> Anti-whip and reduced vibration
> Vaccum (6.6mbar) and pressure (0.2~0.35Bar) performance
> No shedding
> Maximum recommended speeds: continuous 500rpm, intermittent 800rpm

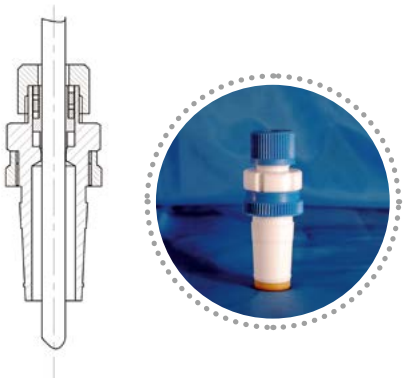
Order No.	ShaftØ (mm)	Joint Size	Height (mm) excl.joint	GuideØ (mm)
5.101.1.7	6	19/22	96	45
5.102.7	6	24/40	96	45
5.104.7	8	24/40	96	45
5.105.7	10	24/40	96	45
5.106.7	10	29/42	96	45
5.108.7	12	29/42	110	55



High performance stirrer guide For standard taper ground glass joints

This product is designed to provide an effective guide for Glass and Metal Shaft stirrers over a range of temperatures without shedding particles from the seal, whilst maintaining a vacuum. The seal is manufactured from a specially formulated PTFE-PEEK composite and is permanently pressure loaded.

- > The HP Stirrer Guide has the additional features:
- > High level of chemical resistance
- > Anti-whip and reduced vibration
- > Vaccum (6.6mbar) and pressure (0.2~0.35Bar) performance
- > No shedding
- > Self-releasing joint ring
- > Maximum recommended speeds: continuous 500rpm, intermittent 800rpm



Note: PEEK has a very high level of chemical resistance with some susceptibility only to strong mineral acids

Order No.	ShaftØ(mm)	Joint Size	Height (mm) excl.joint	GuideØ (mm)
5.0.0619	6	19/22	60	42
5.0.0624	6	24/40	60	42
5.0.0819	8	19/38	60	42
5.0.0824	8	24/40	60	42
5.0.1024	10	24/40	60	42
5.0.1029	10	29/42	60	50
5.0.1034	10	34/45	60	50
5.0.1045	10	45/50	60	58
5.0.1229	12	29/42	70	50
5.0.1945	19	45/50	70	58

High vacuum stirrer guide

The newest design of mechanical stirring seals with all parts that are in contact with liquid or vapor being made of PTFE, RULON, or PEEK material. It doesn't harm the stirring rod and is highly chemical resistant. It can be used with vacuum of up to 0.8mbar. The highest recommended stirring speed is 400 rpm.

Order No.	ShaftØ (mm)	Joint Size	Replace O-Ring
8050-02	10	24/40	7859-526
8050-04	10	29/42	7859-534
8050-14	10	29/32	7859-534
8050-10	10	#15 Ace-Thred	7859-530
8050-12	10	#25 Ace-Thred	7859-534
8050-06	19	45/50	7859-573
8050-16	25.4	45/50	7859-573
8050-08	28	45/50	7859-573
8050-18	30	45/50	7859-573

Coupling

The universal swivel coupling is designed for connection to a metal chuck. The compression connection is secured via Allen screw, and attaches to various O.D. glass stirring shafts. When used with pass-through assemblies, the coupling allows for easy, flexible height adjustment.

Motor shaft (OD)	Shaft size (OD)	Order No.
6mm	6mm	8126-05
6mm	10mm	8126-10

PTFE Impeller

> Stainless steel core surrounded by PTFE mantle
> Chemical resistant
> Economically friendly
> Strong structure which doesn't break easily
> Can be used up to a max. temperature of 280°C
> The stainless steel core is revealed at the upper part and can be plugged into the stirrer
> The length of the revealed part is 50mm

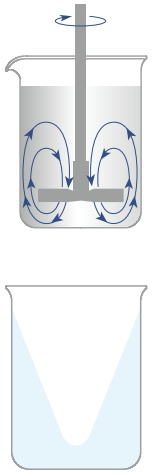
EX = Exposed Shaft.

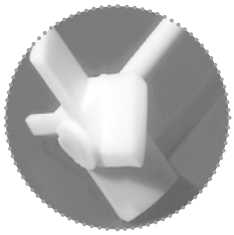
Shafts of 650mm, 750mm & 1000mm in length are produced with a stainless steel core with an exposed end for more rigid clamping to the chuck drive
Shafts up to 12mm diameter have an exposed end of 50mm long and 6.5mm diameter.
Shafts of 16mm diameter have an exposed end of 50mm long and 8.5mm diameter.

Screw Propeller, 4-Bladed (PTFE Coated)

Creates shearing force. Used for mixing media in an up-to-down axial flow, for mid and high-speed stirring, and for mid and low viscosity.

Order No.	Shaft Ø(mm)	Length(mm)	Rotor Ø(mm)
005.230.2	6	300	40
005.240.2	6	400	40
005.250.2	6	500	50
005.230.8.2	8	300	40
005.240.8.2	8	400	40
005.250.8.2	8	500	50
005.255.10.2	10	550	70
005.0265.10.2	10	650EX	70
005.0275.10.2	10	750EX	70
005.0265.12.2	12	650EX	80
005.0275.12.2	12	750EX	80
005.02100.12.2	12	1000EX	80
005.0275.16.2	16	750EX	80
005.0275.16.1.2	16	750EX	100
005.02100.16.2	16	1000EX	100
005.02100.16.1.2	16	1000EX	120

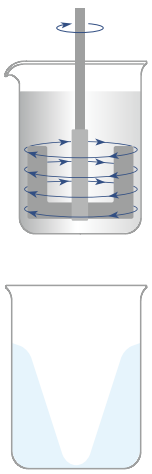




Anchor Impeller (PTFE Coated)

Produces tangential flow and strong shearing force. Used for slow-speed stirring, for high viscosity mixtures.

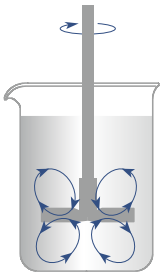
Order No.	Shaft Ø(mm)	Length(mm)	Rotor Ø(mm)
005.330.2	6	300	80
005.340.2	6	400	80
005.350.2	6	500	80
005.330.8.2	8	300	80
005.340.8.2	8	400	80
005.350.8.2	8	500	80
005.355.10.2	10	550	100
005.0365.10.2	10	650EX	140
005.0375.10.2	10	750EX	140
005.0365.12.2	12	650EX	140
005.0375.12.2	12	750EX	140
005.03100.12.2	12	1000EX	140
005.0375.16.2	16	750EX	140
005.0375.16.1.2	16	750EX	180
005.03100.16.2	16	1000EX	140
005.03100.16.1.2	16	1000EX	180



Centrifugal Stirrer, 2-Bladed (PTFE Coated)

2-Blade Impeller which will open up depending on the stirring speed. Used for round vessels with narrow openings, for mixing media in an up-to-down axial flow, for mid and high-speed stirring

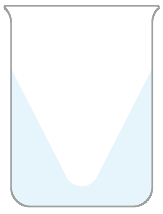
Order No.	Shaft Ø(mm)	Length(mm)	Rotor Ø(mm)
005.430.2	6	300	40
005.440.2	6	400	40
005.450.2	6	500	50
005.430.8.2	8	300	40
005.440.8.2	8	400	40
005.450.8.2	8	500	50
005.455.10.2	10	550	70
005.0465.10.2	10	650EX	70
005.0475.10.2	10	750EX	70
005.0465.12.2	12	650EX	80
005.0475.12.2	12	750EX	80
005.04100.12.2	12	1000EX	80
005.0475.16.2	16	750EX	80
005.04100.16.2	16	1000EX	80



Retreat Curve Impeller (PTFE Coated)

The blades are formed in a 30° angle. It creates tangential and axial flow as well as high shearing force. Used for mid- and slow-speed stirring, and for all levels of viscosity.

Order No.	Shaft Ø(mm)	Length(mm)	RotorØ(mm)	Blade Ht(mm)
005.80850.300	8	300	50	10
005.80875.300	8	300	75	15
005.80850.400	8	400	50	10
005.80875.400	8	400	75	15
005.81050.400	10	400	50	10
005.81075.400	10	400	75	15
005.81050.500	10	500	50	10
005.81075.500	10	500	75	15



Impeller Shafts for Blades (PTFE Coated)

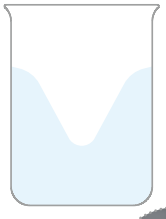
Shafts with a stainless steel core, PTFE coating, an exposed stainless steel end, as well as a hook for mounting blades

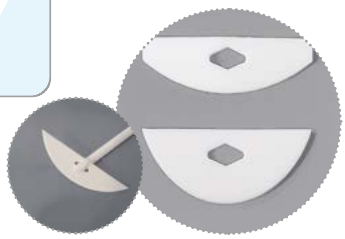
Order No.	Shaft Ø (mm)	Length (mm)	Order No.	ShaftØ (mm)	Length (mm)
005.530.1	6	300	005.0565.10.1	10	650EX
005.540.1	6	400	005.0575.10.1	10	750EX
005.550.1	6	500	005.05100.10.1	10	1000EX
005.530.8.1	8	300	005.0565.12.1	12	650EX
005.540.8.1	8	400	005.0575.12.1	12	750EX
005.550.8.1	8	500	005.05100.12.1	12	1000EX
			005.0575.16.1	16	750EX
			005.05100.16.1	16	1000EX

Blades (PTFE Coated)

Impeller blades that fit to "Impeller Shaft, with Hook (PTFE Coated)" . Completely inert and highly scratch-resistant. (Hole diameter: 6.5 mm)

Order No.	W(mm)	Ht(mm)	Order No.	W(mm)	Ht(mm)
002.052.1	52	14	002.1065.1	65	25
002.076.1	76	19	002.1075.1	75	25
002.090.1	90	28	002.1105.1	105	25
			002.1125.1	125	25
			002.1150.1	150	25





Plain Impeller Shafts (PTFE Coated)

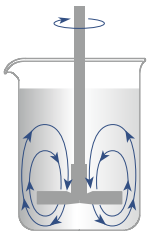
Plain shafts with a stainless steel core and PTFE coating, as well as an exposed stainless steel end.

Order No.	Shaft Ø(mm)	End Ø(mm)	LengthØ(mm)
005.100830EX	8	5	300
005.100850EX	8	5	500
005.101030EX	10	6.35	300
005.101050EX	10	6.35	500
005.101065EX	10	6.35	650
005.101250EX	12	6.35	500
005.101265EX	12	6.35	650
005.101275EX	12	6.35	750
005.1016750EX	16	10	750
005.1016100EX	16	10	1000

4 Blade Angled Type 45° Metric

Pitched impeller for use on PTFE coated shafts.

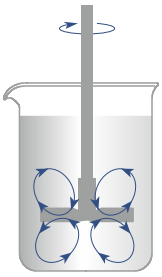
Order No.	Shaft Ø(mm)	RotorØ(mm)
005.606040	6	40
005.608040	8	40
005.610060	10	60
005.610090	10	90
005.612070	12	70
005.612090	12	90
005.616100	16	100



Flat Impeller

Flat impeller for use on PTFE coated shafts.

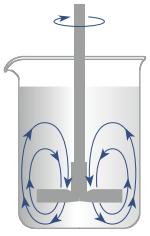
Order No.	Shaft Ø(mm)	RotorØ(mm)
005.706070	6	70
005.708070	8	70
005.710070	10	70
005.710100	10	100
005.712100	12	100
005.712150	12	150
005.716100	16	100
005.716150	16	150



Adjustable Turbine

Flat impeller for use on PTFE coated shafts.

Order No.	Shaft Ø(mm)	RotorØ(mm)
005.90850	8	50
005.90875	8	75
005.91075	10	75
005.9100100	10	100
005.91275	12	75
005.912100	12	100
005.016100	16	100
005.916150	16	150

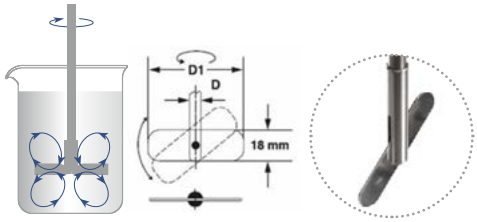


Stainless Steel Impellers

Pivoting Blade Impeller

For mixing media from coarse to liquid, for mid-speed stirring, and for mid to low viscosity mixtures.
Blade Height: 18 mm

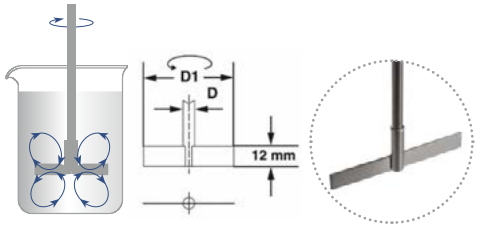
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9603	60	8	300
9604	60	8	400
9605	60	8	500



Straight 2-Blade Impeller

For mixing media from coarse to liquid, for mid-speed stirring, and for mid to low viscosity mixtures.
Blade Height: 12 mm

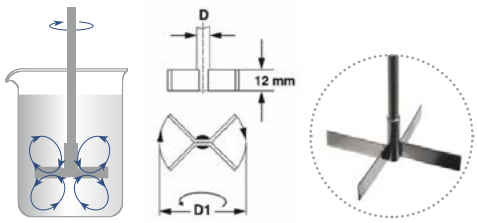
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9703	50	8	300
9704	50	8	400
9705	50	8	500



Straight 4-Blade Impeller

For mixing media from coarse to liquid, for mid-speed stirring, and for mid to low viscosity mixtures.
Blade Height: 12 mm

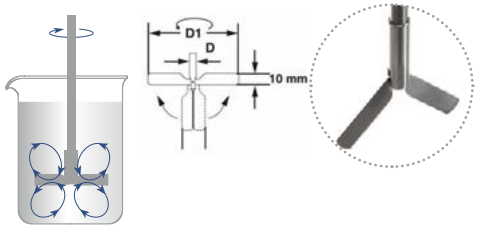
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9053	50	8	300
9054	50	8	400
9055	50	8	500
9056	100	10	300
9057	100	10	400
9058	100	10	500



Centrifugal Impeller

2-Blade Impeller which will open up depending on the stirring speed. Used for round vessels with narrow openings, for mixing media in an up-to-down axial flow, for mid- and high-speed stirring.
Blade Height: 10 mm

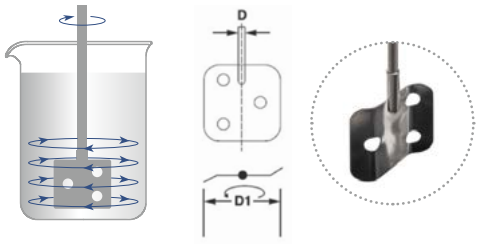
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9209	90/15	8	300
9210	90/15	8	400
9211	90/15	8	500
9212	90/15	10	300
9213	90/15	10	400
9214	90/15	10	500
9215	90/15	10	650



3-Hole Blade Impeller

For mixing media from coarse to liquid, for mid-speed stirring, and for mid to low viscosity mixtures.

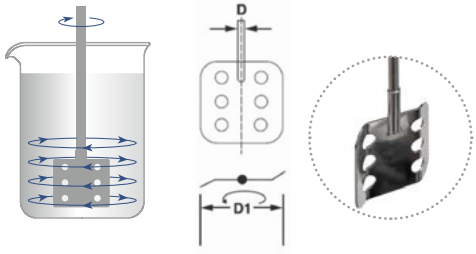
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9403	50	8	300
9404	50	8	400
9405	50	8	500
9406	100	10	300
9407	100	10	400
9408	100	10	500



6-Hole Blade Impeller

For mixing media from coarse to liquid, for mid-speed stirring, and for mid to low viscosity mixtures.

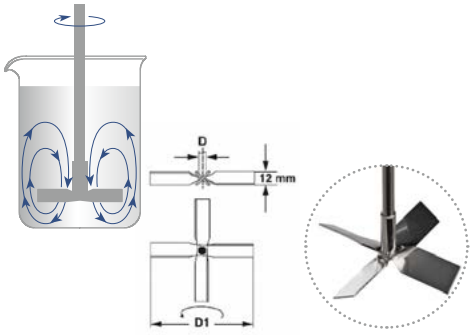
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9503	50	8	300
9504	50	8	400
9505	50	8	500
9506	100	10	300
9507	100	10	400
9508	100	10	500



Pitched Leaf Impeller and Pitched Blade Impeller

Employs small shearing force. Used for mixing media in an up-to-down axial flow, for mid- and high-speed stirring, for mid to low viscosity mixtures.
Blade Height: 12 mm

Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9003	50	8	300
9004	50	8	400
9005	50	8	500
9009	100	8	300
9010	100	8	400
9011	100	8	500
9012	70	8	500
9013	100	10	650
9014	100	10	800

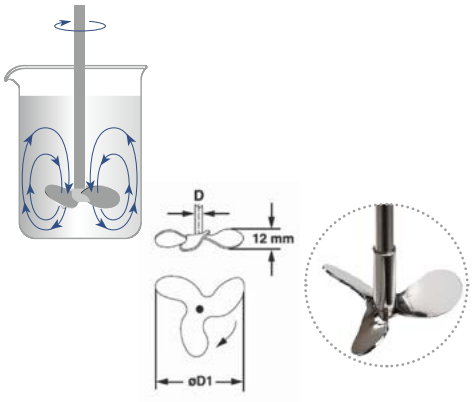


Propeller Stirrers, 3 Fix Blades

> rpm-range middle
> Mixing of media with low and middle viscosity
> Ideal for homogenising and suspensioning
> Axial flow

Blade Height: 12 mm

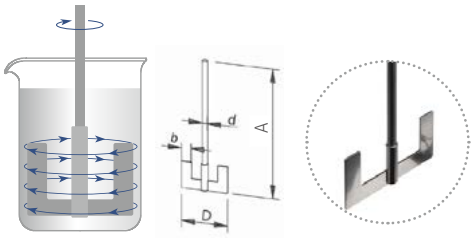
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm)
9103	50	8	300
9104	50	8	400
9105	50	8	500
9109	70	8	300
9110	70	8	400
9111	70	8	500
9112	100	10	300
9113	100	10	400
9114	100	10	500
9115	70	10	650
9116	100	10	800



Anchor Impeller

Produces tangential flow and strong shearing force. Used for slow-speed stirring, for high viscosity mixtures.

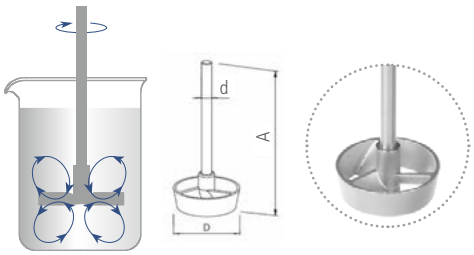
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) d	Length(mm) A
9610	70	8	500
9611	90	10	650
9612	140	10	800



Turbine Impeller

Creates shearing force. Used for mixing media in an up-to-down axial flow, for mid and high-speed stirring, for mid to low viscosity mixtures.

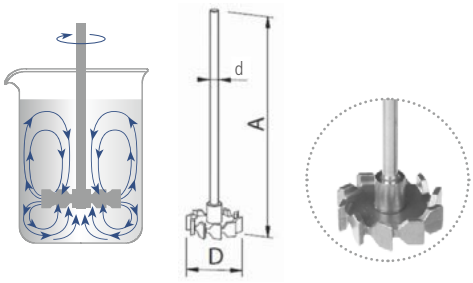
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) d	Length(mm) A
9025	45	7	400
9026	65	7	400
9025A	45	8	400
9026A	65	8	400



Radial Flow Impeller

Creates a strong flow and shearing force. Used for mixing media in an up-to-down axial flow, for mid-speed stirring, for mid viscosity under 500mpas. Especially useful for aerating.

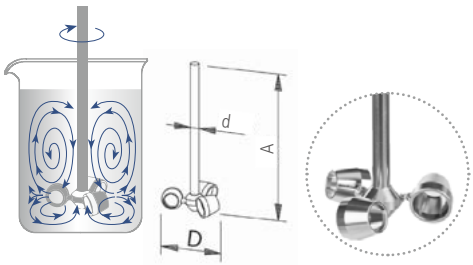
Order No.	Rotor Ø (mm) D1	Shaft Ø (mm) D	Length(mm) A
9030	50	8	400
9031	50	10	400



Multi-Purpose Impeller

Can generally be used in low to high viscosity mixtures. Even with slow stirring speed, it will produce a very good radial stirring outcome.

Order No.	Rotor Ø (mm) D	Shaft Ø (mm) d	Length(mm) A	rpm
9020	80	10	500	200-700
9021	120	10	500	120-500



Lifting platform

Laboratory Lifting platform

- Material : Stainless (#204)
- Available to support experiment tools such as stirrers, water baths, flasks and etc. in height control
- Smoothly works with a little force
- Max Height : 270mm

Description (W x L) cm	Max Height (mm)	Order No.
S/T (15 * 15)	60~270	KA11-91
S/T (20 * 20)	60~270	KA11-93
S/T (25 * 25)	60~270	KA11-94
S/T (30 * 30)	60~270	KA11-95
S/T (15 * 15)	60~270	KA11-91N
S/T (20 * 20)	60~270	KA11-93N
A/L (15 * 15)	60~270	KA11-91B
A/L (20 * 20)	60~270	KA11-92

Clamps

Holder and clamp are used to install the PT100 sensor for WOHS series.

Description	Order No.
Clamping range - stand 6~30mm, Clamping range - extension arm 6~16mm	WH2
Sensor set, POM	WH220027

Three-Prong Clamp

	Overall length (mm)	Maximum grip size(mm)	Order No.
Large Clamp	270	80	KA00-52
Medium Clamp	245	60	KA00-53
Small Clamp	210	30	KA00-54
Large Clamp	615 (Rod: 500)	80	KA00-52A

Two-Prong Clamp

Two-Prong Clamp, or dual adjustment clamp has a maximum grip size of 73mm. Two-prong design is ideal for beakers, flasks, and test tubes. Jaws adjust independently. Overall length is 255mm. Clamp extends 127mm.

	Overall length (mm)	Maximum grip size(mm)	Order No.
Medium Clamp	255	60	KA00-50
Medium Clamp	605 (Rod: 500)	60	KA00-50A

Utility Clamp Flat

Grips rods up to 3/4 in. diameter (19mm). The holding angle of the jaws is adjustable. It can be locked with a wingnut. Wingnut also allows length adjustment. Two-prong flat jaws are for test tubes. Three-prong are for irregular shapes. Vinyl and fiber glass sleeves are included. Replacement sleeves are available: Contact your Fisher Customer Service Representative.

	Overall length (mm)	Maximum grip size(mm)	Order No.
Medium Clamp	170	60	KA00-57

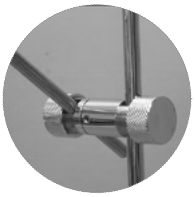
Utility Clamp, 3 Prong

Grips rods up to 3/4 in. diameter (19mm). The holding angle of the jaws is adjustable. It can be locked with a wingnut. Wingnut also allows length adjustment. Two-prong flat jaws are for test tubes. Three-prong ones are for irregular shapes. Vinyl and fiber glass sleeves are included.

	Overall length (mm)	Maximum grip size(mm)	Order No.
Medium Clamp	170	60	KA00-58

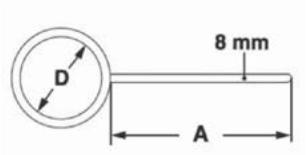
Clamp Swivel Holder

Material : Brass (Chromium plating)
Adjustable angle holder, different from other holders fixed at 90 degrees



Description (Max Grip)	Order No.
Ø13mm	KA00-71B

Extension-Type Ring



Material : Stainless Steel (Chromium plating)
Separatory Funnel Size : 250mL-70mm / 500mL-90mm / 1,000mL-100mm

Description (ID x OD)	Order No.
Ø50 x Ø60mm	KA00-67F
Ø70 x Ø80mm	KA00-67A
Ø90 x Ø100mm	KA00-67B
Ø110 x Ø120mm	KA00-67C
Ø130 x Ø140mm	KA00-67D
Ø150 x Ø160mm	KA00-67E


Have other specifications to order for you

Jumbo Clamp Holder

Heavy-Duty Clamp Holder, or Jumbo clamp holder has a maximum grip size of 22mm. The heavy duty version of the regular holder is for use wherever clamping at 90° angle is required.

Content	Order No.
22mm	KA00-70A

Chain Clamp

Material : Stainless Steel / Vinyl Coating


Overall length(mm)	Maximum grip size(mm)	Order No.
180	165mm	KA00-56
180	280mm	KA00-56A

Frame Holder

Lab frame hook connectors allow one-handed assembly of two components with one adjustment screw.
Material : Die Casting (Chromium plating)
Pipe Diameter : Ø12.7mm


Pipe Diameter	Order No.
12.7mm	KA00-69
12.7mm	KA00-70C

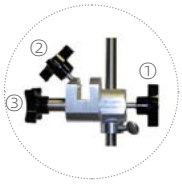
Clamp Holder All-Position

All-position holder connects at any angle in any plane. It consists of two holders connected by double plate-joint which sets holders 90^0 from each other. Each holder can be rotated 360^0. It grips rods up to 19mm in diameter.

	Order No.
All-Position	11090-17

Clamp Universal Swivel, "Power Hold"

Universal swivel clamp allows positioning of stirrer at any compound angle for best stirring action.
① One knob — Lets you lower or raise the stirrer
② One knob — Locks stirrer the on the support rod, tilts right/left
③ One knob — Controls swivel setting, forward/backward
It fits support stands with diameters from 3/8 inch to 5/8 inch (9.5mm to 16 mm). It holds stirrer mounting rods with diameters from 3/8 inch to 5/8 inch. It is fabricated of precision-machined aluminum.



	Order No.
Universal Swivel, "Power Hold"	11084-11

Flexible Arm fixture

Suitable for use when space is limited, or when multiple adjustments are required to position the fixture, especially for use in fume hood, which can be easily installed on any laboratory support stand, there are two types of connection design for flexible arm fixture.

Description (Max Grip×Length)	Order No.
60 x 360, 2P	KA00-50B
60 x 360, 3P	KA00-50C

KA00-50B

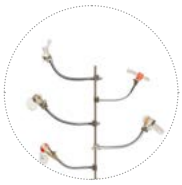
KA00-50C

Ultraflex clampling system

Talboys UltraFlex clamping system features a 30cm or 45cm flex arm and is ideal for working within hoods. The system mounts to any lab frame or support stand with a 19mm or less diameter. An optional base plate or bench clamp gives increased versatility. Complete units, codes -10 and -12, include the flex arm, a two-prong head, a three-prong head, a spring head and lab frame connector.

Package Order No.	type	A(cm)	D(cm)	d(cm)	Material quality	Order No.
11058-10	II	300	12	Three-Prong Clamp 58 Two-Prong Clamp 65	Stainless steel	11058-22
11058-12	II	400	12	Three-Prong Clamp 58 Two-Prong Clamp 65	Stainless steel	11058-22

Support stand need to be ordered from Wiggens



Extension Rod

Extend the rod to the expected length for your application

Order No.	Diameter (mm)	Height (mm)
WE-11	16	200
WE-12	16	400
WE-13	16	550

Clamp Holder

For Single Rod Stand

Model	WH1
Clamping range - stand	6~16mm
Clamping range - extension arm	6~16mm
Material	Cast aluminium

Clamp Holder

For Single Rod Stand

Model	WH2
Clamping range - stand	6~30mm
Clamping range - extension arm	6~16mm
Material	Cast aluminium

Clamp Holder

For double rod stand

Model	WH4	WH6	WH6-1
Clamping range - stand	16mm	16mm	16mm
Clamping range - extension arm	10~13mm	10~13mm	13~16mm
Material	Cast aluminium	Cast aluminium	Cast aluminium

Support stand

Plate stand with Ø16mm single-rod

Particularly stable position with plate base to prevent tilting of the position backward, single-rod provide stability. Used for supporting overhead stirrer and accessories.

Model	Base	Shaft	Container area (W x D mm)	Dimensions (W x D x Hmm)
WF11	Cast Iron coated powder	Stainless steel, OD16mm	315 x 200	315 x 200 x 550
WF12	Cast Iron coated powder	Stainless steel, OD16mm	315 x 200	315 x 200 x 750
WF13	Cast Iron coated powder	Stainless steel, OD16mm	315 x 200	315 x 200 x 950

WF12

WH-stand with Ø16mm single-rod

Particularly stable position with H-shaped base to prevent tilting of the position backward, single-rod provide stability. Used for supporting overhead stirrer and accessories.

Model	Base	Shaft	Container area (W x D mm)	Dimensions (W x D x Hmm)
WH11-S	Aluminum	Stainless steel	252 x 208	340 x 300 x 550
WH12-S	Aluminum	Stainless steel	252 x 208	340 x 300 x 750
WH13-S	Aluminum	Stainless steel	252 x 208	340 x 300 x 950

WH12-S

Plate stand with Ø16mm double-rod

Particularly stable position with H-shaped base to prevent tilting of the position backward, double-rod provide optimum stability, standard with security position ring and fixing clamp for containers. Used for supporting high torque / high speed overhead stirrer and accessories, or for high speed homogenizer.

Model	Base	Shaft	Container area (W x D mm)	Dimensions (W x D x Hmm)
WF11-D	Cast Iron coated powder	Stainless steel	315 x 200	315 x 200 x 550
WF12-D	Cast Iron coated powder	Stainless steel	315 x 200	315 x 200 x 750
WF13-D	Cast Iron coated powder	Stainless steel	315 x 200	315 x 200 x 950

WF12-D

H-stand with Ø16mm single-rod

Particularly stable position with H-shaped base to prevent tilting of the position backward, double-rod provide optimum stability. Used for supporting high torque / high speed overhead stirrer and accessories, or for large volume of containers.

Model	Base	Shaft	Container area (W x D mm)	Dimensions (W x D x Hmm)
WH23-DS	Stainless steel	Stainless steel	635 x 600	635 x 600 x 1010

H-stand with Ø16mm double-rod

Particularly stable position with H-shaped base to prevent tilting of the position backward, double-rod provide optimum stability, Used for supporting high torque / high speed overhead stirrer and accessories

Model	Base	Shaft	Container area (W x D mm)	Dimensions (W x D x Hmm)
WH21-D*	Aluminum	Stainless steel	226 x 220	340 x 300 x 550
WH22-D*	Aluminum	Stainless steel	226 x 220	340 x 300 x 750
WH23-D*	Aluminum	Stainless steel	226 x 220	340 x 300 x 1010
WH24-D**	Aluminum	Stainless steel	226 x 220	340 x 300 x 550
WH25-D**	Aluminum	Stainless steel	226 x 220	340 x 300 x 750
WH26-D**	Aluminum	Stainless steel	226 x 220	340 x 300 x 1010

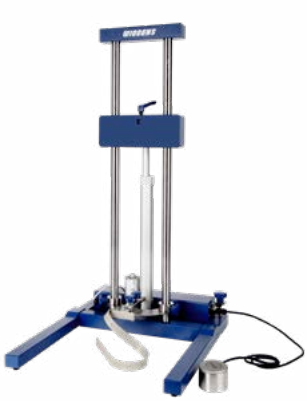
* With clamp holder WH6, suitable for WB series overhead stirrer.
** With clamp holder WH6-1, suitable for WOHS series overhead stirrer.

WH22-D

Electric H-stand with Ø16mm double-rod

Particularly stable position with H-shaped base to prevent tilting of the position backward, double-rod provide optimum stability, integrated electric putter and controller. Used for supporting high torque / high speed overhead stirrer and accessories, even can be used as a stand for bench-top reaction system.

Model	Base	Shaft	Stroke (mm)	Container area (W x D mm)	Dimensions (W x D x Hmm)
WH30	Aluminum	Stainless steel	250	370 x 320	450 x 500 x 890



WH-stand

With Ø32mm single-rod
Adjustable length: 602 - 1,082 mm
Leg distance: 370 mm
Stability adjustment

Model	Base	Shaft	Container area (W x D mm)	Dimensions (W x D x Hmm)
WH33-S	Aluminum	Stainless steel	320 x 370	450×500/602~1082

WH mobile floor stand with Ø32mm single-rod.

Mobile floor stand with strong Foma wheels, specially designed for the application with big vessels

Model	Base	Shaft	Container area (W x D mm)	Dimensions (W x D x Hmm)
WH43-S	Stainless steel	Stainless steel	614×385	786×692/1319