

# Stirrer Guide

## *Caframo*<sup>®</sup> LabSolutions



# Laboratory Overhead Stirrers

- Immediate customer service and technical application support
- In stock quality product; Orders ship one day after receipt
- Manufactured in North America; Shipped Worldwide
- 3 Year Warranty
- Safety Certified to Applicable Standards

**“Thanks for the quick and helpful follow up. I appreciate the personal service.”**

**“The motor just won’t burn out. It runs 24/7!”**





1

## Stirrer

|                       | 1850     | 3030      | 6015     |
|-----------------------|----------|-----------|----------|
| Speed rpm             | 12-1800  | 20-3000   | 40-6000  |
| Volume L (gal)        | 80 (21)  | 60 (15 ½) | 25 (6 ½) |
| Viscosity cP          | 90,000   | 50,000    | 20,000   |
| Torque Ncm<br>(in-lb) | 568 (50) | 341 (30)  | 170 (15) |
| Horsepower            | 1/5      | 1/5       | 1/5      |



|                       | 2010     | 2002     | 250        |
|-----------------------|----------|----------|------------|
| Speed rpm             | 40-2010  | 40-2002  | 50-2500    |
| Volume L (gal)        | 25 (6 ½) | 25 (6 ½) | 2 (1/2)    |
| Viscosity cP          | 20,000   | 15,000   | Water like |
| Torque Ncm<br>(in-lb) | 90 (8)   | 70 (6)   | 10 (1)     |
| Horsepower            | 1/15     | 1/18     | 1/50       |

All stirrers available in 120 and 220 volts.

# Stands

- Solid cast base, coated with chemical resistant epoxy
- Largest base accommodates hotplate or large vessels; Leveling knobs provide added adjustability
- Compact base maximizes bench space and fits into smaller enclosed work stations or hoods

# Clamps

- Securely hold a large portion of the stirrer support rod maximizing stability
- Multipurpose - also used with chain or extension clamps to hold accessories



2

A110



Use with all stirrers except 250

Accommodates maximum vessel diameters of 323 (12 3/4)

A112, A113, A114



Use with all stirrers except 250

Choice of three stand rod lengths  
Includes two extra threaded holes to accommodate A300 - 710 x 16 (28 x 5/8) rod for accessories

A210



Use with 2002 and 2010

Unique offset design centers impeller in vessel

Accommodates maximum vessel diameters of 190 (7 1/2)

Customize



A110BASE - base only

ROD28

710 x 25 (28 x 1)

ROD38

960 x 25 (38 x 1)

ROD48

1200 x 25 (48 x 1)

3



Clamps

A120

Use with 12.5 (1/2) support rod

A122

Use with 16 (5/8) support rod

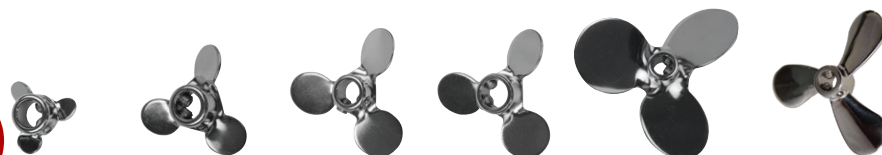
Adjustable to accept 15 - 30 ( 9/16 - 1 3/16 ) diameter stand rods

mm (in)



# Accessories

4



| Blades       | A511     | A521     | A531     | A533      | A541     | A165     |
|--------------|----------|----------|----------|-----------|----------|----------|
| Diameter     | 25 (1)   | 38 (1 ½) | 50 (2)   | 50 (2)    | 78 (3)   | 64 (2 ½) |
| Bore         | 8 (5/16) | 8 (5/16) | 8 (5/16) | 9.5 (3/8) | 8 (5/16) | 8 (5/16) |
| Flow Pattern | Axial    | Axial    | Axial    | Axial     | Axial    | Axial    |



| Blades       | A163     | A164       | A551     | A553      | A561     |
|--------------|----------|------------|----------|-----------|----------|
| Diameter     | 38 (1 ½) | 48 (1 7/8) | 50 (2)   | 50 (2)    | 100 (4)  |
| Bore         | 8 (5/16) | 8 (5/16)   | 8 (5/16) | 9.5 (3/8) | 8 (5/16) |
| Flow Pattern | Radial   | Radial     | Radial   | Radial    | Axial    |

## Shafts

|              | A712     | A162     | A722     | A742     |
|--------------|----------|----------|----------|----------|
| Shaft Dia.   | 8 (5/16) | 8 (5/16) | 8 (5/16) | 8 (5/16) |
| Shaft Length | 305 (12) | 400 (16) | 457 (18) | 610 (24) |



|              | A713      | A723      | A733      | A743      | A753      |
|--------------|-----------|-----------|-----------|-----------|-----------|
| Shaft Dia.   | 9.5 (3/8) | 9.5 (3/8) | 9.5 (3/8) | 9.5 (3/8) | 9.5 (3/8) |
| Shaft Length | 305 (12)  | 457 (18)  | 508 (20)  | 610 (24)  | 762 (30)  |



mm (in)





## Paddles

U022

U044

U055

U510

U044SW

A150

A250

Dimensions

50 x 50 (2 x 2)

100 x 100 (4 x 4)

125 x 125 (5 x 5)

125 x 250 (5 x 10)

152 x 145 (6 x 5 3/4)

70 x 70 (2 3/4 x 2 3/4)

38 x 38 (1 1/2 x 1 1/2)

Shaft Length

400 (16)

914 (36)

914 (36)

914 (36)

914 (36)

400 (16)

400 (16)

Shaft Dia.

8 (5/16)

9.5 (3/8)

9.5 (3/8)

9.5 (3/8)

9.5 (3/8)

8 (5/16)

8 (5/16)

Flow Pattern

Tangential

Tangential

Tangential

Tangential

Tangential

Tangential

Tangential



## Impellers

A130

A131

A231

A140

A141

A166

A190

PTFE

A180

A183

A185

Diameter

50 (2)

50 (2)

32 (1 1/4)

60 (2 3/8)

90 (3 1/2)

64 (2 1/2)

25 (1)

38 (1 1/2)

80 (3 1/8)

38 (1 1/2)

Shaft Length

400 (16)

400 (16)

400 (16)

400 (16)

400 (16)

400 (16)

400 (16)

400 (16)

400 (16)

400 (16)

Shaft Dia.

8 (5/16)

8 (5/16)

8 (5/16)

8 (5/16)

8 (5/16)

8 (5/16)

8 (5/16)

8 (5/16)

8 (5/16)

8 (5/16)

Flow Pattern

Radial

Radial

Radial

Radial

Radial

Axial

Axial

Radial

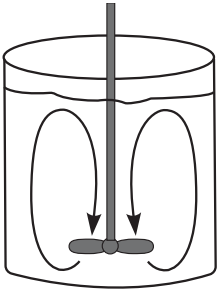
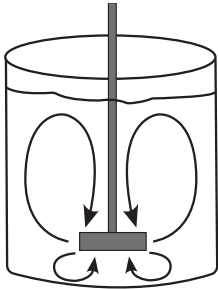
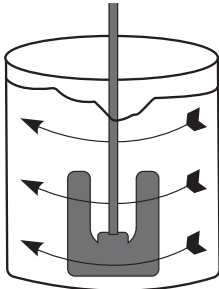
Tangential

Axial

mm (in)



# What do you know about FLOW?

| Axial                                                                                                                                                                                        | Radial                                                                                                                                                                                     | Tangential                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                             |                                                                                                          |                                                                                                                                               |
| Fluid is pumped downward or upward - ideal for liquid/solid mixing, suspending solids, blending or draw down (introducing air- vortexing). Best suited for low viscosity, high speed mixing. | Fluid flows from the top and bottom with higher shear and turbulence and lower pumping - ideal for liquid dispersion. Best suited for medium viscosity fluids and high speed applications. | Fluid moves in a swirling motion often with a surface vortex - ideal for high viscosity fluids at lower speeds. Paddle diameter can be close to the diameter of the vessel and provides a large surface area to contact product. |

|  |  |  |  |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| A600SET                                                                             | CG1                                                                                 | CG5                                                                                 | 13CSET                                                                                | 13CKEY                                                                                |
| High Speed Collet Set                                                               | Chuck Guard                                                                         | Chuck Guard                                                                         | Chuck Set                                                                             | Chuck Key                                                                             |