

# **Overhead stirrers**







### **/RGO LAB**



We are pleased to introduce the new line of scientific instrumentation ARGO LAB All these instruments have passed rigorous tests of quality and reliability that Giorgio Bormac applies on each new product.

The ISO 9001 certified manufacturer based in P.R.C., has agreed to make any modifications and improvements required by us.

With these premises we decided to use our brand: ARGO LAB

Argo is the name of our dog, an half-breed black Labrador, who, with his strength and loyalty gladdens our days in the office and at home.

For this reason we want these instruments become your faithful companions of the laboratory and reliable over time.



AM20-D



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AM40-D PRO



Display AM20-D



Display AM40-D PRO

## Overhead stirrers ArgoLab AM40-D PRO and AM20-D

- · Display for instant reading of speed and torque
- · Accurate control of the stirring speed
- Control of the resistance load with automatic adjustment of the speed (AM40-D PRO)
- A protection system inhibits the stirrer in case of excessive stress due to continuous overload (AM40 D-PRO) (AM40-D PRO)
- Adjustable safety circuit that automatically stops the motor in case of overheating to ensure extreme safety.





Higher passage hole for stirring shaft

Strong support with large opening that facilitates the placement of containers, including those largediameter

Technical data				
	AM40-D PRO	AM20-D		
Max stirring quantity (H₂O)	40 liters	20 liters		
Control of the torque	Yes	-		
Input motor power	120 W	60 W		
Output motor power	100 W	50 W		
Stirring speed	50 2.200 rpm	50 2.200 rpm		
Stirring speed accuracy	±3 rpm	±3 rpm		
Speed display	LCD Display	LED Display		
Display resolution	1 rpm	1 rpm		
Max torque	60 Ncm	40 Ncm		
Display torque	LCD Display	-		
Overload protection	Alarm LED, auto-stop	Alarm LED, auto-stop		
Motor protection	Alarm LED, auto-stop	-		
Max viscosity [mPas]	50.000 mPa.s (*)	10.000 mPa.s (*)		
Opening of the drill chuck	0,5 10 mm	0,5 10 mm		
Shaft dimensions (Ø x H)	14 x 220 mm	14 x 220 mm		
Dimensions (L x A x P)	83 x 220 x 186 mm	83 x 220 x 186 mm		
Weight	2,4 kg	2,4 kg		
Voltage - Frequency	220V - 50/60Hz	220V - 50/60Hz		
Power consumption	130 W	70 W		
IP protection class (acc. to DIN EN60529)	IP42	IP42		
Working temperature	5 40 °C	5 40 °C		
Working humidity max	80 %	80 %		
Part number	22005043	22005013		



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NOTE: All the instruments are supplied with chuck drill and its key



### Accessories



#### Universal stand for overhead stirrers

It's suitable for both models Argolab AM20-D and AM40-D PRO, supplied complete of fixing system. Painted cast base and stainless steel shaft. Thanks to the particular form and strongness avoids the necessity of counterweights. Moreover the large opening of the base, mm 200, makes easy the stirring operations also with large diameter flasks.

Base mm 275 x 350, shaft length mm 80 and diameter mm 16

Weight kg 5

Part number 22005153

#### Stirring shaft

Choose of the correct stirring shaft

The choose of the correct stirring shaft should be done considering several parameters:

• the power of the overhead stirrer • the volume of the sample you have to stir • the viscosity.



#### Stirring shaft with floating blades - Type 1

Characteristics: The two blades opening to the increase of the speed, generate an axial flow from top to the bottom of vessel.

Use: This shaft is particularly indicated for the stirring in narrow neck vessels, for example flasks.

Part number 22005193



#### Stirring shaft with fixed blade - Type 2

Characteristics: It generates an axial flow from top to the bottom of vessel..

Use: It used at medium-high speed to swirl light solids, for flocculation, to mix thickening agents, to stir sludge, etc.

Part number 22005173



#### Stirring shaft with propeller - Type 3

Characteristics: This is the standard stirrer shaft. It generates an axial flow in the vessel, with suction of the substance from bottom to the top and localized appearance of shear forces.

Use: It used at medium-high speed to swirl light solids, for flocculation, to mix thickening agents, to stir sludae, etc.

Part number 22005163



#### Stirring shaft with 3 holes blade - Type 4

Characteristics: It generates a tangential flow with reduced turbolence and gentle mixing of the sample. Use: It used at low speed when it is necessary a good exchange of hot of the products that you have to

Part number 22005183

Description	N°of blades	Shaft dimensions		Speed	Viscosity
Description N of bia	N OI blades	Ø mm	Lunghezza mm	range	Viscosity
Type 1 floating blades, inox	2	8	400	M-A	BB-B
Type 2 fixed blade, inox	1	8	400	M-A	BB-B-M
Type 3 with propeller, inox	4	8	400	M-A	BB-B-M
Type 4.3 holes blade, inox	1	8	400	B-M	B-M

Viscosity	Substance
1	Water
5	Milk
10	Kerosene
100	Motor oil
1000	Castor oil, Glycerine
7000	Refined honey
25000	Chocolate syrup
50000	Ketchup
100000	Molasses











