USER INFORMATION

6000352E

KEEP FOR FUTURE USE

Rev. B

B.18.10.15



CE 0359 (Ex) | 1 1 / 2 G T6 | ITS05ATEX14085

AGITATOR RP - 0,5 - 6 B

GRACO N.V.

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AGITATOR RP - 0,5 - 6 B

Pneumatic gear agitator for mixing fluids, especially paint.



The original nameplate is on the agitator. Please compare the specifications and complete if necessary.

In this manual important information is marked with the following symbols.



Information affecting your safety



Important operational directions

Read and understand the operator manual and the safety instructions before taking into operation!

Ensure that all other users know and understand all safety directions.

CORRECT USE

The agitator 0,5 - 6 B is exclusively manufactured for common applications in surfacing technology (for mixing coatings) or for similar type of work.

Any other purpose above and beyond this, is considered as incorrect use. We are not liable for any damage or injury resulting from this; the user will bear sole liability in such cases.

Correct use includes following operating, maintenance and inspection conditions and regulations laid down by us.

The agitator 0.5KW/6bar B may only be installed, maintained and repaired by personnel familiar with, and trained to recognize the inherent dangers.

The relevant accident prevention regulations as well as safety and medical rules must be respected. Unilateral changes to the agitator will cause us to waive our responsibility for any damage or injury

The user is responsible for the correct installation of the appliance.

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Replacement for issue of 02.97

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Prepared : P.Bogaerts 06/03
Approved : J.Lormans 06/03

OPERATING INSTRUCTIONS - B.18.10.15-B

Note protection mark in accordance with DIN 34

DESCRIPTION

The agitator consists of the pneumatic motor (rotating piston or revolving cylinder motor) ①, the planetary gear ②, the flange ③, the shaft ④ and the propeller ⑤.

The pneumatic motor and the shaft are connected to each other by a sleeve coupling (6). The sealing (7) prevents foreign bodies entering the container.

The holes (8) in the flange are for draining off the lubricant in the event of defective gear-shaft seals.

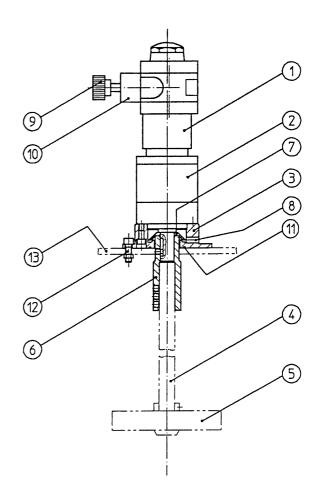
At the compressed air connection of the motor there is a needle valve (9) for changing the speed of the agitator.

A hose barb (figure below) at the inlet of the needle valve makes it possible to insert tubes with a nominal diameter of 6 mm.

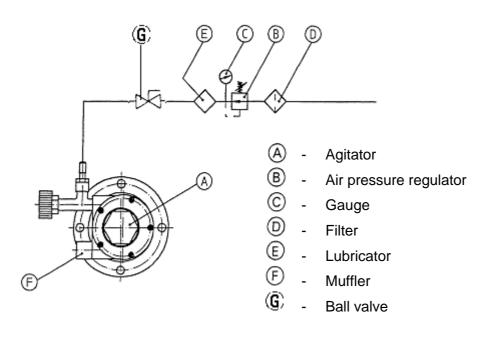
A silencer (10) is installed as standard at the motor exhaust.

If necessary, a sealing ①, part No. 76188 024004 can be inserted into the flange.

The agitator is fixed to the container cover (13) using screws (12).



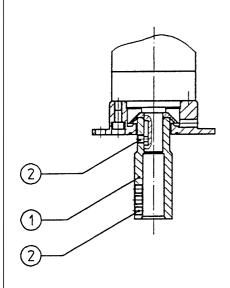
FUNCTIONAL DIAGRAM



COMPATIBILITY MATERIAL

Solids content	Compatibility	Behavior	Compatibility
Low		Neutral	
Low to 1 %	Highly suitable	Corrosive	
Medium 1 to 6 %		Abrasive	Highly suitable
Over 6%		Caustic	
Over 50%	Testing required	Inflammable	
Kinematic viscosity in mm ² /s	Compatibility		
Up to 1000	Highly suitable		
Over 1000	Application must be tested		

MATERIALS IN CONTACT WITH THE FLUID

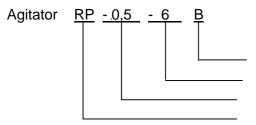


Ref.	Description	Material	
1	Sleeve coupling	SST 1.4305	
2	Set screw	A2-70	

Shaft and propeller SST 1.4305 (see sales catalogue 04.1015)

TECHNICAL DATA

KEY TO DESIGNATION



suitable for mounting on the container cover maximum air inlet pressure maximum power agitator, pneumatic

Maximum output of the air motor

Maximum permissible air inlet pressure

0.5 kW

6 bar

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Lowest operating temperature
(without special provisions)

Max. permissible ambient temperature

80 °C

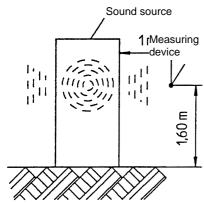
Weight

2.8 kg

SOUND EMISSION

As the working places cannot be anticipated the highest possible sound level is shown.

Measurement spacing

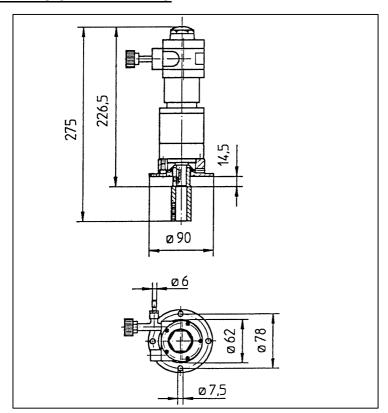


Air inlet pressure	Sound pressure level
in bar	in dB (A)
2	74
4	80
6	85

A warning plate has been fitted to the agitator.

SOUND PRESSURE-LEVEL > 70dB(A)

DIMENSIONAL DRAWING



TIGHTENING TORQUES, LIST OF TOOLS

Tightening torque for M5 screw – 6.2 Nm Allen screw DIN 911, SW3, SW4

START-UP, OPERATION, MAINTENANCE AND INSPECTION



A minimum distance of 50 mm must be maintained between the propeller and the container wall and/or other equipment present in the container.



The sound emission of an air powered agitator is damaging to hearing in the absence of a silencer [> 110 dB (A)].

Every agitator is therefore fitted with a sound absorber with the right dimensions. It should not be operated without this silencer.

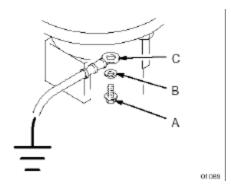
INSTALLATION

The agitator is mounted on the container cover from above without the propeller. (Socket-head screws M 6 necessary). The propeller is then attached to the shaft.

GROUNDING

Proper grounding is an essential part of maintaining a safe system.

To ground the agitator, remove one of the srews (A) and lockwasher (B) of the engine cover. See figure Secure the ground wire terminal (C) to the agitator with the screw and lockwasher. Connect the other end of the ground wire to a true earth ground.



OPERATION

Lubricated and filtered air is required for operating the agitator.



Never immerse a running agitator propeller into a filled fluid container.

Increase the agitator propeller speed slowly.

Do not operate the agitator at high speed for a long period of time. Excessive speed can cause the fluid to foam and increase the wear on the agitator parts.

MAINTENANCE AND INSPECTION

The 0.5kW/6 bar B agitators require little maintenance.



Repairs must be carried out by qualified technicians.

The service life of the hose lines is adversely affected, and thus shortened, by surrounding influences (oxygen in air, temperature, light, etc.), even if operated correctly.

It is recommended that they undergo regular visual checks and occasional checking of performance. As a precaution the hose lines should be replaced by new ones at intervals set by the operator (after 2 to 3 years).

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Never hit the end of the agitator's shaft (e.g. when fitting the propeller, etc.). Heavy impact in the axial direction can result in damage to the pneumatic motor.



Check the maintenance unit, clean the filter and remove condensation water at regular intervals.

Flushing the air motor

If the motor is sluggish or inefficient, flush it with non-flammable solvent in a well ventilated area. The recommended solvent for the air motor is Gast Flushing Solvent (Part No. AH255 or AH255A) or Inhibisol Safety Solvent.

- 1. Disconnect the air line and muffler.
- 2. Add several teaspoons of solvent or spray the solvent directly into the motor.
- 3. Rotate the shaft by hand in both directions for a few minutes.
- Reconnect the air line, and slowly increase the air pressure until there is no trace of solvent in the exhaust air.
- 5. Re-lubricate the motor with a squirt of light-weight oil in the chamber.

Gast_ is a registered trademark of Gast Manufacturing. Inhibisol_ is a registered trademark of Penetone Corp.

Servicing the air motor

- 1. If the unit requires more than installation of a service kit, it is usually quickest and easiest to send the unit to the Graco distributor for repair or replacement.
- 2. If the vanes need replacing, or if foreign material is present in the motor chamber, an experienced mechanic may remove the end plate opposite the drive shaft end. *Do not pry with a screwdriver.* Itwill dent the surface of the plate and body, causing leaks. Use a puller tool, which will remove the end plate while maintaining the position of the shaft.
- 3. New vanes should have the edges with cut corners (or the notched edges, if the vanes are reversible) pointing toward the bottom of the vane slot.

Lubricating the air motor

Caution: Not lubricating the arir motor will cause air motor failure.

If an air line lubricator is not installed, the air motor must be manually lubricated every 8 hours. Lubricate the agitator air motor by placing 10–20 drops of SAE #10 light oil in the motor's air inlet. Run the agitator for about 30 seconds.

TROUBLESHOOTING

BREAKDOWN ANALYSIS				
Component group	Compressed air supply	Air motor	Gear	Muffler
Nature of defect	No rotation			
Defect symptoms	Compressed air supply problem	Defective		Clogged
Possible cause	Filter clogged	Resin oil, wear	Defective components	Compressed air contaminated
Counter measure	Check, clean maintenance unit and lines	Flush the pneumatic motor with a few drops of petroleum, replace worn parts	Replace parts	Replace muffler, check filter in the maintenance unit

GENERAL SAFETY INFORMATION

Never at any time dismantle an agitator that is under pressure.



Never remove a running propeller from the fluid. Make sure the drum does not become empty.

Do not operate the agitator without the silencer.

When flushing the pneumatic motor, the exhaust air contains high concentrations of flushing agent. Never point/direct the exhaust air stream in the direction of humans or animals.

EQUIPMENT MISUSE HAZARD



Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- _ This equipment is for professional use only.
- _ Read all instruction manuals, tags, and labels before operating the equipment.
- _ Use the equipment only for its intended purpose. If you are not sure, call your Graco Distributor or Graco Technical Assistance.
- _ Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- _ Check equipment daily. Repair or replace worn or damaged parts immediately.
- _ Do not exceed the maximum working pressure of the lowest rated component in your system. This equipment has a 6 bar, 0.6 MPa maximum working pressure.
- _ Use fluids and solvents which are compatible with the equipment wetted parts.
 Refer to the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- _ Always wear protective eyewear, gloves, clothing, and respirator as recommended by the fluid and solvent manufacturer.

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_ Comply with all applicable local, state, and national fire, electrical, and safety regulations.

FIRE AND EXPLOSION HAZARD



Improper grounding, poor ventilation, open flames, or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.

- Ground the equipment and the object being sprayed. Refer to **Grounding** on page 5.
- _ If there is any static sparking or you feel an electric shock while using this equipment, **stop spraying immediately.** Do not use the equipment until you identify and correct the problem.



- Do not use 1,1,1–trichloroethane, methylene chloride, other halogenated hydrocarbon solvents, or fluids containing such solvents in aluminum pumps. Such use could result in a serious chemical reaction, with the possibility of explosion.
- _ Do not use kerosene or other flammable solvents or combustible gases to flush the unit.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being sprayed.
- _ Keep the spray area free of debris, including solvent, rags, and gasoline.
- _ Before operating this equipment, electrically disconnect all equipment and extinguish all open flames or pilot lights in the spray area.
- _ Do not smoke in the spray area. Do not operate a gasoline engine in the spray area.
- _ Do not turn on or off any light switch in the spray area while spraying or while there are any fumes in the air.

MOVING PARTS HAZARD



Moving parts, such as the rotating blades of the agitator, can pinch or amputate your fingers or other body parts and can cause splashing in the eyes or on the skin.

- _ Keep clear of all moving parts when starting or operating the agitator.
- _ Always shut off the agitator and disconnect the air line before adjusting the angle of the agitator, removing the agitator from the drum, or checking or repairing any part of the agitator.

HAZARDOUS VAPORS



Hazardous fluids or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, swallowed, or inhaled. When flushing the air motor, keep your face away from the exhaust port.

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- LIST OF REPAIR PARTS -

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	1 _ 1		1		I
Ref.	Qty.	Part No.	Description		Identification
10	1	75971 011005	PNEUMATIC MOTOR	0.5 kW	
20	1	76265 057002	FLANGE	DA 90 H25	
30	4	117027	SOCKET HEAD SCREW	M 5 X 25	
40	1	76107 011002	SEALING (profiled)	13, 9 X 37 X 8	
50	1	76743 024002	SLEEVE COUPLING	-	
60	1	74052 020090	SET SCREW	M 6 X 8	
70	3	74050 043090	SET SCREW	M 6 X 6	
80	1	76257 028001	HOSE BARB	DN 6	
90	1	75272 005003	NEEDLE VALVE	DN 3,5 PN 10	
100	1	75665 006002	SILENCER	G 1/8	
			* END OF SPARE F	PARTS LIST *	

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GRACO STANDARD WARRANTY

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve month from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear an tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the repaid return of equipment claimed to be defective to an authorized Graco distributor for verification of claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco does not extend its warranty to accessories, appliances, materials or components which are sold by Graco but are not manufactured by Graco and makes no guarantee, however implied, with regard to the brand capability and suitability for a certain purpose. These parts sold by Graco but not manufactured by Graco (such as electric motors, switches, hoses, etc.) are covered by the warranties of the respective manufacturers. Graco will support the buyer in enforcing any warranty claim with the proviso that in no event can Graco be made liable for indirect, incidental, special or consequential damages which arise from the supply of appliances by Graco under the conditions governed by these provisions, or the supply, performance or use of any products or other goods which are sold under the conditions governed by these provisions, whether as the result of breach of contract, breach of warranty, negligence on the part of Graco or for any other reason.

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