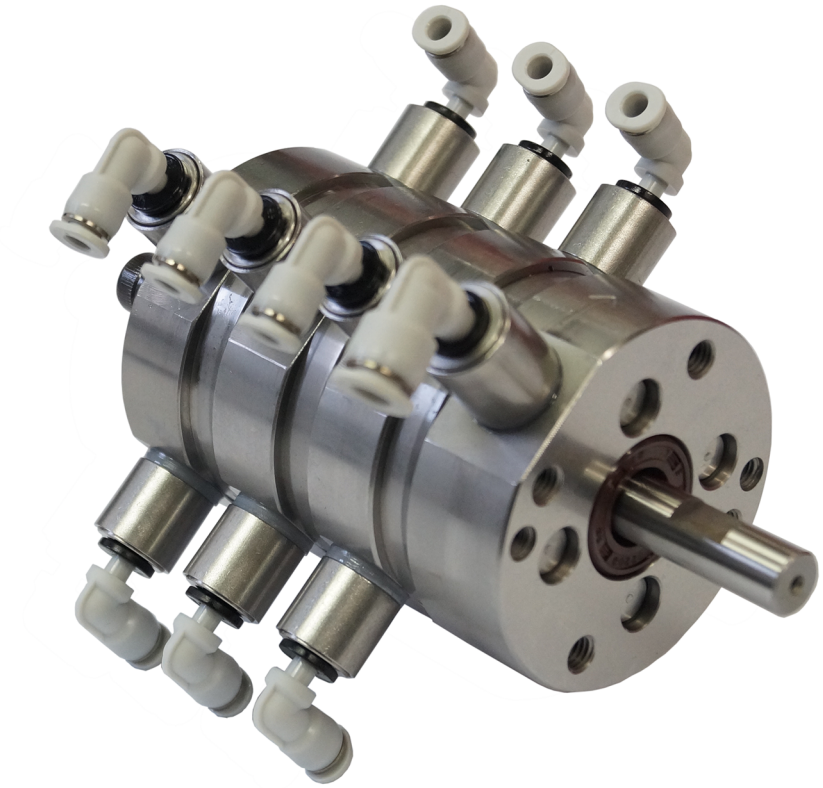
BARMAG

Translation of the assembly instructions

GF
Spin-finish pump



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GF Spin-finish pump

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1 Mounting instructions

1.1 Safety

1.1.1 Notes for the Operating Company

Read these assembly instructions before starting up the pump.

1.1.2 Operating Instructions of the operating company

As employer you are obliged to draw up safe operation instructions for your company.

This applies especially when components, such as pumps / pump units, are supplied for a line / machine and the supplied assembly instructions are component specific. The following sections are meant to facilitate the procedure of drawing up your own Operating Instructions.

In addition, you can order a service manual for any type of pump from Barmag. Barmag also supplies training for service activities.

1.1.3 Intended Use

The GF spin-finish pump is intended for dosing oils and other chemical liquids (up to approx. 40 cST).

Operate the pump only within the limits specified in the pump specifications sheet (see information in Section 1.7.1 (page 14)).

For safety reasons, no other or additional use is allowed. Any other use may lead to increased risks for the operating personnel.

Intended use includes the observance of the assembly instructions, especially of the repair instructions.

1.1.4 Qualifications of Personnel

Use only trained personnel for commissioning, operating, and maintenance of the pump / pump unit.

Maintenance or repair of electrical components must only be performed by qualified electricians.

1.1.5 Notes on Commissioning

After completing the installation and before each recommissioning of the pump / pump unit, you must carry out a test run including a check of the process parameters and all safety devices.

1.1.6 Operation and maintenance

Do not change or convert the pump / pump unit without the express approval of Barmag. Failure to do so makes the entire warranty null and void. Inspection, maintenance, and repair activities may only be carried out by trained personnel.

Use Barmag auxiliary devices for professional maintenance and repairs. Order the corresponding catalogs.

Use only original Barmag parts.

1.1.7 Safety Instructions

The safety instructions are intended for anyone involved with the pump / pump aggregate within the scope of installation, commissioning, operating, and maintenance activities.

Carefully read the operating instructions formulated by your company and observe the following safety instructions and clarifications:

- Use the required personal protective devices(such as safety glasses, safety gloves, and safety clothes).
- Do not allow unauthorized persons access to the installation / machine.
- The safety data sheets of the pump and flushing media as well as of other chemical substances must be observed.
- Covers must not be removed.
- Do not reach into a running clutch.
- Before beginning repair and service work on the pump, the pump drive must be electrically switched off and allowed to run down to standstill.

Observe switch-off regulations!

Secure the switched off drive against unauthorized restart.

1.1.8 Installation / Machine Specific Safety Instructions

- Failure of a pump can cause hazardous malfunctions of the spinning machine. Meticulous pump and drive maintenance and monitoring is therefore required at regular intervals.
- The operating party is required to carry out suitable tests on the pumping and flushing media used to establish the allowed operating values and ensure that neither the media themselves nor the media-specific operating conditions produce any risks.
- Pumping and flushing media may be hazardous to health. Wear suitable protective clothing.
- Inspect the pumping medium connections.
  Confusing of connections can lead to damage to the pump as well as to the line.
- The pump is lubricated by the medium pump. Dry runs must be avoided at all costs, because of possible damage to the pump and any ignition danger for the pump medium.
- The compatibility of the pumping and flushing media with the sealings and pump materials must be ensured.
  If required, ask the Barmag Pump Service.
- The pump must not be operated with water without oil additive.

1.2 Machine Layout / Marking

1.2.1 Machine Layout

Consult the dimension drawings of the pump and of the pump unit (if included in Barmag's scope of delivery). The drawings can be ordered from Barmag, if not supplied.

1.2.2 Designations

Engraved characteristics:

- Number of pump
- Flow rate
- "Barmag"

1.3 Assembly / Disassembly

1.3.1 Designation of Packing

The machines or machine parts are supplied in stable packages.

The packages have been labeled with letters and identification symbols that comply with international symbol standards. Observe these labels for the regular handling and transportation of the packed machine parts.

Label definition

- Order No.
- Weight (gross)
- Addressee

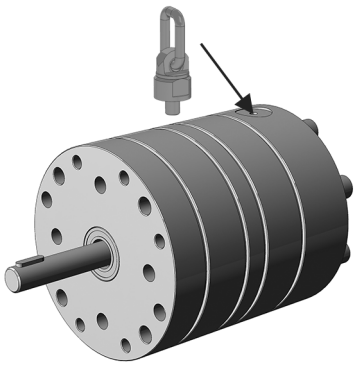
Identification symbols used:		
Meaning	**Color**	**Symbol**
Upper end	black	
Fragile	black	
Protect against dampness	black	
Center of gravity	black	
Attach lifting equipment here	black	
Sealed packing	black	
Do not pick up with forklift at this point	black	

1.3.2 General Information for Assembly / Disassembly

The assembly of the pump / pump unit including installation, alignment and connection must be carried out by the Barmag pump service or by the customer's own qualified personnel. If the customer prefers to carry out the assembly with his own personnel, Barmag is offering the corresponding training for this group of people. Furthermore, you can order service books from Barmag.

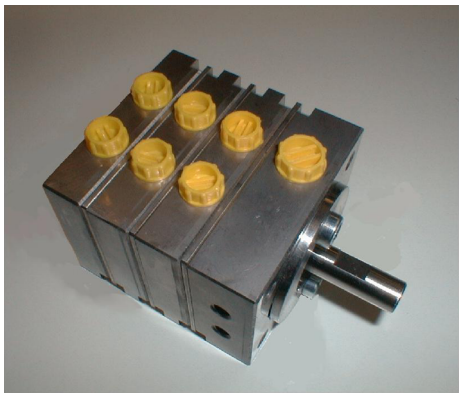
1.3.3 Transport of the spin-finish pump

- Only a transportation professional may handle heavy pumps.
- The weight of the pump can be found in the data sheet.
- Do not stand under suspended loads.
- A suitable load handling device must be used



On delivery, inlet and outlet are sealed to prevent soiling of the interior.

In case the spin-finish pump is delivered without the inlet and outlet fittings screwed in, these bores are closed with screw plugs.



In case the spin-finish pump is delivered without the inlet and outlet fittings screwed in, these bores are closed with screw plugs.



NOTE

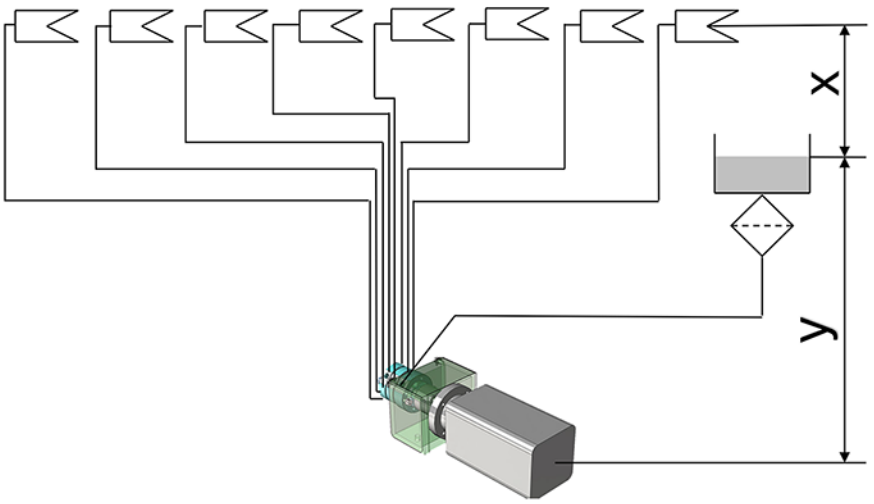
Caution!

- ► Remove screw plugs or dummies immediately before assembly, only.
- ► Keep screw plugs or dummies to use them again should the pump be dismantled at a later date.
- ► Keep screw plugs or dummies to use them again should the pump be dismantled at a later date.

1.3.4 Assembly

The assembly – including installation, alignment, and connection of the pump / pump aggregate must be handled by trained personnel.

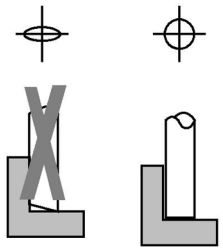
- At the time of delivery, inlet and outlet holes will be sealed with protective plugs in order to prevent contaminations from entering the pump. Remove the protective plugs immediately before installing the supply pipe to the pump. Keep the protective plugs for reuse during any future disassembly.
- Be careful when transporting and assembling the pump / pump aggregate.
- Before the pump / pump aggregate is installed into the installation / machine, ensure that all parts that contact the product ahead of the pump (such as tanks, pipes, valves) are carefully cleaned. Contamination, metal particles, etc. lead to pump damage.
- Do not start-up the pump in dry state. If required, use a lubricant (such as fluid mineral oil) to manually rotate the pump before installing the pump into the installation / machine. Upon delivery, Barmag pumps are already equipped with a lubricating medium. While in operation, the pump is lubricated by the pump medium.



- In order to avoid that spin finish emerges from the nozzles at a pump standstill, the nozzles should always be higher than the liquid level in the container.

We do recommend to keep the differential pressure between the pump's suction and pressure side als small as possible. To this purpose, the spin-finish nozzles should be located max. 500 mm above the liquid level in the container (dimension “X”). The pump's intake height should be approx. 500 mm (dimension “Y”).
The installation location of intake and outlet can be either at the side or on the top, however, preferential is the top installation.

- Within one line, hoses of the same length and with the same inner diameter should be installed between the pump outlets and the spin-finish nozzles. In order to avoid the formation of air bubbles, the hoses from the pump to the nozzles are to be installed with constant rise. Hoses must not be bent or pinched.
- Filtering of spin finish before inflow into the pump is essential for troublefree operation and for protection of the pumps. Recommended filter fineness approx. 5 µm or finer.
- The connection of the hoses to the pump is realized by hose fittings. If these are not included in the scope of delivery, you can order them from Barmag.In case of client-procurement, only use VA-fittings (stainless austenitic steels). If using brass fittings, corrosion may occur. If using nickel-plated brass fittings, the nickel coat may spall. Both may cause a pump failure.



- Before pushing the hoses into the joint, they must have been cut neat and straight and must not be squeezed.

- The hub of the pump-drive clutch is to be mounted onto the pump shaft smoothly and without force. No axial forces may act on the pump shaft when mounting the hub as these would damage internal pump parts.



NOTE

If a drive is used that is not supplied by Barmag, the following applies:

- The operator must ensure that the permissible drive torque is not exceeded.
- The operator must ensure that there is no danger from splinters in the event of a shaft break.
- This can be achieved by an overload clutch, a motor with a lower maximum drive torque or a suitable separating protective device.

1.3.5 Disassembly procedure



⚠ DANGER

► Before the pump is removed from the line / machine or the shaft seal is disassembled, ensure that all connecting lines are depressurized and shut off. The drive motor must be de-energized and protected against unauthorized restart!

1.3.6 Storage of Installation Parts / Spare Parts

If the pump / pump aggregate is to be temporarily stored prior to mounting into the installation / machine, then it must be kept in the original packing.

The storage of the pump / pump aggregate or separate parts must satisfy the following conditions:

- Ambient temperature: 15 to 25 °C
- Rel. air humidity: max. 60 %

Pumps / pump aggregate that have been installed but not yet commissioned are subject to the same conditions.

If the pump is stored, the inlet must be filled with a low-viscosity mineral oil. Filling is to occur while the drive shaft is slowly rotated in the prescribed direction of rotation, until the medium can be seen to flow out of the outlet openings. Next, seal the inlet and outlet holes and the flushing holes (if present), using the appropriate protective plugs.

The pump body must in all cases be greased using a resin-free preservation oil or similar product.

1.4 Commissioning

1.4.1 General

The pump / pump aggregate may be commissioned only by the trained personnel of the operating party or by members of the Barmag pump service.

Check the direction of rotation of the drive before each recommissioning (see arrow on front side of pump for permissible direction of rotation). The wrong rotation direction can damage the pump and the installation.

NOTE
The pump is lubricated by the pumped medium.

Easy running of the spin-finish pump by manually turning the pump drive shaft into the mandatory sense of rotation.

Make sure that the corresponding hoses are connected to the pump intake and outlets.

1.4.2 Resuming Operation after Pump Standstill

Supply of spin-finish:

- In case a standstill of more than 1 day (according to the spin-finish type other periods are possible, too; see specifications of spin-finish producer) is to be expected, the pump must be rinsed for about 1 hour with max. 25 $^{1}/_{min.}$. The rinsing medium is a mixture of demineralized water and about 3% of spin-finish oil. This procedure has to be repeated about every 3 days.

1.5 Maintenance

1.5.1 Carrying out Maintenance

Maintenance activities must be carried out by Barmag's Pump Service or the operating party's trained personnel.

For maintenance, Barmag provides pump workshops.

Barmag can provide relevant training for the operating company's personnel carrying out maintenance themselves. In addition, you can order a service manual for any type of pump from Barmag.



⚠ DANGER

During maintenance work, the drive motor must be de-energized and protected against unauthorized restart.

- ► At regular intervals, check the hose connections at pump inlet and outlets for tightness.
- ► At regular intervals, check the shaft seal for tightness. In case of excessive leakage of the shaft seal, replace the seal in accordance with the spare parts catalog (can be ordered from Barmag). When doing so, inspect the drive shaft of the pump for damage in the sealing area and replace it if necessary.

Normally, pumps are not a significant source of vibration or noise (< 70 dB(A)). Increased emissions indicate unsuitable installation or faulty operating conditions.

You can contact the Barmag pump service for remedial action.

1.5.2 Spare Parts

The following information is required when ordering spare parts:

- Barmag pump No. (engraved on the pump)
- Exact identification of the parts as listed in the spare-parts catalog (can be ordered from Barmag)
- Quantity

Contact:

Pump Sales Dept.:
Tel. 0049 2191 / 67-1235 Fax: 67-3364
Pump Service Dept.:
Tel. 0049 2191 / 67-2815 Fax: 67-702815

1.5.3 Disposal

Pump and pump components

Pumps and pump components must be disposed of in compliance with the legal regulations.

Seals must be disposed of depending on their material.

The components must be handed over to an appropriate waste management company.

Production materials

The residues produced during pump operation must be disposed of by the operating company according to the instructions of the material manufacturer and in compliance with the legal regulations.

1.6 Malfunctions

1.6.1 Faults

Any faults can be remedied by the Barmag Pump Service or the operating company's own trained personnel. In addition, the pump / pump unit can be sent to Barmag's Pump Service with a damage identification note serving as repair order.

1.7 Tables

1.7.1 Pump Data Sheet

The pump specifications sheet is supplied with these assembly instructions.

1.8 EC - Declaration of Incorporation

EC - Declaration of Incorporation

BARMAG
A Subsidiary of the Rieter Group

acc. to the Machinery Directive 2006/42/EC

(Annex II, 1 B for partly completed machinery)

Manufacturer: **Barmag** GmbH & Co. KG
Leverkuser Str. 65
42897 Remscheid
Germany

Person established in the Community authorised to compile the relevant technical documentation:
Paul Schlößer
Barmag GmbH & Co. KG
Leverkuser Str. 65
42897 Remscheid, Germany

We hereby expressly declare, that for the goods / product designated below:

Designation	: SPIN FINISH PUMP
Function	: METERING OF OILS AND OTHER CHEMICAL LIQUIDS
Model	: GF
Type	: GFxxxA-4x-xxxZ GFxxxA-5x-xxxZ GFxxxA-6x-xxxZ GFxxxA-7x-xxxZ
Material number	: DIVERSE
Year of manufacturing	: SINCE 2026
Serial / Batch number	: CONSECUTIVE

the following essential health and safety requirements of the Machinery Directive 2006/42/EC have been applied and fulfilled:

- 1.1.3 / 1.1.7 / 1.1.8 / 1.2.1 / 1.2.2 / 1.2.3 / 1.2.5 / 1.3 / 1.3.7 / 1.5.3 / 1.5.6 / 1.5.7 / 1.5.13 / 1.5.15 / 1.6.1 / 1.6.3 / 1.6.5

The following harmonized and / or other technical standard(s) / specification(s) - or parts thereof - have been applied:

- DIN EN ISO 12100:2011-03
  Safety of machinery - General principles for design - Risk assessment and risk reduction

It is further declared that the specific technical documentation has been prepared in accordance with Annex VII, Part B.

The manufacturer or his authorised representative undertake to transmit, in response to a reasoned request by the national authorities, relevant information on the partly completed machinery.

This transmission takes place via e-mail

This does not affect the intellectual property rights!

Important note!

The partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of this Directive, where appropriate[1].

TRANSLATION

EC - Declaration of Incorporation

acc. to the Machinery Directive 2006/42/EC

(Annex II, 1 B for partly completed machinery)

BARMAG
A Subsidiary of the Rieter Group

(1 considered, that, if the partly completed machine is installed in used machines / machinery, those may be taken into operation, if the „used machine / machinery“ do not fulfils the regulations of the Directive.

Information about the signatory authorized to sign the declaration in the name of the manufacturer in a legally binding manner:

Michael Kaminski

Barmag GmbH & Co. KG

Leverkuser Str. 65

42897 Remscheid, Germany

Remscheid, 25.08.2026

Place, Date	Signature MICHAEL KAMINSKI BAREM, HEAD OF PUMP DIVISION	Signature PAUL SCHLÖßER BAREM, DESIGN & DEVELOPMENT PUMP DIVISION

TRANSLATION