

AG-90 0.37 kW 12 or 24 VDC

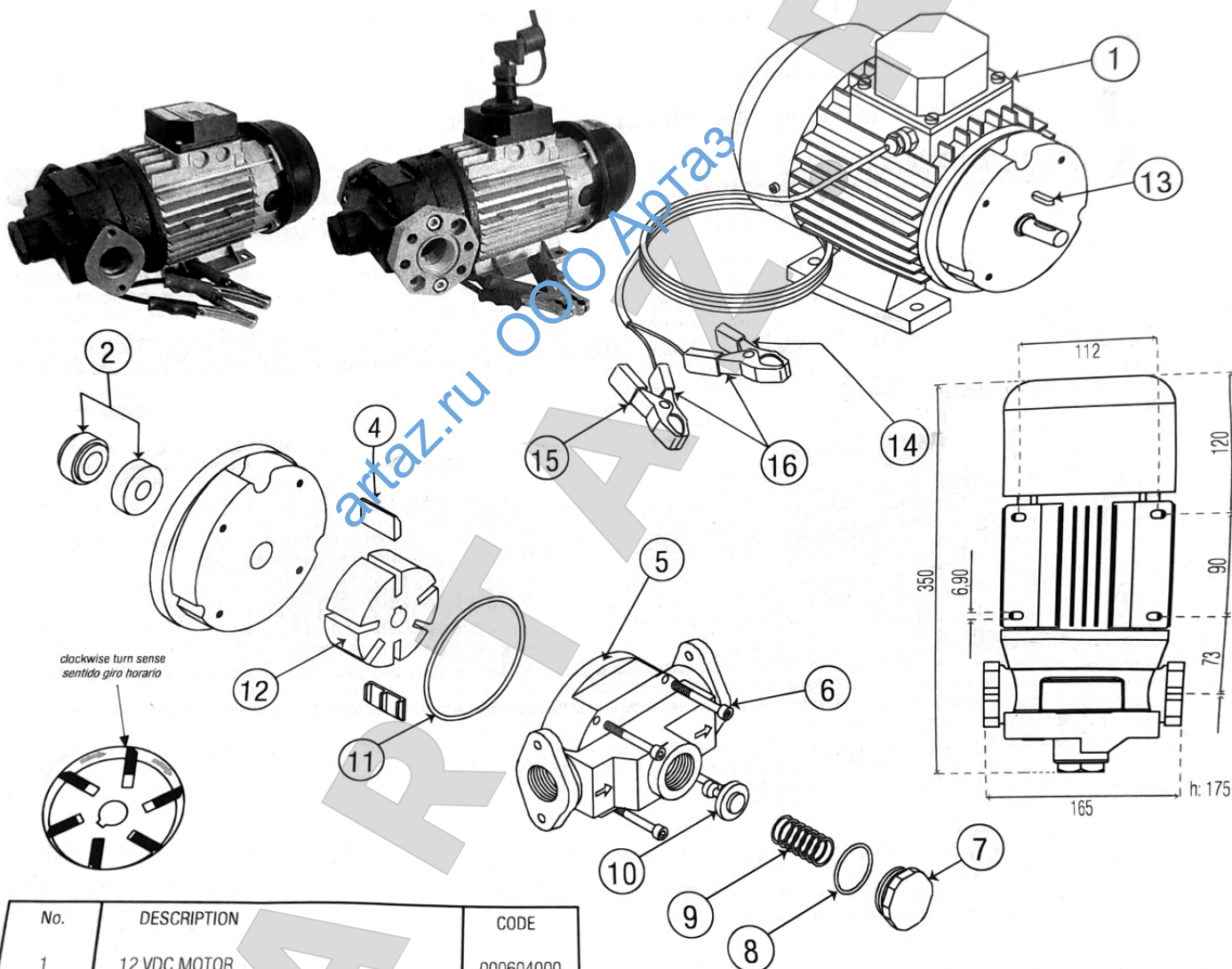
12 VDC code 00040

12 VDC with switch code 00042

24 VDC code 00050

24 VDC with switch code 00052

INSTRUCTION MANUAL WARRANTY AND CONFORMITY DECLARATION **CE**



No.	DESCRIPTION	CODE
1	12 VDC MOTOR	000604000
1	24 VDC MOTOR	000704000
1	12 VDC MOTOR + SWITCH	000604001
1	24 VDC MOTOR + SWITCH	000704001
2	MECHANICAL SEAL	804601009
4	6-BLADE SET	000302009
5	PUMP BODY	000302101
6	M-6x55 mm DIN.912 ZINC-PLATED SCREW	805400001
7	BYPASS PLUG	000302008
8	30x3 mm NBR BYPASS JOINT	803100019
9	BYPASS SPRING	000302205
10	BYPASS VALVE	805606101
11	85x4 mm JOINT	803100020
12	D.16 mm ROLLER	000302014
13	5x5x20 mm COTTER PIN	000302002
14	BIG RED CLAMP CASE	804350005
15	BIG BLACK CLAMP CASE	804350004
16	BIG METAL CLAMP CASE	804350004

	FREE	PSF-040	PA-80	PA-120
AG-90 12 VDC	90 l/min 38 A	75 l/min 42 A	70 l/min 44 A	76 l/min 42 A
SAG-90 12 VDC	65 l/min 45 A	58 l/min 48 A	56 l/min 48 A	60 l/min 46 A
AG-90 24 VDC	92 l/min 30 A	78 l/min 32 A	72 l/min 33 A	80 l/min 31 A
SAG-90 24 VDC	68 l/min 34 A	60 l/min 35 A	57 l/min 36 A	62 l/min 35 A

CONNECTION: 1" · SUCTION: 2.7 m 1 1/2" · DELIVERY: 4 m 1 1/4"

1. TECHNICAL SPECIFICATIONS

- AG-90 12 or 24 VDC self-suction pump of grey foundry
- Eccentric of self-adjusting blades
- With recirculation bypass system
- *Flow with free outlet: 70-80 l/min
- Motor: 0.37 kW 12 or 24 VDC · self-ventilated · dust protected · tropicalised
- Noise level: $L_{eqA} < 85$ dBA (1 m)
- Continuous duty · IP-55 protection
- Consumption: 35-53 A (12 VDC) · 24-32 A (24 VDC)
- 1,500 rpm
- Bypass pressure: 1.4-1.6 bar
- Connection through F1" (BSP) threads and flanges
- With clamps for the connection to the battery 12 or 24 VDC and ON/OFF switch
- It has built in an steel filter in the suction of 350 µm (micron).

Dim. (approx.): 350x165x175 mm (length x width x height)

Weight (approx.): 15.50 kg

*NOTE: When using an automatic nozzle or any other accessory (like meter, filter...), the flow will be reduced (see the table in the front page).

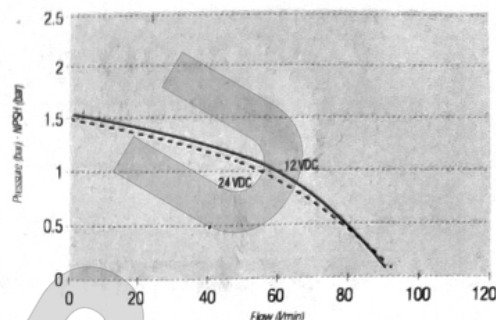
FLUID COMPATIBILITY

The AG-90 12 or 24 VDC pumps are especially for the diesel transfer. They must not be used to transfer other liquids. They are suitable for the agriculture, building, public works and industry use.



It is not suitable for the transfer of liquids of Class A and B with a flash point lower than 55 °C.

FLOW CURVES



2. WARNINGS

Please read these instructions carefully before using this product. The people who do not know the instructions must not use it.

This manual describes how to use the pump according to the project hypothesis, the technical specifications, the installation type, the use, the maintenance and the training relating to the possible dangers.

The instruction manual must be considered as a part of the pump and keep it for future inquiries during all its working life. We suggest keeping it in a dry and protected place. The manual reflects the technical situation when selling the pump and cannot be considered inadequate for the reason of being updated according to the new experiences. The manufacturer reserves the right to update the production and the manuals without being forced to update the old ones.

3. SECURITY INSTRUCTIONS

- 3.1. Make the electric connection only with the qualified personnel following the applicable electric regulations.
- 3.2. Connect adequately to the earth. Use approved cables and electric equipment.
- 3.3. The broken down motors must be fixed in an authorized workshop or in our factory.
- 3.4. Check the packaging in the receipt of the goods and store it in a dry place.
- 3.5. Check the kit does not have any damage during their transportation or storage.



3.6. ATTENTION

The electric connection must be done according to the EN 60204-1:2007 CORR:2010 Regulation. In their series version the electric motor is not equipped with the protection against electric overloads. The user will take charge of its assembly. Connect the cable to the supply system after checking it has the same values as those written in the motor plate (it admits a tension tolerance of 10 %). The box-switch of the motor has electric parts whose assembly must be done by specialized personnel complying with the security rules.



3.7. IMPORTANT

It is forbidden to use the pump in environments where there is the risk of suffering an explosion or a fire (defined according to law). In particular the pump must not be used to pump liquids that, according to law, need explosionproof motors, i.e. not allowed uses with petrol, acetone, solvent... (Regulation references: IEC 79-10 International Regulation). Do not smoke near the pump or use it near a flame. This could cause an explosion and even the death.

3.8. ATTENTION: If the pump, the hose and the nozzle are outdoors in summer weather or hot countries, after the refuelling (once the pump is stopped), it is advisable to open the nozzle in order to discharge the accumulated pressure of the hose.

Otherwise, the high sun temperature makes possible to create an overpressure because of the expansion due to the diesel dilation the pipes have, being able to cause a retainer or mechanical element breaking of the pump and/or the meter.

If the pump was without operating in a place exposed to bitterly cold weather or ice, it would be necessary to empty the hoses and the pump body.

It would be also advisable to make this operation if the pump or the supply kit was without operating during a long time even though the temperature was normal.

3.9. If the hose connections are made with clamps, ensure they are well-tightened in order to avoid any air intake.

3.10. Please avoid spilling any type of liquid on the motor.



3.11. ATTENTION

The installer will be responsible of using the pipes with the adequate features. The inadequate use of the pipes could cause the contamination and damages to the pump or people. Check all the connections after the first installation and daily control they are not loosened. If necessary, tighten them. The connection loosening could cause serious ecological and security problems.



3.12. ATTENTION

The pump must not be switched on before finishing its installation. It is completely forbidden to put the fingers or other parts of the body into the holes: the pump has parts in motion. Before starting the pump disassemble or assembly, always switch it off and disconnect it from the power supply in order to avoid accidental ignitions with the unprotected parts in motion.



3.13. IT IS OBLIGATORY THE INSTALLATION OF A FUSE SUITABLE FOR THE PUMP CONSUMPTION FOR THE KIT WARRANTY.

4. INSTALLATION

Read this manual before installing or handling this kit.

INSTALLATION WITH OWN EQUIPMENT

- Before connecting the pump to the battery, check the supply is the same as that is described in the technical plate of the pump motor.
- If possible, connect the pipe to the pump through flanges (code 800003022 - F1" aluminium flange kit). This system is better than those connected through threads as the pump does not suffer any tension.
- If the installation has a rigid pipe, install a section of, at least, 20 cm of flexible pipe before and after the pump.
- If the pump is connected through threads, avoid to force the pump body. Any little displacement between the body and the motor can cause damages.
- Seal the hose connections of the hoses or pipes with Teflon or compatible seal liquid. Any air inlet through the suction tube will cause the pump does not suction. Make sure the leak absence.

