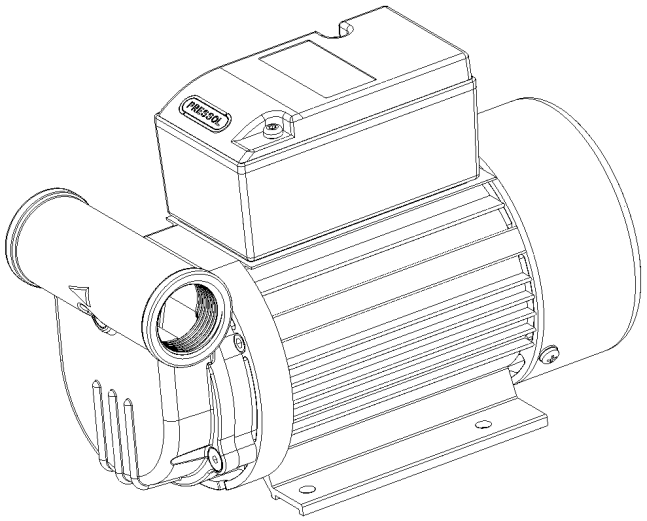
Diesel Pump 60 l/min

230 V AC

Operating Instructions



Contents:

1. General Information

1.1 Usage Stipulations

- The diesel pump is to be used only for the delivery of diesel fuel.
- **Never use it to deliver explosive fluids like petrol, or other fluids with similar flashpoints!**
- It must be connected only to a 230 Volt AC supply.
- To ensure that usage stipulations are met, read through the operating instructions completely before using the pump and observe all stipulations.
- Any departure from the usage stipulations (other fluid media, use of force) or user modifications (changes, use of non-original parts) can be dangerous and are considered as non-stipulated usage.
- The user is liable for any damage resulting from non-stipulated use.
- For any repairs to electrical components, the appropriate safety and test requirements are to be observed.
- Only original replacement parts are to be used for any repairs, otherwise the warranty will be invalidated.

1.2 Construction and Functional Description

- The diesel pump can be fitted with a variety of FMT accessories.
- To prevent environmental damage the diesel pump is fitted with a siphon protection system. This means that if the discharge hose is damaged while the pump is stopped, siphon action will not empty the tank.

1.3 Application Range

The diesel pump is suitable for the delivery of diesel and heating oil only when they are not heated above their flash points.

The temperature of the delivery fluids must be between –10 °C and +40 °C. The temperature limits must not be exceeded.

Because the motor and switch are not explosion-protected, the pump must **not**

- be operated in an explosion risk area.
- be used to deliver fuels of danger classification A I, A II and B.

1.4 Operational Area Requirements

Heating oil and diesel are water polluting substances. Therefore the country specific rules and regulations regarding the delivery and storage of such fluids must be obeyed.

According to § 19g WHG (Germany) the filling installation must be so constructed and built, maintained and operated, such that water pollution and/or any other environmental damage is prevented.

The operator of such an installation is, according to § 19i WHG (Germany) responsible for continuous monitoring to ensure compliance with the above stated requirements at the installation.

1.5 Technical Data

Year of Manufacture		**See Nameplate**
Fluid temperature	° C	-10 to +40
Connection thread	G	1“ i
Current	A	2,4
Power	W	380
Capacitor	µF	450 V – 12 µF ± 5 %
Pressure relief setting	bar	1,8
Max. suction height	m	5
Nominal delivery rate*	L / min	58
Voltage	V / AC	230
Frequency	Hz	50
Revolution count	min^{-1}	2800
Safety type	IP	54
Power cable	m	1,8
Weight	kg	6,3
* under free discharge		

Tab. 1-**Fehler!** : Technical Data

2. General Safety Advice

2.1 Safe Working Advice

- The diesel pump has been designed and manufactured according to the health and safety requirements of the relevant EC guidelines.
- Nevertheless, there can still be risks if the product is not set up or operated as stipulated.
- Therefore, before using the diesel pump, read these operation instructions and pass them on to other users.
- When operating the diesel pump, the local safety and accident prevention rules and regulations always apply, as well as the safety advice in the operating instructions.

2.2 Explanation of Safety Advice

The safety advice provided in these operating instructions is categorised according to different danger levels. The different danger levels are identified within the instructions by the following symbols and identifying words:

Symbol	Indicates	Result if the safety requirements are not observed or applied
	Danger	Death or very serious injury
	Warning	Possible death or serious injury
	Caution	Possible slight or not serious injury or material damage

Tab. 2-**Fehler!** : Safety Advice Classification according to Danger Type and Severity

In addition, another symbol is used to indicate general tips about using the product.

Symbol	Indicates	Meaning
	Note	Background information or tips about how to use the product

Tab. 2-**Fehler!** : General Information

2.3 Risks when Working with the Diesel Pump

Danger!

Never work on a pump that is running!

- Mount or remove attachments and accessories only when the pump is switched off.
- For your own safety, disconnect the pump from the power supply.

Danger!

Do not pump contaminated fluids!

- Take special care to ensure that there is no contaminant in the fluid to be pumped.
- Install a strainer on the suction pipe.

Danger!

Damaged attachments and accessories can lead to personal injury and material damage

- Suction and pressure pipes must not be kinked, twisted or stretched.
- Attachments and accessories must be checked for wear, splits or other damage at all times.
- Damaged attachments and accessories must be replaced immediately.
- With reference to the period of use, please note the details in ZH 1/A45.4.2 or DIN 20066 Part 5.3.2.

Caution!

Spilled fuel can result in environmental damage

- Local and country rules and regulations relating to domestic water supplies and fuel storage must be obeyed.

3. Installation

- 4 bolts, diameter less than 7 mm (not included) are required to attach the pump.
- When installing the pump, ensure that it is mounted on a stable surface. Select a secure location (protected from water spray, damage and theft).
- First, remove the plastic plugs from the suction and discharge junctions.
- Connect hoses to the suction and delivery connectors. Attach a strainer to the end of the suction hose.
- Attach the nozzle valve to the delivery hose.
- Connect the pump to a 230 V supply through the power connector.
- The pump is now ready for operation.

Note

Ensure cleanliness during installation, and that all accessories/attachments are correctly connected to the pump housing.

Use suitable sealing and jointing material (e.g. Teflon tape).

3.1 Installing the Siphon Protection

- Remove the bolt screwed into the side of the pump housing, together with the seal (see Fig. 3-1).
- Screw into the same thread the threaded nozzle with the new seal (see Fig. 3-2).
- Connect the hose to the threaded nozzle and feed it into the tank.

Note

Ensure when installing the siphon protection system that the end of the hose is **not** immersed in the fluid. If it is, the siphon protection system will **not** work!

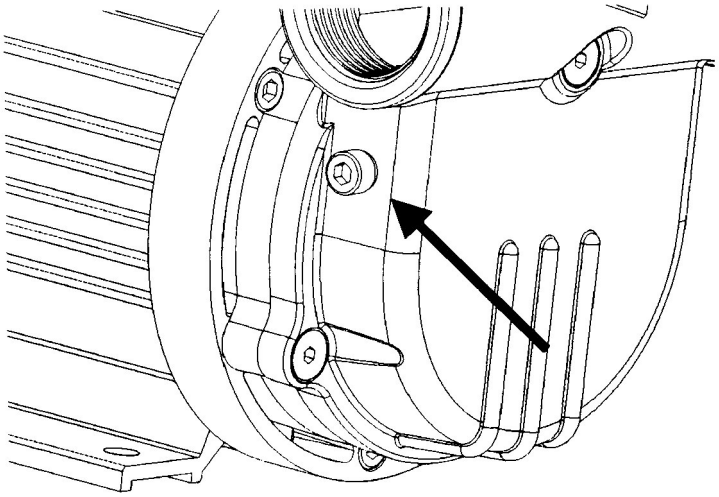


Fig. 3-**Fehler!** : Siphon Protection boring with blanking screw (as delivered)

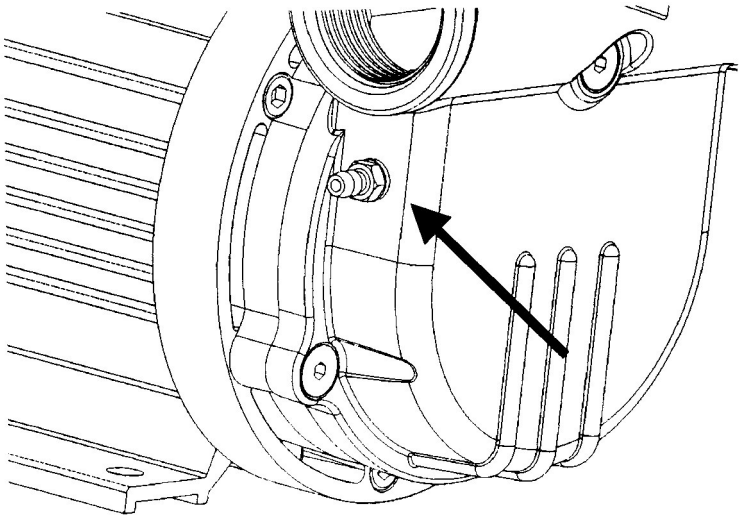


Fig. 3-**Fehler!** : Threaded nozzle for Siphon Protection screwed in place

4. Operation

Check the diesel pump and installed accessories for completeness and damage. Replace any damaged components immediately. Never use a pump if damaged.

Check the suction filter for damage each time the tank is filled/emptied and replace it if damaged. Never operate the pump without the suction filter, because the pump will not be protected against contamination by foreign bodies.

- Suspend the suction hose in the tank to be emptied.

Note

To ensure that the tank can be completely emptied, the suction hose must reach to the bottom of the tank.

- Position the nozzle valve in the container to be filled.
- Operate the rocker switch to switch on the pump.

Caution!

Never operate the pump without delivery fluid. There is a danger of your diesel pump being damaged if operated dry.

- Adjust the nozzle valve lever pressure according to the delivery rate required, or lock it in position for constant flow (only applicable to automatic control valve, not included in standard delivery).

Caution!

Tank pump does not switch off automatically, therefore when filling, never leave the pump running without supervision.

- To finish a pumping session, release the nozzle valve control lever.
- Operate the rocker switch to switch off the pump.
- Position the nozzle valve so that no diesel fuel can pollute the environment.

Caution!

Danger of product damage

The power source must be the correct voltage for the pump type.

5. Maintenance

The diesel pump is very easy to maintain and service.

Due to the operator responsibilities according to § 19i WHG (German rules), the following components must be regularly checked and replaced as necessary, to minimise the possibility of environmental or equipment damage, or personal injury:

- Pump housing (6)
- Delivery hose
- Nozzle valve

6. Servicing

6.1 Replacing worn blades

- Undo the screws (4, 5).
- Remove the pump housing (6) from the motor (10).
- Replace the worn blades (2) with new Original-FMT spare parts, ensure that they are correctly located.
- Refit the pump housing (6) and secure it in position with the screws (4, 5).

Blade replacement will be necessary only in exceptional circumstances.

7. Repairs/Service

The diesel pump was developed and produced according to the highest quality standards.

Should a problem develop, despite all quality controls, please contact our customer service:

FMT Swiss AG
Tel +49 7665 9346 105
Fax +49 7665 9346 120
service@fmtag.ch

8. EC Declaration of Conformity

We hereby declare that the product described here, its concept and construction, including this particular model, complies with the EC requirements. Any change to the product, not approved by us, will invalidate the declaration.

Product Description:	**Diesel Pump 60 l/min 230 V 1~AC**
Product Type:	Electric Pump
Year of Manufacture:	See Nameplate
Applicable EC-Directives:	EC-Low Voltage Directives (73/23/EEC) EC-Directives Electro-magnetic Compatibility (89/336/EEC) - 93/31/EEC
Applicable National Standards:	DIN VDE 0843 T1 (German)

08.12.2009

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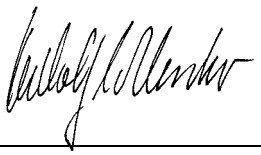

Dipl.-Ing. Rudolf Schlenker

9. Explosion drawing

No.	**description**	**Article number**
1	compression spring	89 384
2	segment	89 254
3	Fit-in key	00 602
4	screw M5x35	00 240
5	screw M5x16	00 236
6	Pump body	89 259
7	O-ring 65x2	00 234
8	Valve cone	89 385
9	rotor	89 255
10	engine	85 000

Tab. 9-1: Synopsis spare parts and article numbers

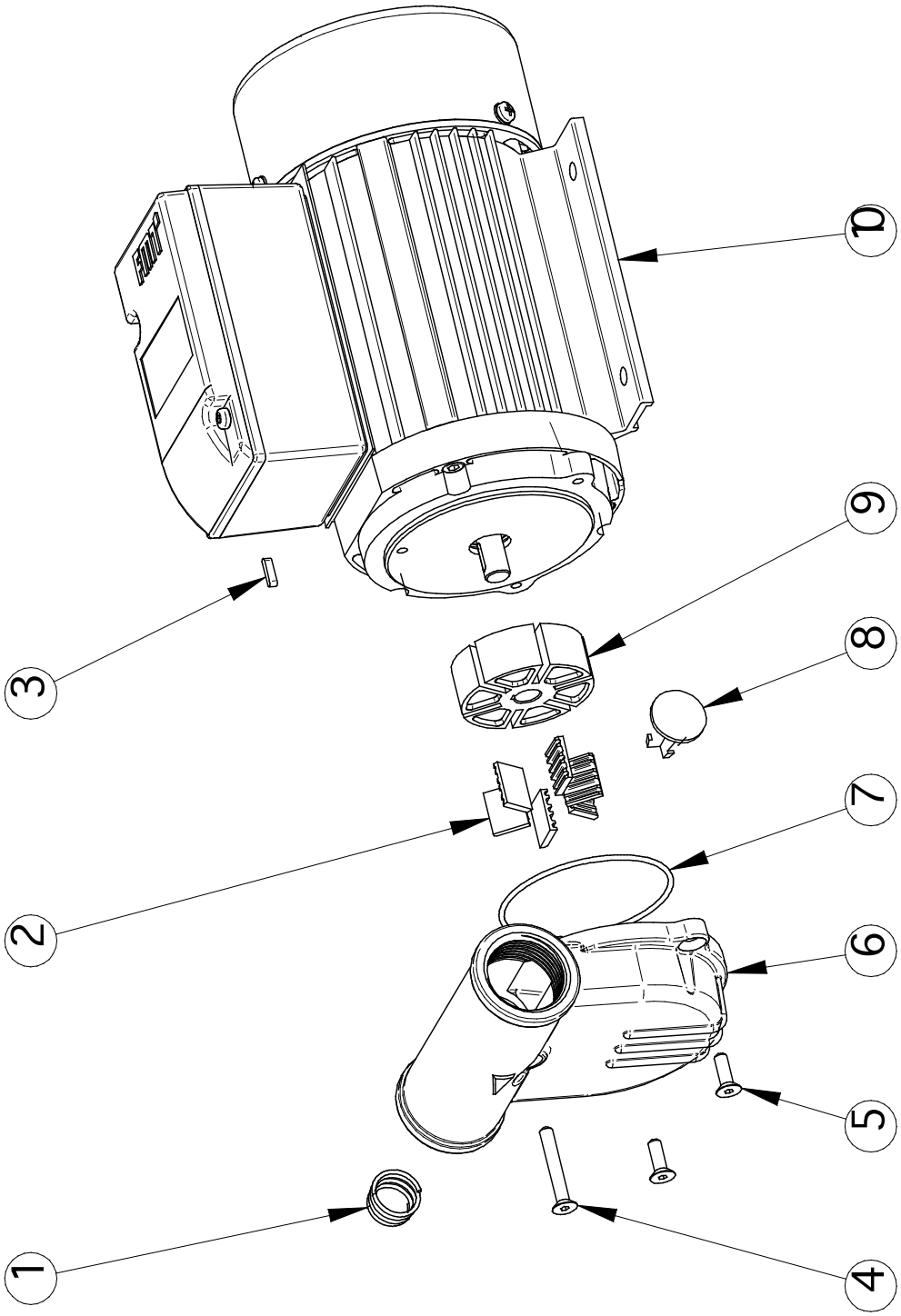

Fig. 9-**Fehler!** : Exploded View of the Diesel Pump

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