

EC-Declaration of conformity  
as defined by machinery directive 89/392/EEC, Annex II A

Herewith we declare that the below mentioned equipment in it's conception and design and in the execution was manufactured by us in conformity with the provisions of the EC directive. Any modification to the equipment made without our consent will render this declaration invalid.


**Description:** HORNET W 50 II, HORNET G50/12 II, HORNET G50/24 II  
**Type:** electric pump  
**Year of construction:** see equipment

**Applied EC-directives:** EC- Low voltage guidelines (73/23/EWG)  
EC-directive electromagnetic compability (89/336/EWG) version 93/31/EEC

**Applied harmonized standards:** EN 60335-1, EN 60335-2

**Applied national standards and technical specifications:** VDE 0700 T1, VDE 0700 T2

**Date / signature** 05.06.2001

  
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## Operating manual

*HORNET W 50 II*  
*HORNET G 50/12 II*  
*HORNET G 50/24 II*



HORNET W50 II with flow meter FMT

- General information
- Installation/erection
- Start-up
- Operation
- Repair/Service

Before using this device it is absolutely necessary to read the operating manual. In case of mal functions and damages of the device caused by insufficient knowledge of the operating manual, the warranty claim will be void.

## Contents

### 1. Safety precautions

- 1.1 Working safety instructions
- 1.2 Requirements to operating site

### 2. General information

- 2.1 Manufacturer
- 2.2 Range of use
- 2.3 Description
- 2.4 Technical data

### 3. Assembly instructions

- 3.1 Option flow meter

### 4. Operation

- 4.1 Start-up
- 4.2 Normal operation
- 4.3 Flow meter FMT
- 4.4 Flow meter Z300

### 5. Disassembly

### 6. Maintenance

### 7. Repair/Service

## 5. Disassembly

- In case the pump has to be dismantled from barrel or container
  1. Pull plug out of socket.
  2. Loosen adjusting screws at the drum joint.
  3. Take out pump slowly of container (liquid flows entirely out of suction pipe) and place it in an oil-proof basin. Hereby, please pay attention to the PU-3 - hose of the anti-siphon safety feature.
  4. Release discharge pipe at pressure connection and let liquid flow out into oil-proof basin.

## 6. Maintenance

- The electric pump basically does not need any maintenance.
- Due to existing regulations, however, pump housing, discharge hose and suction nozzle must regularly be checked for damage.
- The discharge hose can easily be replaced by releasing the hose threads (See also chapter 3 "Assembly Instructions").

### Fuse

- The motor on the Hornet W50 II is protected by a thermofuse in the motor coil which resets itself after the motor has cooled down.
- The motors on the DC designs are protected by fuses of commercial quality, located under the switch cap at the end of the motor.
- Attention! Before changing a fuse, detach motor from power supply!  
To change a fuse, release both screws on each end of the switch cap. Take off cap carefully and change fuse.  
When remounting the cap, ensure that the O-ring is securely placed between motor and cap.
- the Hornet G50/12 II, has a 30A.fuse
- the Hornet G50/24 II has a 25A fuse

## 7. Repair/Service

- The electric pump has been designed with the purpose of being able to operate with least possible maintenance. This is obtained by operation the pump according to this operating manual. Should you, however, after all need service, we kindly ask you to contact the Horn-Service department.

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**HORN - Service**  **+49 (0)461 / 86 96 - 27**

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## 4. Operation

### 4.1. Start-up

**Caution !** Running the pump without liquid for a longer period of time (> 1 min.) must be avoided, as it may result in damage of the pump impellers.

1. Put nozzle into a tank or into a collecting basin. Open nozzle at the nozzle lever.
2. Switch on pump, after approx. 15 sec. liquid will flow out of the nozzle.

### 4.2. Normal operation

**Avoid running without liquid (> 1 min.)**

**In order to prevent excessive heating and damage of the pump impellers, the pump is only allowed to be operated with a closed nozzle for approx. 1 min. After each pumping process the nozzle must be replaced into the nozzle holder. A damaged hose may cause spillages. The hose may not be left lying on the ground in order to avoid damages to the hose.**

**Caution !**

1. Switch on pump.
2. Hold nozzle into filling container or put nozzle into vehicle tank and press nozzle lever according to quantity required or adjust with clamp.  
Automatic nozzle A2010 switches off automatically when the tank is full (Q min 12 l/min.)  
Do you wish to stop the filling, let go of nozzle or pull the nozzle briefly and then let go of it.
3. Switch off electric pump and replace nozzle into mounting. See also operating manual Automatic Nozzle A2010.

### 4.3 Flow meter FMT (optional)

- The 6-digit display will run automatically during filling process.
- The display can be resetted by pressing the start/stop - button until 0.00 appears.
- The meter has a 5 summation memory device of which the summation-memory 1 can not be reset. The last summation memory No. used is automatically shown, when filling up the tank. The summation memory is able to display a total amount of 999 999 liter.
- The meter has been pre-calibrated in the factory for the delivery of Diesel and fuel oil. Influences such as temperature and effective capacity of the pump may, however, change the accuracy of measurement. In that case a recalibration of the flow meter is possible.

Please see also operation manual Flow Meter FMT

### 4.3 Flow meter Z300 (optional)

- The 3-digit display will run automatically during filling process.
- The indication can be resetted by turning back the reset button to 000.
- The quantity indication will run automatically as soon the filling process will start. The quantity indication is not resettable and can indicate a total delivered quantity up to 999 999 litres.
- The meter has been pre-calibrated in the factory for the delivery of Diesel and fuel oil. Influences such as temperature and effective capacity of the pump may, however, change the accuracy of measurement. In that case a recalibration of the flow meter is possible.

Please see also operation manual Flow Meter Z300

## 1. Safety precautions

### Symbol and explanation

#### Working safety symbol



This symbol is placed at all safety instructions of this operation manual where a danger of life and health of individuals exists. Please follow these instructions and act at these cases very careful. Pass all working safety instructions to other users. Besides the instructions of this operating manual all safety and accident preventive rules which are generally valid must be observed.

#### Caution symbol

**Caution !**

The "Caution" symbol is placed at passages of this operating manual which have to be observed very careful in order to follow the guidelines, regulations, instructions and the correct operating process as well as to avoid damages to the product and/or other parts of the device.

### 1.1 Working safety instructions

The electric pump has been designed and built in accordance with the relevant basic safety and health requirements of existing EC-guidelines. However, dangers may result if this product is used for other purposes than described. Any person dealing with assembly, operation and maintenance of the electric pump must have read and understood the complete operation manual.



**The electric pump is only to be used for delivery of radiator liquids, diesel and fuel oil, flash point above 55°C.**

Any other use as well as any modifications to the product have to be considered as improper use. The manufacturer may not be held responsible for any damages resulting from such, the risk lies in that case solely with the user.



**Motor and switch are not explosion-proof. Operation in explosion danger areas and operation with fuels with flash point below 55°C may cause explosions.**

A proper use of the product also implies the observance of the conditions specified by the manufacturer regarding assembly, start-up, operation and maintenance.

For the operation of the electric pump the local safety and accident prevention rules must be observed in any case.

### 1.2 Requirements to operating site

As radiator liquids, diesel and fuel oils are water-polluting liquids, the regulations regarding protection of ground water and environment in the country must be observed.

## 2. General information

### 2.1 Manufacturer:

HORN GMBH & CO. KG, D-Flensburg

### Model:

HORNET W 50 II, HORNET G 50/12 II, HORNET G 50/24 II

### 2.2 Range of use



The electric pump can only be used for delivery of radiator liquids, diesel and fuel oil with a flash point above 55°C.

**Caution!**

The temperature of the flow liquid is not allowed to fall below or exceed - 10°C to +40°C.

**Caution!**

Make sure that the foot filter is tightened (tighten clamp). Use of electric pump without foot filter may cause damage of important pump parts.

### 2.3 Description

**Caution!**

The electric pump is a self-priming pump. However, permanent operation without liquid may cause damage of the pump impellers!

- The electric pump is an electrically operated tank pump for delivery of radiator liquids, diesel and fuel oil with a flash point above 55°C.

### 2.4 Technical data

HORNET	W 50 II	G 50/12 II	G 50/24 II
Year of construction:	Please see name plate		
Medium temperature:	-10° C to +40° C / 22° F - 72° F		
Connecting thread:	G 1"		
Drum thread:	G 2"		
By-pass valve adjusted:	1.8 bar / 26 psi	1.4 bar / 20 psi	1.8 bar / 26 psi
max. priming level:	4,0 m		
Nominal pump capacity:	55 l/min	47 l/min	50 l/min
Voltage:	230 V 50 Hz	12 V –	24 V –
Input capacity:	0.55 kW	0.34 kW	0.43 kW
Nominal motor capacity:	0.33 kW	0.29 kW	0.42 kW
Current:	2.4 A	28 A	18 A
Protection:	IP 54		
Connecting cable:	2m		
Duration of operation	100 %	max 15 min. operation min 15 min. stop	

## 3. Assembly instructions

1. Before assembly please make sure that all parts are free from package material.

2. Screw drum joint (1) with the G2"-thread into the tank. Slide foot filter (2) until measuring point on to the pipe of suction hose, and mount it with the clamp. Please be sure that the foot filter is mounted tightly (tighten clamp).

3. Screw suction hose with the 1" - thread (3) into pump and tighten.

5. Dismount protecting cover from connection of anti-siphon safety feature and mount here the by-pass hose. Insert other end of by-pass hose approx. 300 mm into the 8 mm drill hole of the drum joint (1). Mount pump on the screwed-in drum joint. Screw adjusting screws (4) into the threaded holes of the drum joint and fix pump with adjusting screws in the position required.

6. Fix holder for automatic nozzle (5) with both hexagonal head screws M6x25, the spring washers and the hexagonal nuts M6 on the upper - or lower support of the pump motor.

7. Fix discharge hose (6) with external thread G1" in pump-outlet. Fix other end of discharge hose into hose swivel joint (10) and screw this into the automatic nozzle.

9. After mounting, please test the connections for leakages.

### 3.1 Option flow meter FMT or Z300

If a flow meter FMT or Z300 is part of the delivery, one G1" - thread of the discharge hose must be connected with the flow meter-outlet (9). Connect other thread with the swivel joint of the automatic nozzle (10).

Please see operation manual Flow Meter FMT or Z300.

