



Operating manual

# **Visconet II**

Item-No.: 104123700, 104133701, 104123702, 104143701, 104163700,  
104173701

Translation of the  
original operating manual

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## Important!

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The operating manual is always to be read before commissioning the equipment. No warranty claim will be granted for faults and damage to the equipment arising from insufficient knowledge of the operating manual.

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## Copyright

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Document-No.:      44 1338 101-D  
As of:                09.04.2015

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## 1. Safety instructions

The device is a state of the art piece of equipment and has been constructed according to recognised safety specifications. It is nevertheless possible that use of the device will present hazards to the operator or to third parties, or may damage the device or other property. It is therefore essential to act in accordance with these safety instructions, and in particular with those sections identified as warnings.

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### Warning notices and symbols

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In the operating manual, the following signs are used for highlighting important information.



Special information for economical use of the equipment.



Special information or "dos and don'ts" for damage prevention.



**Information or "dos and don'ts" for the prevention of damage to persons or equipment.**

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### Appropriate use

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The device may only be used if it is in perfect condition, and then only for its intended purpose, in compliance with all safety regulations, with an awareness of the potential risks, and according to the operating manual. Any faults that may impair the safety must be rectified immediately.



The device and its components are only to be used for handling the liquids listed and the purpose described. Using the machine for any other purpose would constitute inappropriate use. The manufacturer is not responsible for any loss arising as a result of this, the risk for this is borne only by the operating company.

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### Organisational measures

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This operating manual should always be kept readily available at the site of operation! Each person concerned with the assembly, commissioning, maintenance and operation of the equipment must have read and understood the entire operating manual. It is essential that the type plate and the warning notices attached to the device are observed, and are maintained in a fully readable condition.

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### Qualified personnel

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The operating, maintenance and assembly personnel must be appropriately qualified for their work. The areas of responsibility, competences and supervision of the personnel must be precisely regulated by the operating company. If the personnel do not have the required knowledge, they must be trained and instructed. The operating company must also ensure that the contents of the operating manual are properly understood by the personnel.

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### Waters protection

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The device has been designed to handle water hazardous substances. The regulations on the operating place (e.g. Water Resources Act WHG, = ordinance on installations for handling of substances hazardous to water VAWS) must be adhered to.

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## Hydraulics

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Only persons with special knowledge and experience with hydraulic systems may carry out work on hydraulic parts and equipment. All lines, hoses and screw joints should regularly be checked for leaks and visible external damage. Any damage must be rectified immediately. Any oil spurting out can cause injuries and fire.

The relevant safety regulations for the product must be followed when handling oils, greases or other chemical substances!

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## Maintenance and Service

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According to the regulations of the water resources law only authorized services may work on devices for flammable and/or water endangering substances. During such works, appropriate tools are to be used (avoid sparking). Before any kind of work on the device, all fuel lines are to be completely emptied and aerated.

Do not make any changes. Modifications or additions to the device which may affect the safety cannot be carried out without consent of the manufacturer. Exclusively genuine spare parts made by the manufacturer may be used.

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## Electric power

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Work on the electrical equipment may only be carried out by a qualified electrician or by trained persons under the guidance and supervision of a qualified electrician according to electro-technical guidelines. Machine or system components, on which inspection, maintenance or repair work is to be carried out must be de-energised.






Product description

## 2. Technical description

### 2.1 Description

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

### 2.2 Appropriate use

-  The electric pump Visconet II is exclusively designed for the delivery of motor and gear oil. They are not suitable for conveying used oils.
-  The temperature of the liquid to be pumped must be in the range +10°C to +40°C.
-  The pump has no safety device to prevent automatic restarting after interruption of the power supply.
-  The Visconet II must not be operated with flammable or explosive liquids with a flash point of below 55 °C (hazard classes AI, AII and B). Liquids with a flash point above 55 °C (hazard class A III) must not be transported if they are heated beyond their flash point.
-  Operation in explosion-risk areas is not permitted. There is a risk of explosion!

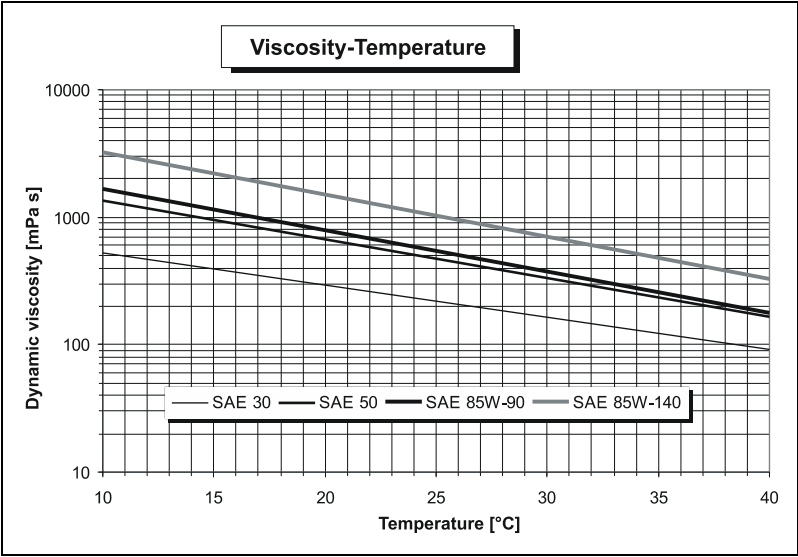
### 2.3 Product versions

Item-No.	Product	Features
104 123 700	Visconet II	Oil nozzle ZV 2000
104 133 701	Visconet II F	Oil nozzle ZV 2000, Flow meter FMOGne
104 123 702	Visconet II HDZne	Manual flow meters FMOGne
104 143 701	Visconet II HDZe	Manual flow meters FMOGe, calibratable
104 163 700	Visconet II M	Oil nozzle ZV 2000
107 173 701	Visconet II M F	Oil nozzle ZV 2000, Flow meter FMOGne

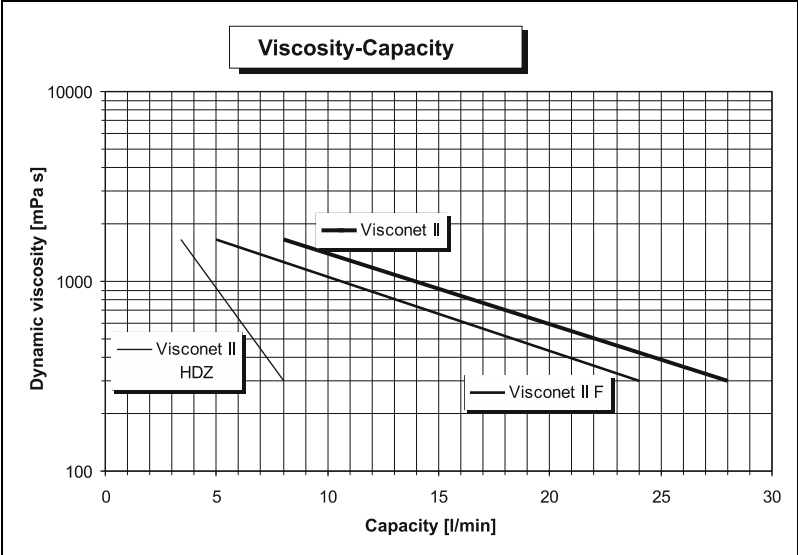
## 2.4 Technical data

Type	Visconet II, Visconet II F	Visconet II M, Visconet II M F
Year of construction	Please see name plate	
Voltage	230 V~ 50 Hz	
Input capacity	1,22 kW	0,64 kW
Current	5,3 A	2,8 A
Connecting cable	2 m	
Zero delivery pressure	4,5 bar (65.25 psi)	2,0 bar (29.0 psi)
Nominal pump capacity	see diagram I to III	
Max. viscosity	2000 mPas	1000 mPas
Min. viscosity	100 mPas	
Drum thread	G 2"	
Nozzle hose	DN 19 x 4000 mm	
Suction head	840 mm	
Duration of operation	100 %	
Weight	13,5 kg (VISCONET II F, VISCONET II M F: 14,0 kg)	

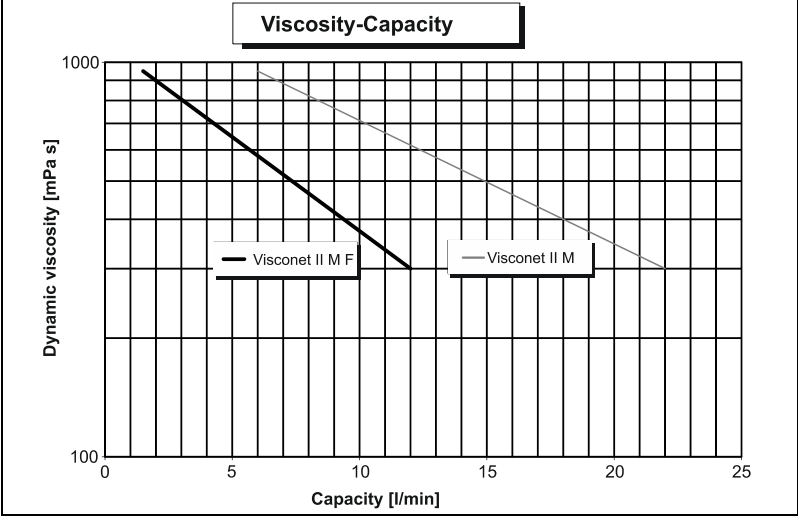
2.4.1 Diagram I



2.4.2 Diagram II - Visconet II, Visconet II F



2.4.3 Diagram III - Visconet II M, Visconet II M F



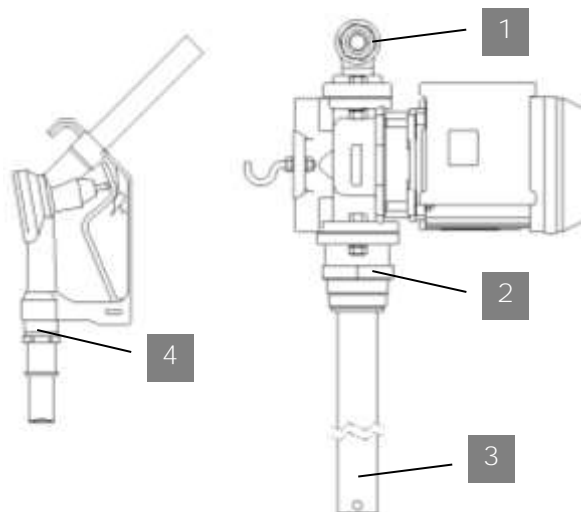
### 3. Assembly instructions

#### 3.1 Place of installation

The installation location should be selected to ensure trouble-free operation. In addition, it must be accessible for maintenance work.

#### 3.2 Assembly

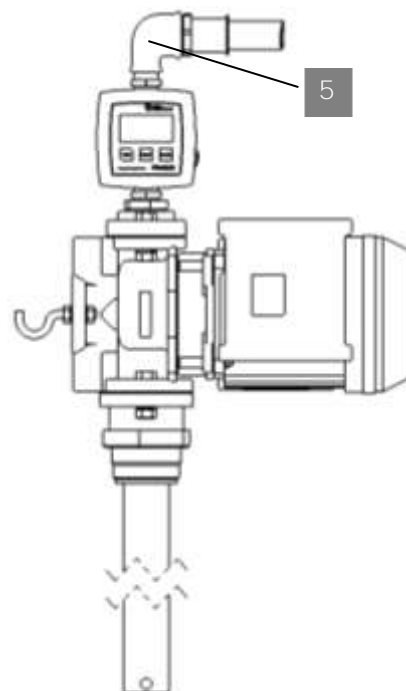
- Before fitting check all parts for any packaging material residue.
- Connect suction tube (1) to the drum thread (2) and tighten firmly.
- Screw drum thread with suction tube into the G2" container opening.
- Lay sealing on the barrel thread and connect pump with the enclosed screws M 10x35, high tension and hexagonal nuts M 10.
- Screw discharge hose (3) with the external thread G1" into the exit of the pump. Screw other end of the discharge hose into the hose swivel (4).
- After mounting, please test the connections for leakages.



#### 3.3 Option flow meter

When a flow meter is in scope of supply, please connect **the G1" screwing of the discharge hose with the elbow at flow meter's outlet (5)**. The other screw coupling is connected to the rotary joint of the automatic nozzle (4).

- For operation of the meter see the enclosed instructions.



## 4. Operation

### 4.1 Commissioning and re-commissioning

! 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.

- Put nozzle into a tank or into a collecting basin. Open nozzle at the nozzle lever.
- Switch on pump, after short time discharge liquid emerges out of the nozzle.

In case of a too small suction capacity during the return to service the pump can be evacuated via the knurled-head screw at the pump body.

A suitable container has to be held under the screw and these has to be carefully unscrewed. As soon as media comes out fasten screw.

The electric pump Visconet II may only be operated under supervision.

### 4.2 Normal operation

! Avoid dry running (>1 min).

! With the nozzle closed and the pump filled with medium it may be operated for max. 1 min, since otherwise this can lead to excessive heating and pump vane damage.

! After the filling process, the nozzle must be replaced in its nozzle holder.

! The discharge hose should not remain lying on the ground in order to prevent damage to it (e.g. by driving over it).

! A defective hose can cause contamination.

! If any leakage occurs in the pump, the hoses or the nozzle, operation must be stopped immediately and the fault rectified.

- Switch the pump on.
- Hold nozzle into filling container or put nozzle into vehicle tank and press nozzle lever according to quantity required.
- At the end of delivery, switch the electric pump off and place the nozzle in its holder.

### 4.3 Flow meter (optional)

Version: Visconet II F, Visconet II MF, Visconet II HDZne, VisconetT II HDZe

Please see operation manual flow meter.

## 5. Dismantling

In case the pump has to be dismantled from barrel or container:

- Pull plug out of socket.
- Loosen adjusting screws at the drum joint and take out pump of container.
- Release discharge pipe at pressure connection and let liquid flow out into oil-proof basin.

## 6. Fault display - What to do if...?

... the pump is switching itself repeatedly on and off?

- The pump is running dry and is switching itself back on after the pumping chamber has cooled down. Switch off the pump and eliminate the cause of the dry-running.

... the pump doesn't aspirate the liquid?

- The tank is empty.
- The suction line and all screw joints on the suction side are to be checked for leaks and resealed if necessary.

**... the pump isn't to be switched on?**

- The mains plug is not plugged in.
- The cable is damaged.

... the pumping capacity is too low?

- Very cold or viscous liquids can only be pumped with difficulty, the delivery rate is correspondingly low, possibly the temperature of the liquid is below the specified minimum.

... the pump switches itself off during operation?

- The thermal overload protection of the electric motor has been activated. After cooling down it resets itself automatically. The cause of the over heating should be corrected.



In case of excessive noise development, further operation is only permitted after elimination of the cause!

## 7. Maintenance

The pump is designed to need very little attention and maintenance. Before the start of any maintenance work, remove the mains plug from the socket.

### 7.1 Leak test

The device and the other components of the system are to be checked regularly for leaks and damage and sealed if necessary.

### 7.2 Discharge hose

A discharge hose can be easily changed by simply loosening the screw connections (also see chapter 3 Assembly instructions).

### 7.3 Fuse

In the Visconet II the motor is protected by a thermal cut-out in the motor winding, which resets itself after the motor cools down.

### 7.4 Cleaning the system

In the event of superficial fouling clean the device carefully with suitable materials, use no corrosive cleaning materials. Flush with diesel to clean the interior parts and pipes.

## 8. Disposal

The device is to be emptied completely and the liquids properly disposed of in case it is taken out of service.

The equipment is to be disposed of properly when taken permanently out of service:



- Return old metal for recycling.
- Return plastic parts for recycling.
- Return electronic waste for recycling.



The water legal regulations are to be followed.



## Konformitätserklärung *Declaration of Conformity*

Hiermit erklären wir, dass die Bauart  
*We herewith declare that the construction type*

Typ: <i>Type:</i>	<b>Visconet II, Visconet II F, Visconet II M, Visconet II MF</b>
Bezeichnung: <i>Designation:</i>	<b>Elektrische Förderpumpe <i>Electric delivery pump</i></b>
Artikel-Nr.: <i>Item No.:</i>	<b>104123700, 104133701, 104123702, 104143701, 104163700, 104173701</b>

in der von uns gelieferten Ausführung folgenden einschlägigen Bestimmungen  
entspricht:  
*in the form as delivered by us complies with the following applicable regulations:*


- |  |  |
|--|--|
| - Maschinenrichtlinie 2006/42/EG<br><i>Machinery safety 2006/42/EC</i> | - EMV-Richtlinie 2004/108/EG<br><i>Electromagnetic compatibility<br/>2004/108/EC</i> |
|--|--|

Angewendete harmonisierte Normen:  
*Applied harmonised standards:*

EN ISO 12100-1, -2    EN 60204-1

EG-Dokumentationsbevollmächtigter: <i>EC official agent for documentation:</i>	Jörg Mohr	Horn GmbH & Co. KG Munketoft 42 24937 Flensburg
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16.05.2011  
Datum  
*Date*

  
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