



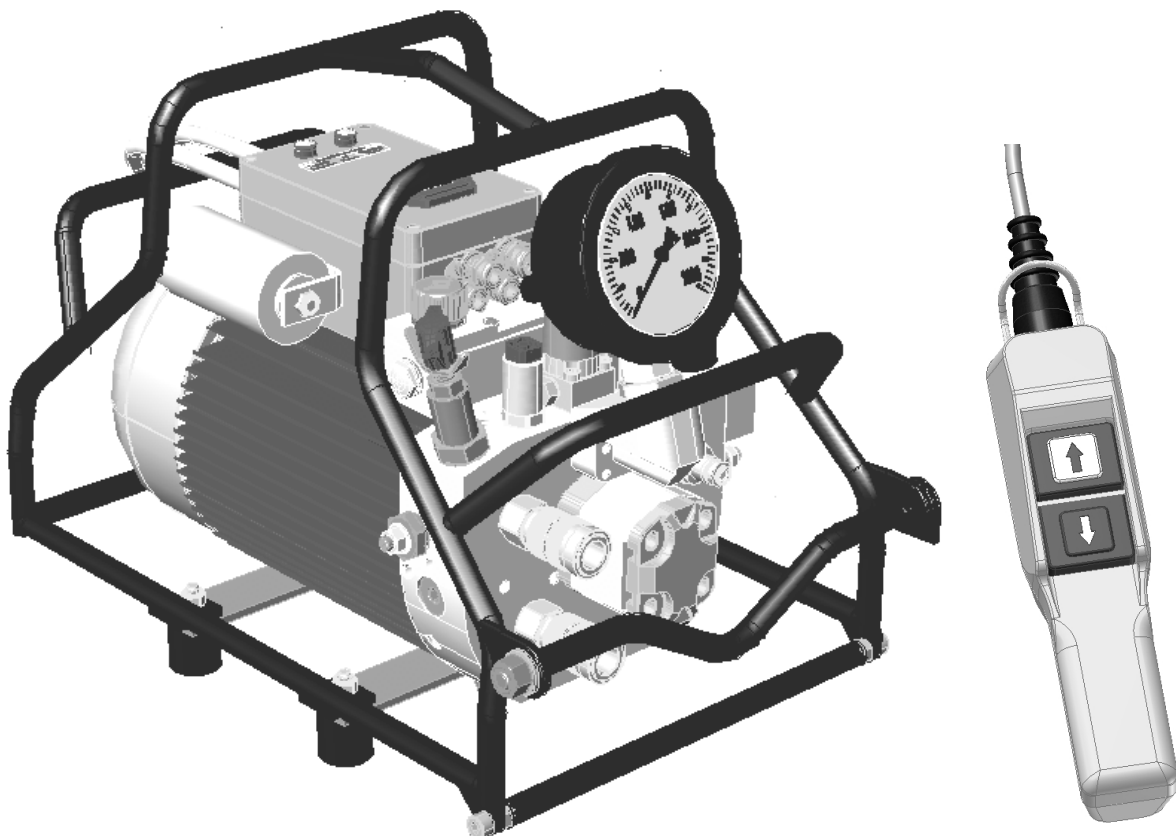
Plarad Hydraulic Unit

IQ-VX 1-Z

IQ-VX 2-Z

IQ-VX 3.5-Z

Operating instructions



CONTENTS

1. Notes	3
1.1. CE marking	3
1.2. Directives	3
1.3. General notes	3
1.4. General safety instructions	3
1.5. Symbols and warning notes	4
1.6. Method description	4
2. Product information	4
2.1. Proper use	4
2.2. Improper use	4
3. Scope of supply / accessories	4
3.1. Consumables	4
4. Technical data	4
5. Functional description	5
5.1. Putting into operation	5
5.2. Screw connection	6
5.3. Maintenance instructions	6
5.4. Signal lamp fault messages	7
5.4.1. Signal lamps on the control housing	7



IMPORTANT INFORMATION

1. NOTES

1.1. CE marking

The products bear the CE conformity mark. The Declaration of Conformity declares that the products comply with the safety directives of the European Union.

1.2. Directives

The product meets the directives:

EC Machine Directive 89/37/EC
EU-Low voltage Directive RL2006/95/EC
EMC requirements
EN61000-6-2 (2001)
EN55011 Kl. A (1998)+A1
EN61000-3-2(1995)+A1,A2,A14
EN61000-3-11 (2000)

1.3. General notes

Before you use the hydraulic unit...

...make sure you read and understand the instructions in this manual. The legislator requires us to point out important safety notes and advise you how to avoid damage to the unit.

If you do not heed this manual, Maschinenfabrik Wagner is not liable for any damage caused by negligent or intentional disregard of the instructions contained in it.

- The operating manual is a component part of the equipment. It has to be stored near the unit at all times. Exact observance of the instructions in this manual is the pre-requisite for proper use and correct operation of the equipment.
- The safety of the operator and problem-free unit operation can only be guaranteed if original unit parts are used.
- If other components are used, Maschinenfabrik Wagner cannot accept any liability for safe operation and safe function. No claims will be accepted for damages caused by these reasons.
- Maschinenfabrik Wagner only considers itself responsible for the units in terms of safety, reliability and functional ability provided assembly, re-setting, modifications, extensions and repairs have been carried out by Maschinenfabrik Wagner or its authorised

representative and if the hydraulic unit has been used in line with the operating manual.

1.4. General safety instructions

- When the equipment is in operation, the laws and regulations valid at the site of application must be heeded. In the interest of safe working procedure, operator and user are responsible for the observance of the regulations.
- Before every application, the user must ensure that the unit is functioning safely and is in a proper working condition.
- The user must be familiar with equipment operation.
- Before initial operation the unit and lead must be checked for damage. Damaged leads and plug fixtures must be replaced immediately.
- The use of an extension lead with a low cross-section can lead to a drop in voltage which has a negative effect on motor start-up. Only extension leads with a minimum cross-section of 1.5 mm² for mains voltage 230V/400V 2.5 mm² for mains voltage 100V/110V may be used.
- The mains plug must always be removed from the socket during repair and servicing work.



1.5. Symbols and warning notes



- Warning of dangerous electrical voltage.



- CE marking.



- Observe mounting and operating instructions!



- Special note.

1.6. Method description

Screw attachments using the torque method can be carried out using the hydraulic unit and connected hydraulic screwdrivers. One or two hydraulic screwdrivers (tandem application) can be operated using the hydraulic unit. No special settings are necessary for tandem application. All the processes correspond to screwing with one screwdriver.

2. PRODUCT INFORMATION

2.1. Proper use

The hydraulic unit has been designed for the operation of PLARAD hydraulic screwdrivers for tightening screw attachments according to the torque method.

2.2. Improper use

The hydraulic unit has been designed for use inside and outside, at ambient temperatures of -10 to +50 °C. The manufacturer must be consulted in the case of deviations.

The hydraulic unit is suitable for operation with PLARAD hydraulic screwdrivers in as far as the conditions described are met.

The unit is suitable for operation both connected to the mains supply and to mobile generators, as long as the conditions described in Chapter 4 "Technical Data" are met.

The unit is classified as protective rating IP54 according to VDE 0530-5, Annex A (national) IEC 34-5 (international)

EN60034-5 (harmonised European) for foreign bodies and accidental contact/water contact.

Any other or further use shall be considered improper. The manufacturer is not liable for any damage resulting from improper use. The operator / user alone bears the risk.

3. SCOPE OF SUPPLY

Hydraulic unit, filled with oil and ready to use.

3.1. Consumables

The parts listed below are included in the scope of supply. Please order if required!

Filter insert 10 µm	K20-058-4-27901
Hydraulic oil 1l	K20-001-4-46701
Hydraulic oil 5 l	K20-001-4-46701

Please indicate the amount of oil on your order!!!

4. TECHNICAL DATA

Maximum operating pressure 800 bar

IQ-VX 1 Z
Volume flow 5.3 l/min 10 to 70 bar
0.75 l/min 70 to 800 bar
Mains connection AC 230 V / 50 Hz
Weight 22 kg

IQ-VX/ 2 Z
Volume flow 8.0 l/min 10 to 70 bar
1.2 l/min 70 to 800 bar
Mains connection AC 230 V / 50 Hz
Weight 29 kg


IQ-VX/ 3.5 Z
Volume flow 13.0 l/min 10 to 70 bar
3.0 l/min 70 to 800 bar
Mains connection AC 400 V / 50 Hz
Weight 36 kg

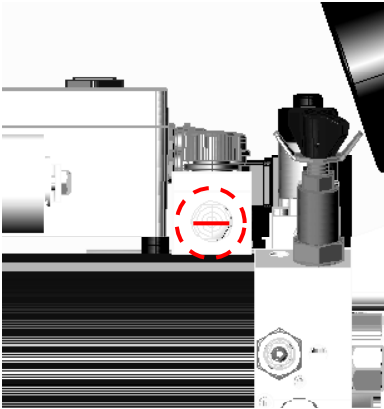
Minimum connected load for mobile current generator 4kVA.

5. FUNCTIONAL DESCRIPTION


5.1. Putting into operation

- Check oil level.

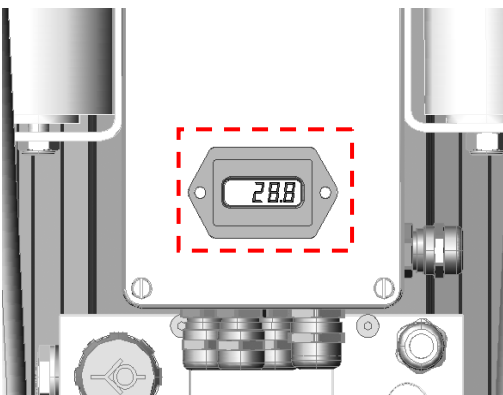
 **Note** When checking the oil level make sure the unit is in a horizontal position.




- Connect the hydraulic unit to the mains.

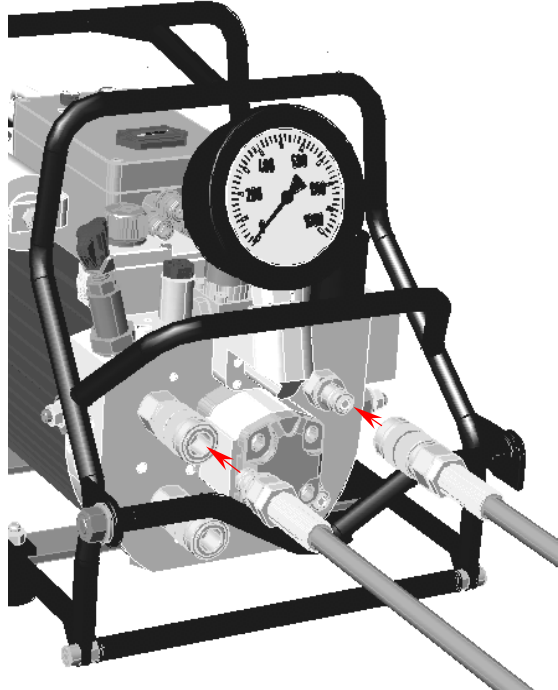
 **Note:** Heed the mains voltage given on the type plate.

- After the mains connection has been set up, a short test is carried out, during which all 4 signal lamps on the hydraulic system light up for approx. 5 seconds (can be interrupted by key).
- Once the mains supply has been set up, the operating hours are displayed on the unit.

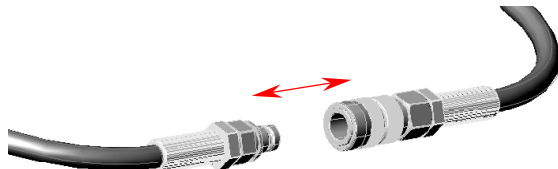


- Connect the hydraulic hoses to the unit.

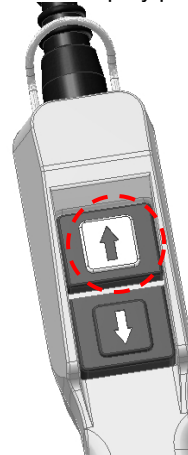
 **Note:** Do not connect the hydraulic screwdriver yet.



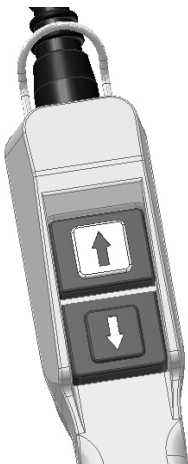
- Connect the hydraulic hoses at the other end, in the case of tandem application connect both pairs of hoses.



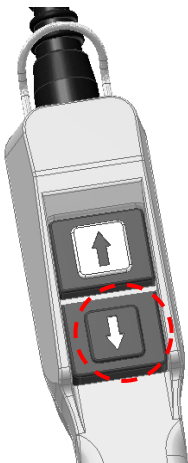
The unit is started up by pressing the "on" key.



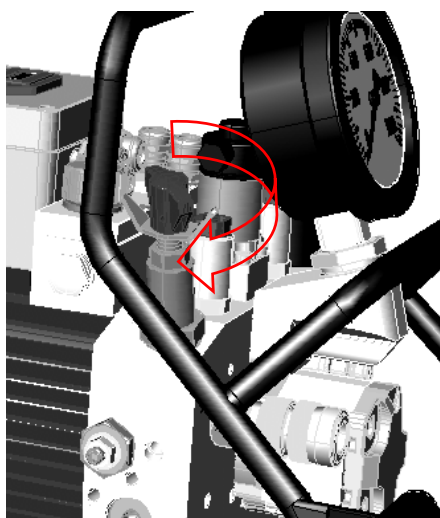
- Keep the "on" key pressed for approx. 30 seconds.



- Switch the unit off by pressing the stop key.



- Connect the hydraulic screwdriver
- Keep the "on" key on the remote control pressed and set the required hydraulic pressure at the pressure setting valve.



Pressure setting valve

- The pressure to be set can be found in the torque table of the hydraulic screwdriver.
- The pressure is read off on the unit manometer.

The screw unit is now ready for the screwing process.

5.2. Screw connection

- When screwing work begins, the pressure for the required torque must be taken from the torque table of the hydraulic screwdriver.

"On" key pressed → Screwdriver moves forwards.

"On" key not pressed → Screwdriver moves backwards.

- Press the "on" key and keep it pressed until the screwdriver stops turning.
- Release the "on" key.
- This process is repeated until the screwdriver no longer turns when pressed again and the pre-set pressure has been reached.

5.3. Maintenance instructions

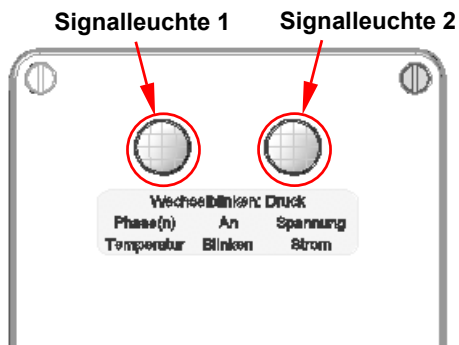
- The unit oil level must be checked regularly, particularly when starting work.
- Couplings and nipples on the unit, the hoses and the hydraulic screwdriver must be kept clean. Use a cloth to clean coupling and nipple before connection.
- Use the sealing caps to close couplings and nipples during transport and storage.



5.4. Signal lamp fault messages

There are two signal lamps in the cover of the control unit housing on the screwing system. Different fault functions, which lead to problems when operating the units, are indicated by the signal lamps. The various functions are indicated by different flashing frequencies.

5.4.1. Signal lamps on the control housing



Flashing frequency	Cause
Signal lamp 1 on permanently	With 3-phase units - direction of rotation wrong General voltage/direction of rotation detection faulty
Signal lamp 1 flashing	The maximum permissible temperature of the unit has been exceeded
Signal lamp 2 on permanently	The voltage of the power supply is outside the permissible range
Signal lamp 2 flashing	The maximum permissible current consumption of the unit has been exceeded
Signal lamps 1 and 2 flash alternately	The maximum permissible pressure of the unit has been exceeded (disconnect the unit from the mains, check pressure setting valve – maximum permissible pressure 820 bar. Connect the unit to the mains and restart)