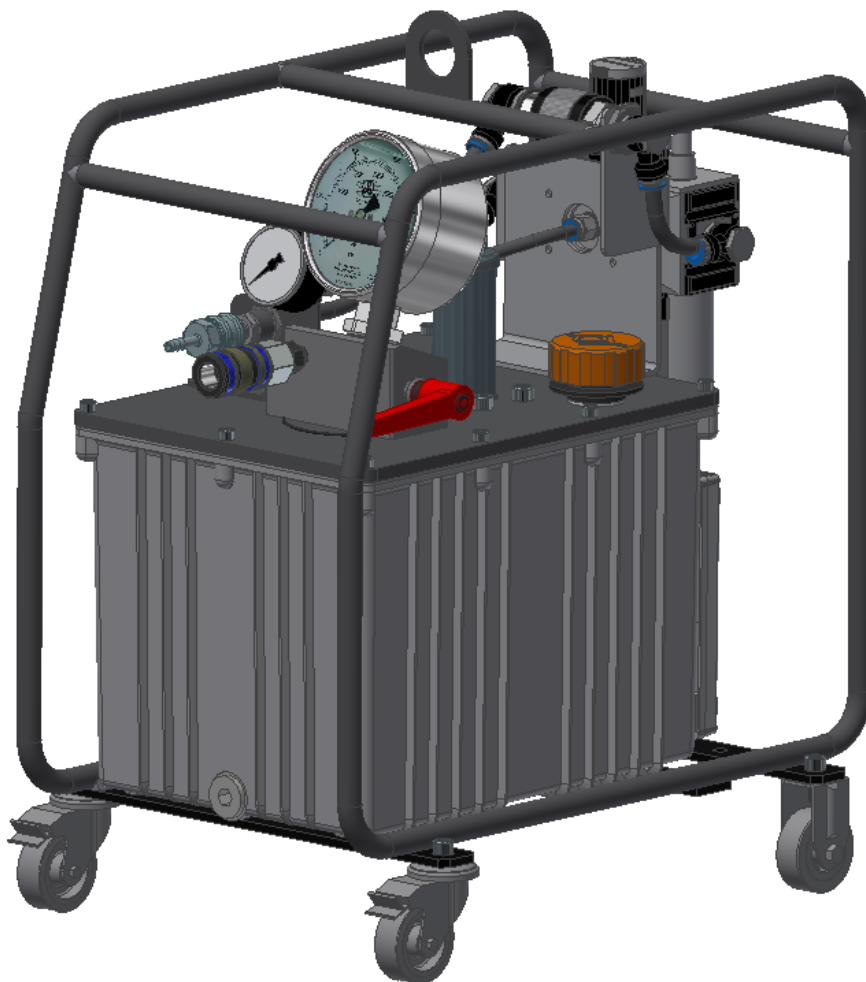


Pneumatic power pack



U 0,8 – 1500bar

Operating manual



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1. Manufacturer

Maschinenfabrik Wagner GmbH & Co.KG
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2. Notes

2.1. CE mark

The products are labelled with the CE mark. The Declaration of Conformity verifies that the products are in compliance with the safety directives of the European Union.

2.2. Directives

The product meets the requirements of the EC Machinery Directive 2006/42/EC.

2.3. Information about this manual

This manual contains important instructions on how to operate, set up and connect the unit. Read these instructions carefully before putting the unit into operation.

This is for your own protection and will provide you with important information on how to connect and use the unit in a safe manner.

The operating manual is an integral part of the unit. Store it close to the unit where it is available at all times.

Observing every detail of the operating manual is a requirement for using the tool correctly and as intended. For this reason, pass this operating manual on to the next owner when selling the unit.

Please note that details of the illustrations and technical specifications contained in this operating manual may deviate from the product you purchased.

The information provided in this operating manual is current as of the time it was printed. We reserve the right to make changes without prior notice.

2.4. Information about the workplace

We recommend that you use the hydraulic tensioner in one-man operation. The operation of the unit is restricted to trained and authorised personnel. Conduct a risk assessment before deciding to use the unit in two-person operation. When using the unit in two-person operation, ensure that the two users have previously cleared the application, the communication and the coordination of the unit with one another. The person positioning the tensioner should give the instructions regarding the operation of the power pack even if he is not operating the remote control.

The safety of the operator and the trouble-free operation of the unit are only guaranteed if you use the original PLARAD components. This applies both to device components and spare parts.

If different components are used, Maschinenfabrik Wagner cannot guarantee safe and reliable operation.

2.5. Risk analysis

- Acting as a pressure intensifier, the pump prevents the unit from reaching impermissible pressure levels on the high-pressure side by regulating the pressure on the low-pressure side.
- Impermissible absolute pressure levels (high-pressure side) are excluded by the use of an additional pressure relief valve that has been integrated into the compressed air circuit (low pressure circuit).
- Even if experiencing leaks or line breakage, the high pressure system does not pose any immediate risk to the operator's health.
- Ruptured lines will cause the pressure to collapse on the high-pressure side.
- If the power pack fails to build up the necessary pressure within a short period, the unit is probably defective. Should this happen, take the unit out of operation as the oil it contains will otherwise be channelled into the housing compartment, resulting in unnecessary soiling.
- Use great care when closing the cover to avoid damage and injury.
- Since built into the oil tank, the pump is sufficiently lubricated and supplied with hydraulic oil. Should the pump develop a leak, the operating compartment is protected against escaping oil by the tank walls.

2.6. Symbols and warnings



- CE mark



- Follow the instructions for installation and use



- Wear hearing protection



- Use protective eyewear



- Hazard warning.
The hazard category is specified in the text found next to the respective warning



- Warning of a hot surface



- Service seal specifying the date of the next inspection



- WEEE recycling/disposal instructions. This product must not be disposed of with regular household waste.

2.7. Maintenance, servicing, and repairs

Disconnect the power supply before adjusting any settings and prior to servicing or repairs

- Allow only a specialist to repair your unit
- This pneumatic unit conforms to all
- applicable safety regulations. Repairs may only be performed by a specialist using original spare parts. Otherwise, the user may experience accidents.

2.8. Product identification

The power pack is marked by the type plate that is found on the cover of the control enclosure.

Das Hydraulikaggregat ist durch das Typenschild auf dem Deckel des Steuerungsgehäuses gekennzeichnet.



2.9. Proper use

The operating unit is designed for data entry and documentation of the screwing parameters in conjunction with Plarad hydraulic power units for the tightening of screw connections using the torque or torque/rotation angle process.

2.10. Improper use

The operating unit is designed for use indoors or outdoors, at ambient temperatures of from +5 to +50°C. Please consult the manufacturer in the event of any other required operating conditions. The operating unit is designed for use with Plarad hydraulic power units and on a PC when connected using the cable supplied, provided that the above conditions are fulfilled. Any other form of use constitutes improper use. The manufacturer accepts no liability for any resulting damages. The risk is borne solely by the operator/user.

2.11. Other applicable operating manuals

- BGR/GUV-R 194 Use of hearing protection
- BGR 237, Rules regarding the safe use of hydraulic hose lines
- Shell Tellus S2 V 15, PD / MSDS

3. Scope of delivery

The power pack is supplied with oil in the tank.

Consumables (order more if necessary)

Hydrauliköl 1l Shell Tellus S2 VX15	14101
Hydrauliköl 5l Shell Tellus S2 VX15	14100

4. Technical specifications

Max operating pressure 1500bar / 21750 psi

L x W x H(mm)	460 x 516 x 275 mm
Volume flow	0,65 l/min at 700 bar
	0,1 l/min at 1500bar
pneumatic connection:	
pneum. pressure	min. 4 bar / 60psi
	max. 10 bar / 145psi
pneum. volume flow	max. 1400 l/min
weight	22,3 kg (with 6 liters oil)
oil type:	Shell Tellus S2 VX15
sound pressure (1500bar)	78 dB(A)* (1m)

5. Information about operating temperatures

When operating in temperatures of -5 °C or less, keep starting the power pack until the motor starts running (several times if necessary). Set the pressure relief valve to 400 bar. Do not connect a hose or tensioner and let the power pack run for approx. 5 minutes while holding down the button. By doing so, you are allowing the hydraulic oil to reach its necessary operating temperature before work begins.

6. Transport

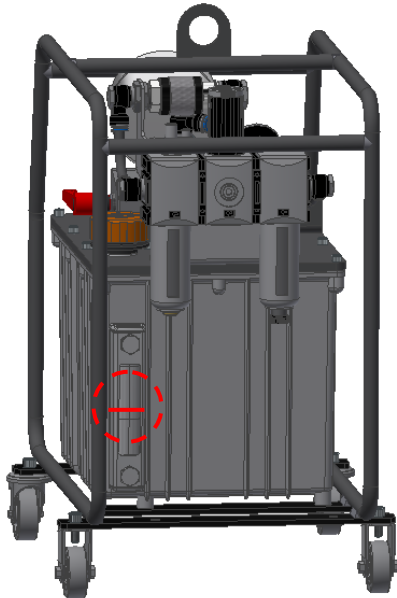
When using a crane or similar lifting gear for transport, attach the power pack at the attachment points identified below.



7. Startup

7.1. Check oil level

Before every startup, check the oil level. The oil level must be at half of the oil level window.



note! When checking the oil level, ensure the motor is in a horizontal position.

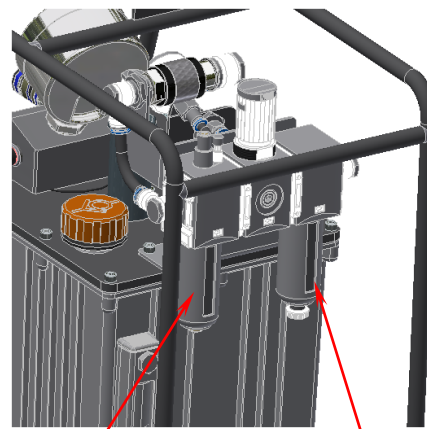
7.2. Fill in oil

Unscrew the oil filling support, and fill with oil up to the oil level mark. Screw the oil filling supports back in firmly by hand.



fill in support

7.3. Service unit



oil sprayer

water separator



note! Watch the oil level in the oil sprayer. If the minimum level is reached, you must add more oil.



note! Watch the water level in the water catchment. If the maximum level is reached, the water must be drained.

7.3.1. Oil sprayer

During operation, set the oil amount as necessary, using the dosage screw. The number of drops can be seen in the sight glass. To fill oil, remove the seal screw, fill the container up to the filling level mark, and close it again.

It is possible to refill the oil during operation. The air supply does not need to be switched off.

An amount of 1 mm³ of oil per 1 m³ pressured air is enough to keep wear down and ensure the correct RPM and the optimal torque moment for the pneumatic motor.

The oiler is set to approx. one drop per minute.

Recommended oil types:

VIA	Avilup RSL 46
BP	Energol HPL 46
ESSO	Nuto H
TEXACO	Rando Oil HD C 38
WILKERSON	Airline Oil F442001

7.4. Connect power pack to air supply

The tube for connecting the pressure can be fixed in place (e.g. with a tube clamp). It must be ensured that the air pressure supply tube cannot come off during operation.



air pressure connector



Note! Take note of the supply data on the specification plate.

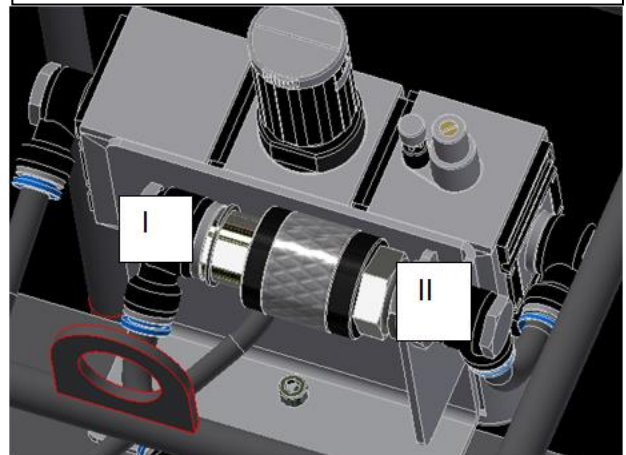
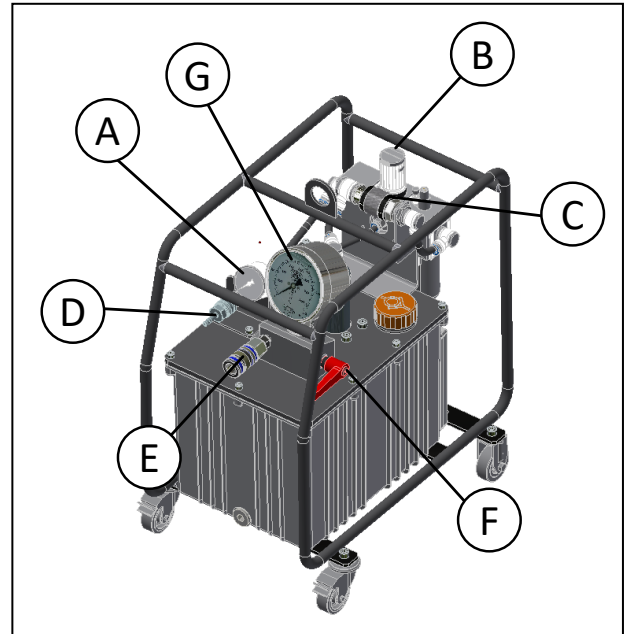
8. Operation

8.1. Operation description

- The U 0.9 power pack supplies high static pressures for use in combination with hydraulically tension-bolted connections. ,
- Its specification sheet does not allow the power pack to be used for conveying large volumes under high pressure. Neither the pump capacity nor the oil supply are available at levels high enough to accomplish such a task.
- When operating within the limits of its specified range of application, the unit will only require compressed air as its operating medium.
- The operating principle of the power pack is based on a pressure pump with a proportional pressure controller.
- The absolute maximum hydraulic output pressure is ensured by a safety pressure limiter fitted on the side of the pneumatic low pressure (see Risk analysis).
- To prepare the unit for operation, connect the compressed air supply (<10 bar) to the air connection D, check the indicators A and flip the start lever C. The pressure is built up until it reaches its set limit.
- The operating pressure can be re-adjusted using the pressure relief valve B until the desired value is indicated on the pressure gauge G or the maximum pressure of 1500 bar has been reached.
- When high pressure is no longer needed, return the start lever C to position II .
- The high-pressure lines need to be relieved before they can be removed.

8.2. Set hydraulic pressure

1. Close the pressure relief valve B by turning it clockwise as far as it will go
2. Open valve C → Pos.I
3. turn pressure adjustment valve until the required hydraulic pressure is shown on gauge G (max. 1500 bar)
4. close valve C schließen → Pos.II
5. open the pressure relief valve B



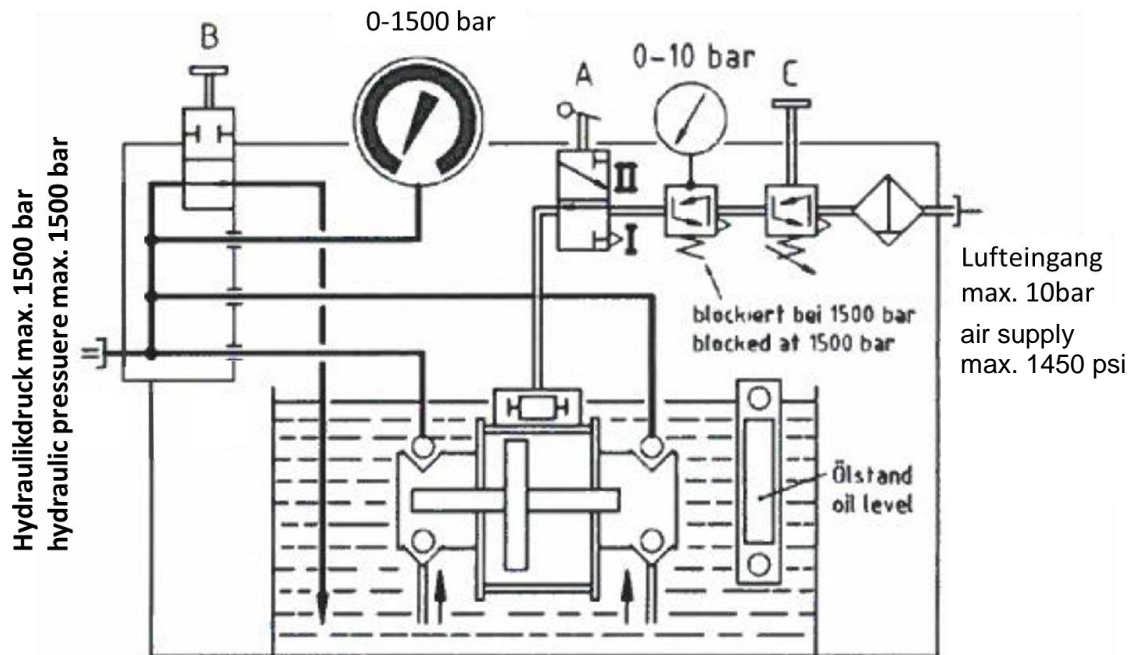
8.3. Connect tensioner

Connect the tensioner to the power pack when the power pack is unpressurized (pressure relief valve is open and gauge G shows now pressure).

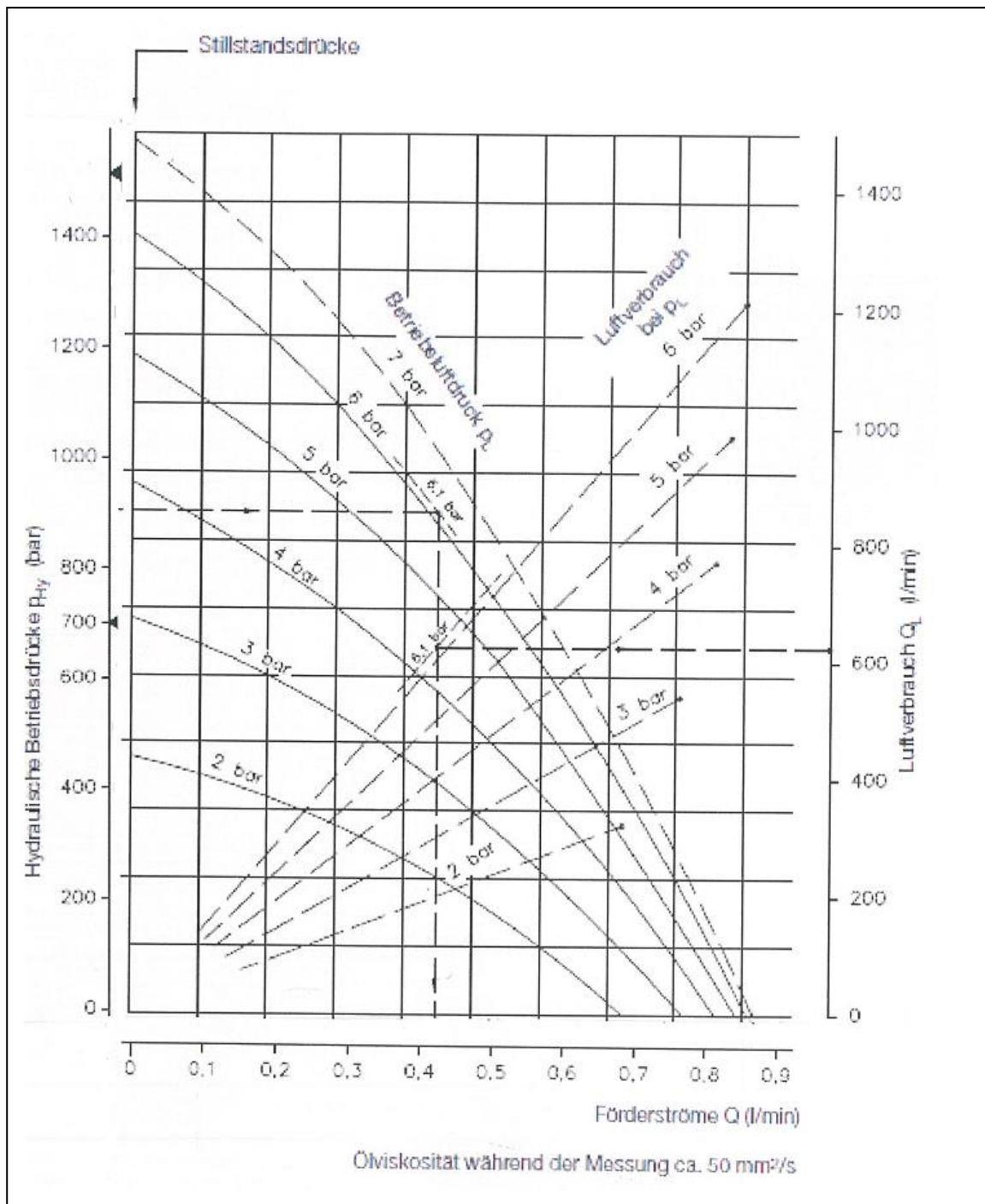
8.4. Working with the power pack

1. Close the pressure relief valve B by turning it clockwise as far as it will go
2. Open valve C → Pos.I
3. The power pack will now operate until the pressure adjusted in the previous step is reached
4. After the tensioning process is completed open the pressure relief valve B and close the air supply valve C

9. Hydraulic diagram



10. Characteristic curve



11. Maintenance instructions

- Seal the couplings and nipples with sealing caps prior to transport and storage.
- Also observe the following points:
- Check the oil level of the power pack on a regular basis, but at least every time before you start working.
- Change the hydraulic oil every 150 hours of operation, but no later than every 12 months.
- Keep the couplings and the nipples on the power pack, on the hydraulic hoses and on the hydraulic tool clean. Use a cloth to clean the couplings and nipples before connecting them to the unit.
- Dispose of the power pack as required by local regulations.
- The oil can be drained by opening the oil drain screw **L** and by slightly raising the unit at the opposite side
- **ATTENTION:** The oil will start exiting immediately once the screw has been loosened!



Attention!

Use only oils that match the following specification:
Shell Tellus S2 V 15

12. Instructions on disposal



Attention

This symbol points out that the product must not be disposed of with regular household waste as specified in the WEEE directive (Waste Electrical and Electronic Equipment Directive, 2002/96/EC) and national laws.

- **Dispose of this product at an authorised waste collection facility. Return the product if, for instance, purchasing a similar product or take it to a waste collection facility that is authorised to recycle waste electrical and electronic equipment.**
- **Turn to your local administration office, your public waste disposal authority, a facility that is authorised to dispose of waste electrical and electronic equipment or your waste management company.**



... eine erfolgreiche
Verbindung!

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