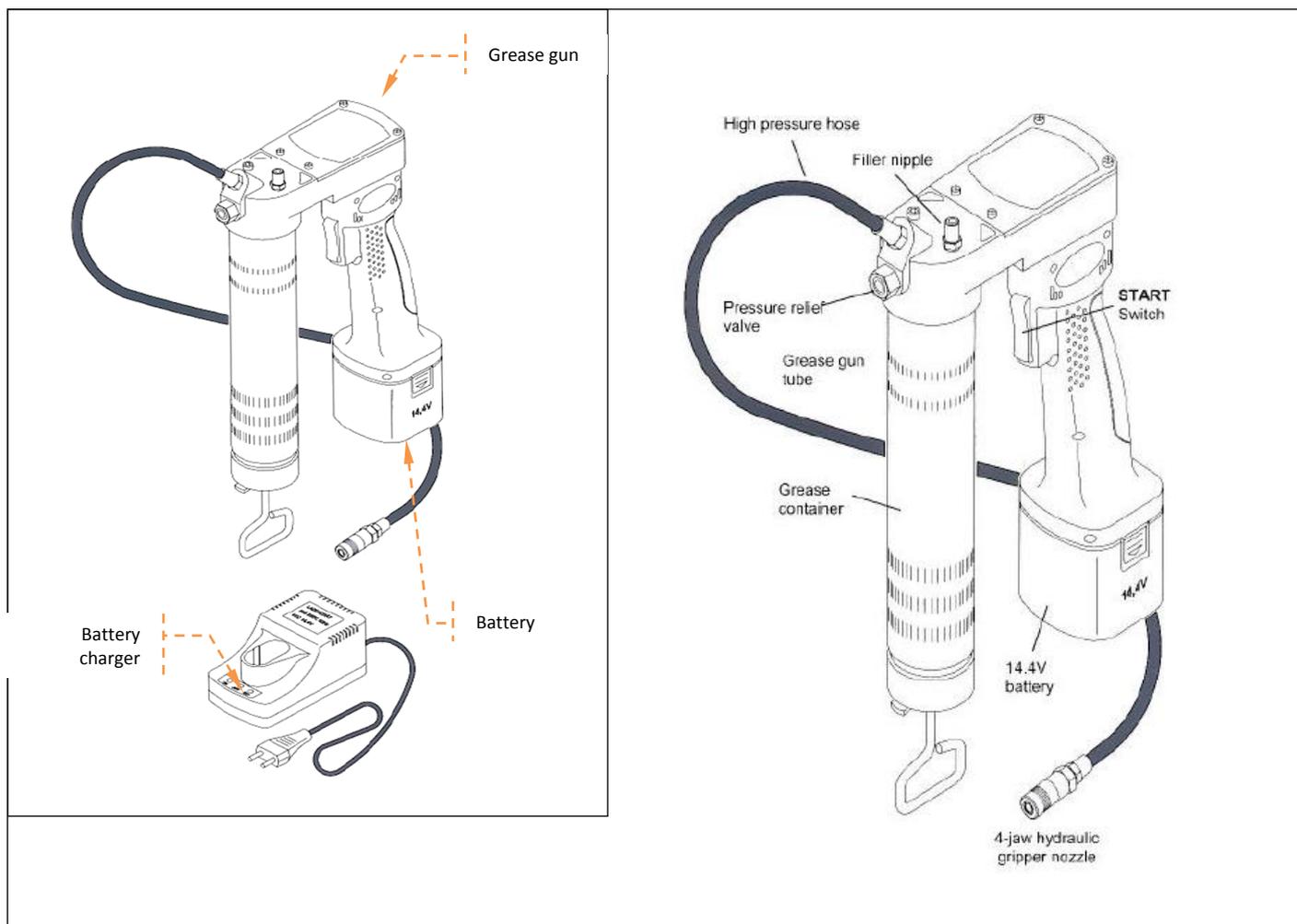


4. TECHNICAL CHARACTERISTICS

BATTERY GREASE GUN CHARACTERISTICS	
Tensione di lavoro Working voltage	14.4V
Pressione di lavoro Working pressure	ca. 400 bar
Flow rate	ca. 100 cc/min
Thread for connection nozzle	R1/8"
Working temperature	da -18 a + 50 °C
Lubrificants	NLGI 000 up to 2 (DIN 51818). Not be used pastes without lubricating properties (with abrasive components) and silicon pastes
BATTERY CHARACTERISTICS	
Power	14.4 V
Delivery	1500 mAh
BATTERY CHARGER CHARACTERISTICS	
Primary voltage	230 V, 50 Hz, 35 W
Secondary voltage	14.5 V 1500 mA
Loading time	1 hour

WHEIGHT	
Case included	5,4 kg
Gun with battery and grease case	3,1 kg

5. COMPONENTS



6. UNPACKING AND INSTALLING

6.1 UNPACKING

Once a suitable installation position has been identified, unpack the pump and prepare for installation. It is important to inspect the pump to ensure that there has been no damage during transportation. The packaging material used does not require any special disposal procedures. You should refer to your regional requirements.

7. OPERATING INSTRUCTIONS

- Before using for the first time the battery must be charged up. A charging time of around 1 hour is sufficient for further use.
- Before charging ensure that the mains voltage – complies with the details on the rating plate of the charger.
- To charge take the battery out of the handle and plug into the charger.
- The charging process is started by pressing the **SET** button on the charger.
- The red **ON** LED indicates that the battery is being charged.
- The green **OFF** LED indicates that the charging process has ended.

7.1 FILLING WITH GREASE CARTRIDGES:

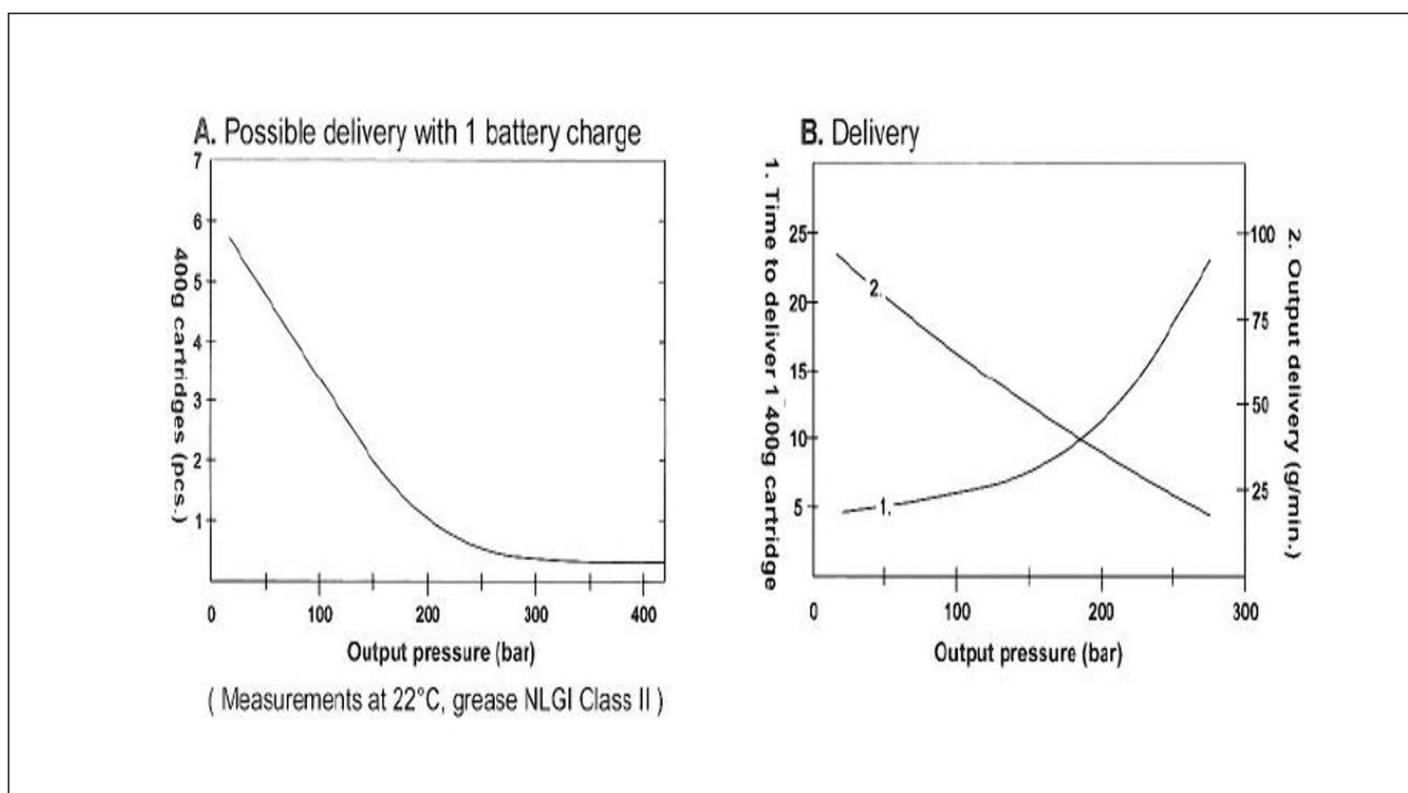
Only use standardised (DIN 1284) 400g grease cartridges.

7.2 FILLING WITH A FILLER UNIT:

Attach the filler nipple on the gun to the filler unit. When filling keep the grease gun presser downwards.

- Next push the piston rod completely into the tube body of the grease container again
- After filling bleed the air from the grease gun by slightly opening the filler nipple or the grease container (1- 1½ turns), until bubble-free grease comes out.
- The grease gun is now ready for use
- Operate the START switch until grease comes out of the nozzle.
- If the max. Working pressure of ca.400 bar is exceeded, the pressure relief valve will open and let the grease escape. Abort the lubrication process and cure the reason for the high build up of pressure. For instance be the lubrication nipple, the lubrication pipe or the bearing could be damaged or blocked.
- The temperature of the battery increases during use. Before charging the battery, first let it cool to room temperature, as otherwise it will not be charged up.

7.3 Performance diagrams



8. TROUBLESHOOTING

Below is a trouble shooting table to show possible problems and solutions.

If you are in any doubt about the correct solution to fixing a problem, do not dismantle parts of the Bravo but contact an Authorized Dropsa Sales and Service Point for technical assistance.

TROUBLESHOOTING TABLE		
PROBLEM	POSSIBLE CAUSE	REMEDIAL ACTION
The motor will not run	The battery is flat or defective. The wiring to the motor is defective	Charge or replace the battery. Remove the battery, disassemble the handle and check for loose connections.
Pressure relief valve opens when grease is being delivered	Lubricating nipple defective or blocked. Lubricating pipe defective or blocked Bearing point defective or blocked	Check affected parts and if necessary clean or replace
Unit not pumping grease	The grease gun container is empty. The grease feed is interrupted	Check the level in the grease container. Bleed out the air
The unit continually breaks off delivery of grease	Due filling with loose grease there is air trapped in the grease	Empty the grease gun container and bleed the air out of the refilled gun
The battery is not taking a charge	No mains voltage to charger. Battery defective or worn out	Check whether the socket is alive Replace the battery.

9. MAINTENANCE PROCEDURE

The battery powered high performance grease gun requires no maintenance.

Make a regular check on the pressurised components (high pressure hose) and also on the live parts (charger) for possible damage. Defective parts must be replaced with genuine spares without delay.

10. DISPOSAL

During maintenance or disposal of the machine care should be taken to properly dispose of environmentally sensitive items such as oils or other lubricants. Refer to local regulations in force in your area. When disposing of this unit, it is important to ensure that the identification label and all the other relative documents are also destroyed.

11. ORDERING INFORMATION

DESCRIPTION	PART NUMBER
GREASE GUN	K000455

12. HANDLING AND TRANSPORTATION

Prior to shipping, the equipment is carefully packed in cardboard package. During transportation and storage, always maintain the pump the right way up as indicated on the box. On receipt check that package has not been damaged. Then storage the machine in a dry location.

13. OPERATING HAZARDS



WARNING: Non-compliance with the safety instruction can result in danger both to person and to the environment and the equipment. Non-compliance with the safety instructions can lead to the loss of any claims for damages. The operator of the equipment must ensure that the contents of the Operating Instructions, particularly the Safety instructions are known to the operating personnel.

- The unit must not be operated in potentially explosive areas
- Protect the unit from damage and the effects of heat
- The unit must only be operated with the 14.4V battery originally intended for it.
- The use of a different battery could lead to damage to the unit, or to a risk of fire.
- The battery must only be charged with the charger provided for the purpose.
- Before charging ensure that the mains voltage complies with the details on the rating plate of the charger.
- The ventilation slots on the top and bottom of the charger must not be covered during the charging process.
- Do not charge the battery when the temperature is under 0°C or over 40°C
- Do not charge the battery in damp or wet surroundings
- Only dispose of used batteries properly in accordance with EC Guideline 91/157/EWG. The battery contains rechargeable NiCd cells.
- The setting of the of the pressure relief valve must never be changed.
- In case of blocking do not continue pressing the START switch. There is a danger of the motor overheating and being damaged.
- **Never point the lubrication hose at people or animals ! Risk of injury!**
- Before repair or maintenance work the current supply must be shut off. The battery must be taken out of the handle.
- Leather industrial gloves and also safety glasses must be worn when using the unit
- When lubricating, only hold the high pressure hose in the area of the nozzle
- Do not bend the high pressure hose sharply
- Make a regular check on the pressurised components / high pressure hose) and also on the live parts (charger) for possible damage. Defective parts must be replaced with genuine spares without delay.
- The use of accessory components e.g. hoses and connection fittings, which are not supplied by DROPSA, can in some cases give rise to the risk of accidents. No liability can be accepted for accidents or damage caused by components from other sources.
- Modifications or changes to the equipment are only allowed after discussion with the marker.
- The safe operation of the equipment is only guaranteed if used in accordance with the directions.
- Maintenance, inspection and repairs must only be carried out by qualified specialist personnel, who have acquainted themselves with the subject by studying the operating instructions.

14. WARRANTY

All products manufactured and marketed by Dropsa are warranted to be free of defects in material or workmanship for a period of at least 12 months from date of delivery. Extended warranty coverage applies as follows:

Complete system installation by Dropsa: 24 Months.

All other components: 12 months from date of installation; if installed 6 months or more after ship date, warranty shall be maximum of 18 months from ship date.

If a fault develops, notify Dropsa giving:

- ✓ a complete description of the alleged malfunction
- ✓ the part number(s)
- ✓ test record number where available (format xxxxxx-xxxxxx)
- ✓ date of delivery
- ✓ date of installation
- ✓ operating conditions of subject product(s)

We will subsequently review this information and supply you with either servicing data or shipping instruction and returned materials authorization (RMA) which will have instructions on how to prepare the product for return.

Upon prepaid receipt of subject product to an authorized Dropsa Sales & Service location, we will then either repair or replace such product(s), at our option, and if determined to be a warranted defect, we will perform such necessary product repairs or replace such product(s) at our expense.

Dropsa reserves the right to charge an administration fee if the product(s) returned are found to be not defective.

This limited warranty does not cover any products, damages or injuries resulting from misuse, neglect, normal expected wear, chemically caused corrosion, improper installation or operation contrary to factory recommendation. Nor does it cover equipment that has been modified, tampered with or altered without authorization.

Consumables and perishable products are excluded from this or any other warranty.

No other extended liabilities are stated or implied and this warranty in no event covers incidental or consequential damages, injuries or costs resulting from any such defective product(s).

The use of Dropsa product(s) implies the acceptance of our warranty conditions. Modifications to our standard warranty must be in writing and approved by Dropsa.

15. DISTRIBUTORS

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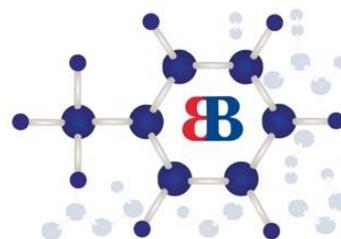
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