

Operating instruction

press tool CALPEX® 125/160



Technical data

HMP 1 / TOOL G1 125/160 hydraulic unit

Motor voltage:	230 V / 50 Hz
Power consumption:	0.22 KW
Remote control for motor:	24 V safety voltage
Pumping rate:	0.3 l/min (0.33 l/min usable in theory)
Pressure:	550 bar
Oil filling:	0.4 bar
Oil specification:	8 CSt at 40°C, free of acid and water

Safety warnings

Caution:



Read all the safety warnings and installation information before starting to operate the tool.

Take note of this information during operation, and always keep the safety warnings near the tool.

In addition to the operating instructions, generally applicable statutory and other binding regulations on accident prevention and protection must also be followed, and instruction must be given regarding these regulations.

General safety warnings:

1. Keep your workplace clean and clear of obstacles. Make sure there is adequate lighting.
2. Keep children, pets and unauthorised individuals away from your workplace. Do not let anyone else touch the hydraulic hose, the tool or the cables.
3. Wear suitable work clothing. Do not wear loose-fitting garments or jewellery. These items can be caught by the moving parts. Wear a hairnet if you have long hair. Use safety goggles
4. Do not take hold of the moving parts (danger of crushing!)
5. Be attentive. Only use the appliance if you have received instructions on how to handle it.
6. Keep your tools safely. Unused tools should be kept in a locked dry room and out of the reach of children.

1. The tool is only suitable for producing sliding sleeve joints, with dimensions 125 / 160 mm!!!. Do not use the tool or the electrohydraulic unit for any other purposes or dimensions!!!.
2. Only operate the appliance with original parts and accessories.
3. Only have maintenance and repair work carried out in a specialised workshop that is authorised. We decline all liability for work undertaken by external personnel.

Tool-specific safety warnings:

1. Protect the tool against moisture, extreme heat, oil and solvents.
2. Do not carry your hydraulic unit by the supply cable or the hydraulic hose. Do not drag the appliance behind you by its cable or hydraulic hose.
3. Make sure that the hydraulic hose and the supply cable are not damaged. Before starting operation, always check the hydraulic hose and the supply cable for chafing, cuts, tears, crushing, kinks, etc. Never work if the hydraulic hose or supply cable are damaged. Have damaged hydraulic hoses or supply cables replaced immediately at the service centre.

1. Do not touch any leakage points on the hydraulic hoses while the system is pressurised.
2. For safety reasons (statutory regulations), the hydraulic hose must be replaced by an authorised service centre after no more than five years. It is essential to comply with this period. The year of manufacture of the tool is shown on the warranty card. If anything is unclear, contact your dealer
3. Do not connect the pump /unit to any other cylinders or tools.
4. Only use monophasic alternating current at the voltage shown on the rating plate.
5. Do not expose the appliance to rain. Do not operate it in damp or wet surroundings, or where there are fire or explosion hazards
6. Never leave the appliance unsupervised when it is connected to the power mains.
7. Make sure that you use suitable extension cables.
8. As the motor could overheat, do not let it run for too long against maximum pressure.

Caution!

accepts no liability for damage or injuries which are attributable to unsafe use of the product, deficient maintenance or incorrect use of the product and system.

Producing a sliding sleeve joint



1. Cut the pipe to the desired length, at right angles, using the guillotine (article number 249340).



2. Push the sliding sleeve onto the pipe. Caution! The inner bevel must point towards the end of the pipe.



3. Expand the pipe twice with a 30° offset. The sliding sleeve must not be in the expansion zone. Minimum interval: 2 x the length of the sliding sleeve!



4. The time that the fitting is inserted in the pipe can be influenced by maintaining the expansion pressure with the expansion head fully opened (final position in the expansion procedure).



5. Insert the fitting into the pipe. After a short time, the fitting stays in a fixed position in the pipe (memory effect).



6. There must be a uniform gap between the fitting collar and the pipe end. If necessary, the position of the fitting must be aligned by means of a rubber hammer immediately after insertion. Caution! All the sealing ribs must be covered by the pipe!



7. Cover the entire circumference of the pipe uniformly with lubricant in the area of the joint.



8.  **CAUTION!**
Apply the press tool completely. Do not tilt the tool! The tool must be applied over the whole area and at right angles!



9. Operate the pressure switch (master cylinder) to push the sliding sleeve up as far as the fitting collar. If necessary, change the position of the guide pin(s) so that the sliding sleeve can be pushed all the way up (see the section on Tool conversion!)



CAUTION! Failure to comply with these instructions can cause damage to the connection system, material damage to the tool and personal injuries!

Tool conversion



1. To perform the expansion, the cylinder with the hydraulic hose (rapid-action connector) and the control cable must be connected directly to the unit .



2. The expansion insert is introduced all the way into the cylinder and is fixed with the 2 short guide pins and the long guide pin. Caution! Insert the guide pins completely!



3. Expansion heads 125 and 160 are screwed directly onto the expansion insert. To do this, the heads must be applied so that they are flat, and must be completely screwed on.



4. The expansion insert must be removed for the pressing operation. To do this, remove the long guide pin and pull the short guide pins out as far as the limit stop.



5. For the pressing operation, both cylinders must be connected to the unit via Y-distributors (rapid-action connector on hydraulic hose or unit)



6. The control cable for the "master cylinder" must be connected to the unit.



7. First push on the long frame press, and then the short one, and insert the long guide pins completely. Check that the frame sets are aligned correctly (the short fixed frame is flush with the edge of the cylinder)!



8. The long (movable) frame has 2 guide pin positions. The first one is the starting position, when the sliding sleeve is still a long way from the fitting collar.



9. The second position is the final position so that the sliding sleeve can be pushed up flush with the fitting collar (final position).

Tool conversion



10. The reductions for dimension 125 are clipped into frame press 160.

Caution! Always clip them in completely!

11. Make sure that one reduction is eccentric. It must be inserted with the eccentric towards the joint (sliding sleeve or fitting collar).

Tips and tricks

1. You can use a rubber hammer to tap the sliding sleeve open a little before pressing; in some cases, this enables you to use the second guide pin bore hole right away => no need to change the guide pins

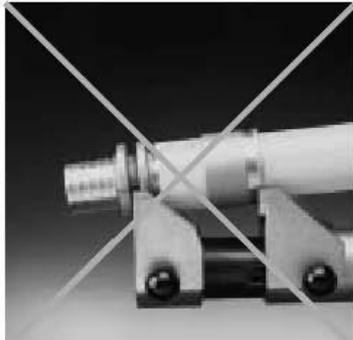
2. With dimension 125, the stroke can be increased by rotating the eccentric reduction => no need to change the guide pins

3. To vent, raise the pump unit and lower the press tool; operate the tool several times without taking it up to maximum pressure.

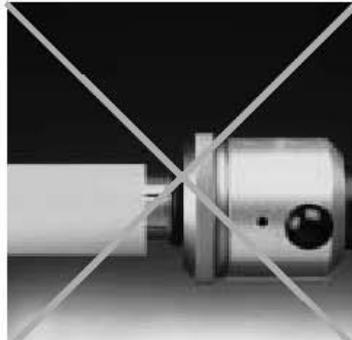
Notes on troubleshooting

Fault	Remedy
Motor not running	<ul style="list-style-type: none">• Check whether the plug you are using is conducting the current• Check the supply cable for defects and have it changed if necessary• You pressed the wrong start button => master cylinder with connected control cable
Motor is running but tool does not work, or only works partially	<ul style="list-style-type: none">• Check the oil level and top up the oil if necessary• Vent the appliance
Appliance does not reach 550 bar pressure	<ul style="list-style-type: none">• Check the oil level and top up the oil if necessary
If the functional fault cannot be remedied, send the appliance your dealer.	customer service or

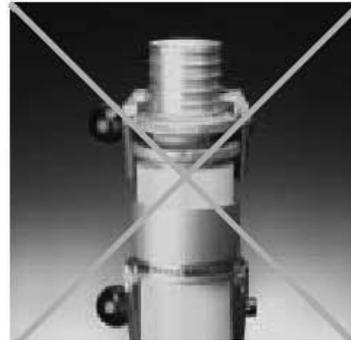
Important notes



Always attach frame presses or connection equipment completely, and at right angles.



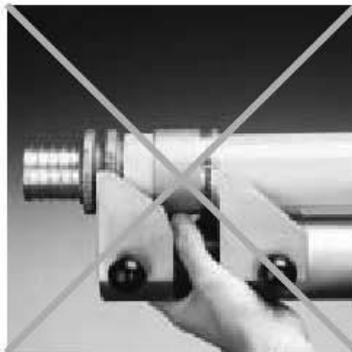
As a basic rule, always insert the expansion tool into the pipe as far as the limit stop.



Make sure the fitting is in the correct position in the tool. The joint will be over-pressed if the tool is applied to the wrong fitting collar.



Do not work with a damaged expansion head, otherwise the pipe will be damaged.



Caution!
Do not reach into the moving parts (danger of crushing!)