

C1 BP-R PUMP



INSTALLATION

OPERATION

MAINTENANCE

1. OVERALL DIMENSIONS

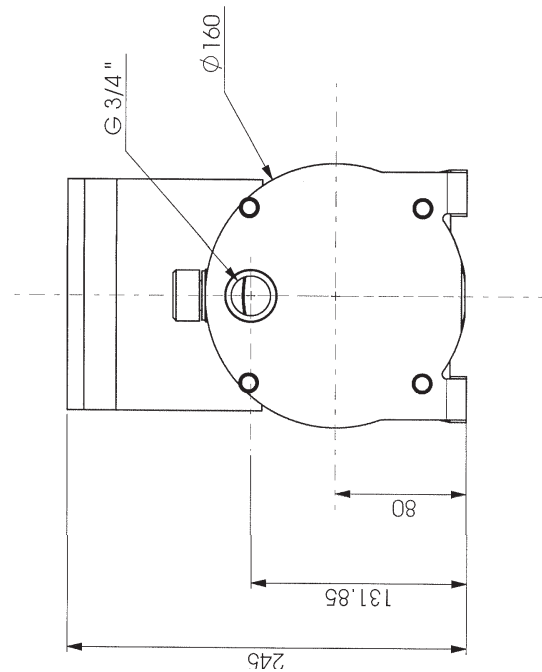
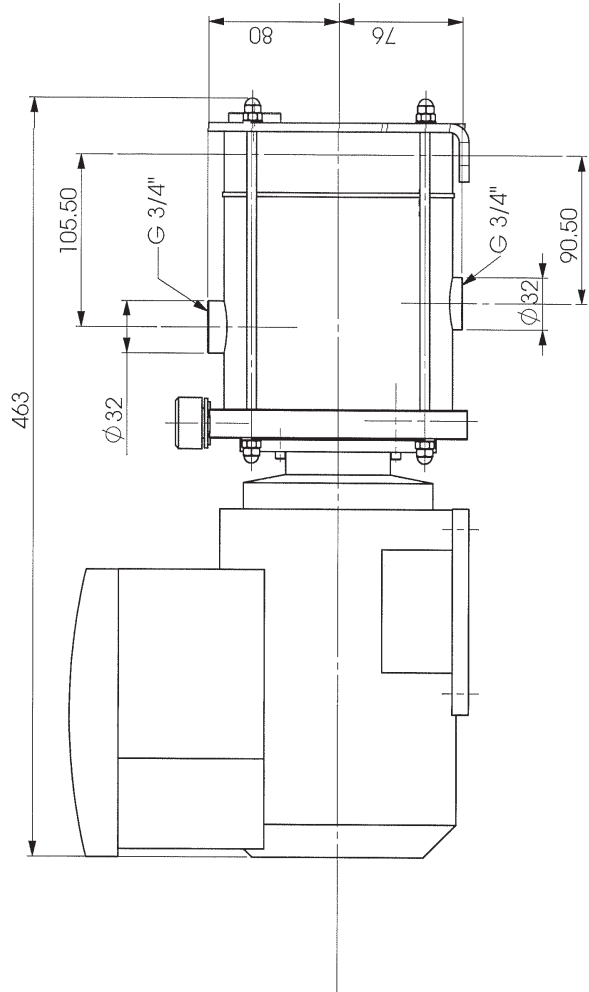
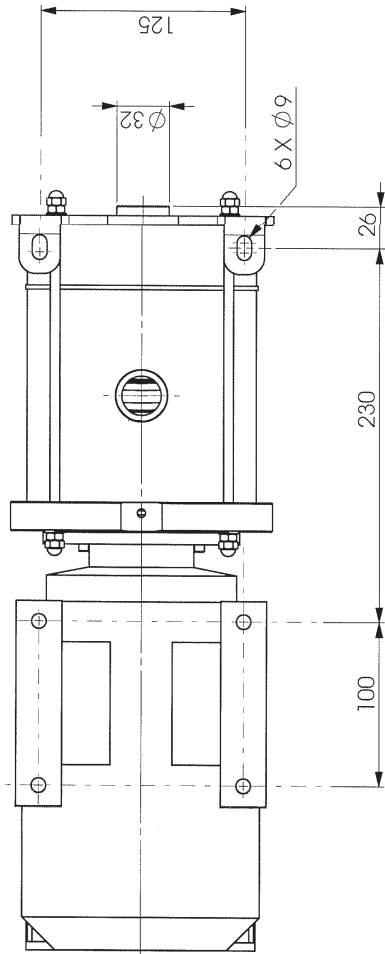
C1 BP-R

Direction of rotation	Speed (rpm.)	Pressure (bar)
Clockwise	1000 rpm	1 bar
Clockwise	200 rpm	0,5 bar
Anti-Clockwise	500 rpm	0,5 bar

BE CAREFUL : ANTI-CLOCKWISE ROTATION DO NOT EXCEED 0,5 BAR.

Clockwise rotation stands for clockwise rotation of the motor watching its fan.

Weight : Max. 20 kg



2. INSTALLATION

2.1 ASSEMBLY / DISASSEMBLY

THIS PUMPS CAN NOT BE DISASSEMBLED WITHOUT MOVEX TECHNICAL PERSONAL.

2.2 DIRECTION OF ROTATION

The pump has two directions of rotation: clockwise and anti-clockwise.

2.3 MAXIMUM SPEED AND PRESSURE

Direction of rotation	Speed (rpm)	Pressure (bar)
Clockwise	1000 rpm	1 bar
Clockwise	200 rpm	0,5 bar
Anti-clockwise	500 rpm	0,5 bar

BE CAREFUL :

ANTI-CLOCKWISE ROTATION DO NOT EXCEED 0,5 BAR.

2.4 PROTECTION OF THE INSTALLATION

- In the situation where there are valves placed in the intake and delivery pipes, make sure that they cannot be closed without the pump being shut down beforehand.
- The pump must be protected from overpressures. It can be supplied with a pressure controller to perform this function.
- Make sure that the pump and the installation are protected against any possible damage due to intrusion of foreign bodies by fitting a pre-filter at the pump intake port.

3. OPERATION

3.1 STARTING UP

To eliminate any risk of the pumped product becoming contaminated, flush the entire installation before starting up in order to get rid of all the impurities that might have been left in the pipes, tanks... during the installation process.

3.2 DRY RUNNING

The pump can operate dry for a period of 5 minutes.

4. MAINTENANCE


⚠ WARNING



Any unforeseen start-up can cause serious injuries or important material damages.

TAKE ALL NECESSARY MEASURES TO RENDER ANY START-UP, EVEN ACCIDENTAL, OF THE PUMP DURING THE WORK IMPOSSIBLE.

⚠ WARNING



Hazardous pressure can cause personal injury or property damage.

DISCONNECTING THE FLUID OR PRESSURE CONTAINMENT COMPONENTS DURING PUMP OPERATION CAN CAUSE SERIOUS PERSONAL INJURY, DEATH OR MAJOR PROPERTY DAMAGE.


⚠ WARNING



Hazardous pressure can cause personal injury or property damage.

FAILURE TO RELIEVE SYSTEM PRESSURE PRIOR TO PERFORMING PUMP SERVICE OR MAINTENANCE CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.

⚠ WARNING



Hazardous or toxic fluids can cause serious injury.

IF PUMPING HAZARDOUS OR TOXIC FLUIDS, THE SYSTEM MUST BE FLUSHED PRIOR TO PERFORMING ANY SERVICE OPERATION.


⚠ WARNING



The weight of the parts can be dangerous and may provoke bodily injuries or material damages.

BE CAREFUL WITH THE WEIGHT OF THE PARTS WHEN THEY ARE BEING REMOVED.

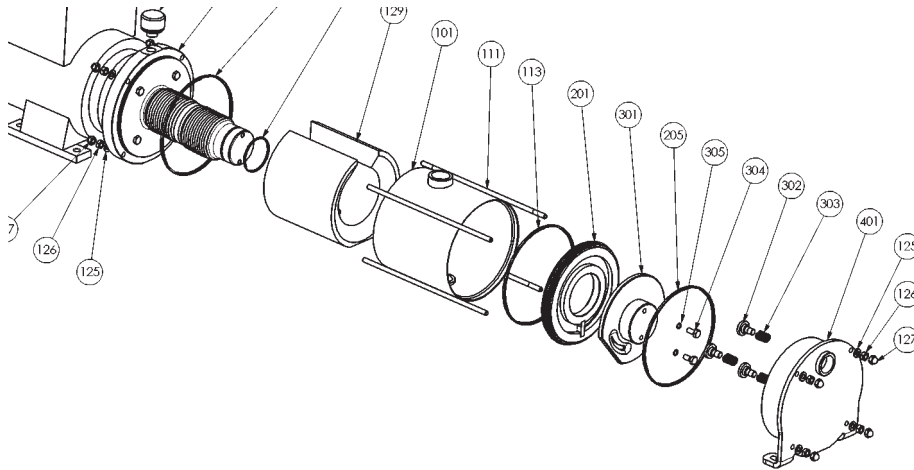
⚠ CAUTION



Slippery lubricant. Spills should be cleaned up.

THE PUMP LUBRICANT IS VERY SLIPPERY AND MAY CAUSE SERIOUS INJURY. ANY SPILLS MUST BE CLEANED UP.

4. MAINTENANCE (continued)



Pump greased for life with Food synthetic grease (60 ml of MOUVEX oil CS00).

CAUTION : DO NOT FILL IN OIL.

Before dismantling at any time, make sure that the pump has been drained and also take the necessary precautions to ensure that it cannot start. It must be impossible for the pump to start up, even accidentally.

4.1 TOOLS REQUIRED

- Tubular spanner : 10
- Flat spanner : 10
- A corner iron.

4.2 DISASSEMBLY OF THE PUMP

- Uncouple the pump from both the intake pipe and the delivery pipe.
- Unscrew the 4 cap nuts **106** and remove the 4 die rods **111**.
- Unscrew the 4 nuts **126** and washers **125**. Remove the cover plate **401** with related seal **205**. Pay attention to the 3 springs **303** and the 3 piston-pushers **302** which may fall down while removing the cover plate.

BE CAREFUL :

Whatever happens, never pull the bellows. It could result in misplacing internal components of the pump transmission and / or damaging the bellows : the pump operability may be altered.

- Unscrew totally one of the two screws **304** and unscrew the other one only partially (let a few filets engaged).
- Tap on the remaining screw **304** until the piston **301** is disassembled from the bellows. Unscrew totally the remaining screw **304**, pay attention to the 2 seal **305** and remove the piston.
- Remove the seal **306** and the cylinder **201** with its related seal **113**.
- Pull out the sleeve **101** and the insert **129**, carrying it carefully in order to prevent any impact with the bellow.

AFTER DISASSEMBLING THE PUMP, ALL THE SEALS HAVE TO BE CHANGED.

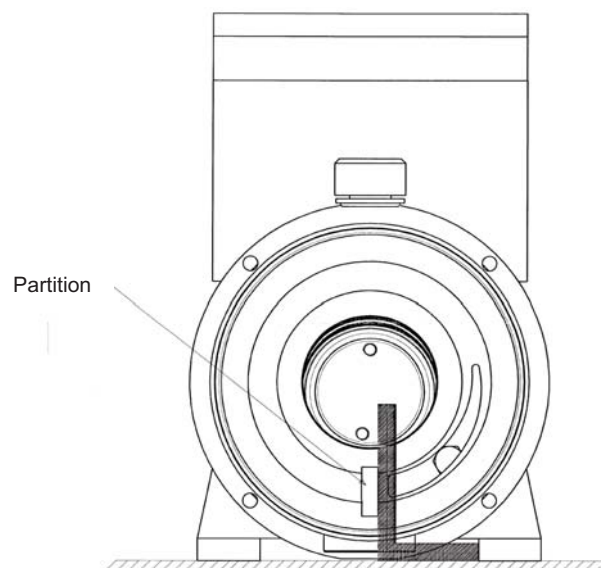
4.3 ASSEMBLY OF THE PUMP

Before using the seals, all of them have to be greased. It is imperative to ensure effective pump tightness.

- Position the insert **129** in the sleeve **101**.
- Position the seal **113** on the flange **2** and put the sleeve **101** in place.
- Position the seal **113** on the cylinder.
- Position the seal **306** on the bellow.
- Put the cylinder **201** in place and use a corner iron to make sure the partition of the cylinder is in vertical position as shown on following sketch.

BE CAREFUL :

Upper bore hole must be in line with the partition of the cylinder. The lower bore hole is slightly out of line to the goniometer (see drawing). In case of ignoring the cylinder is not in a vertical position. Piston can beat against partition, which can cause damages.



4. MAINTENANCE (continued)

- Engage the piston **301** with the bellows, the slot of the piston being in front of the cylinder partition. Pay attention that the two piston holes are in front of related bellows holes in order to engage the screws **304**. Be aware that this two holes are not equally spaced in order to prevent mounting the piston upside down relatively to the bellows.

BE CAREFUL :

Whatever happens, never pull the bellows. It could result in misplacing internal components of the pump transmission and / or damaging the bellows : the pump operability may be altered.

- Place the little seals **305** on the 2 screws **304** and tighten the 2 screws (tightening torque of 7,5 Nm).
- Position the seal **205** on the cylinder.

- Put the 3 springs **303** and the 3 piston-pushers **302** in place on the cover plate **401**.
- Position this assembly against the piston and pay attention that no piston-pusher felt down while positioning. Maintain the assembly in place while positioning the 4 tie rods and engaging the 4 washers **125** and the 4 nuts **126**.
- Tighten the 4 nuts **126** alternatively so the seals **113** and **205** take their place progressively. When the 4 nuts are tightened (**tightening torque of 7,5 Nm**), the seals must not rise above the sleeve or the cover plate.
- Put the 4 cap nuts **106**.