INSTRUCTIONS 1010-C00 e

Section	1010
Effective	March 2018
Replaces	October 2017

Original instructions

PUMP CC20

INSTALLATION

OPERATION

MAINTENANCE

WARRANTY :

CC20 Series pumps are covered 24 months by warranty within the limits mentioned in our General Sales Conditions. In case of a use other than that mentioned in the Instructions manual, and without preliminary agreement of MOUVEX, warranty will be canceled.

a DOVER company

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Your distributor :

TANK TRUCK PUMP

SAFETY, STORAGE, INSTALLATION AND MAINTENANCE INSTRUCTIONS

MODEL : CC20

Definition of safety symbols

This is a SAFETY ALERT SYMBOL.
When you see this symbol on the product, or in the manual, look for one of the following signal words and be alert to the potential for personal injury, death or major property damage.

DANGER

Warns of hazards that WILL cause serious personal injury, death or major property damage.

WARNING

Warns of hazards that CAN cause serious personal injury, death or major property damage.

CAUTION

Warns of hazards that CAN cause personal injury or property damage.

NOTICE

Indicates special instructions which are very important and must be followed.

REMARKS :

CC20 pumps MUST be installed in systems designed by qualified personnel. The installation MUST be in compliance with local standards, national regulations and rules of safety.

This manual is designed to permit installation and commissioning of CC20 pumps and MUST accompany the pump.

Maintenance of CC20 pumps must ONLY be carried out by qualified technicians. This maintenance must meet local and national standards as well as all safety regulations. Read this manual, including all instructions and warnings, in full BEFORE any use of CC20 pumps.

Do not remove the warning and use label stickers that are found on the CC20 pumps.

NOTE :
The numbers after part names correspond to items in the spare parts lists.

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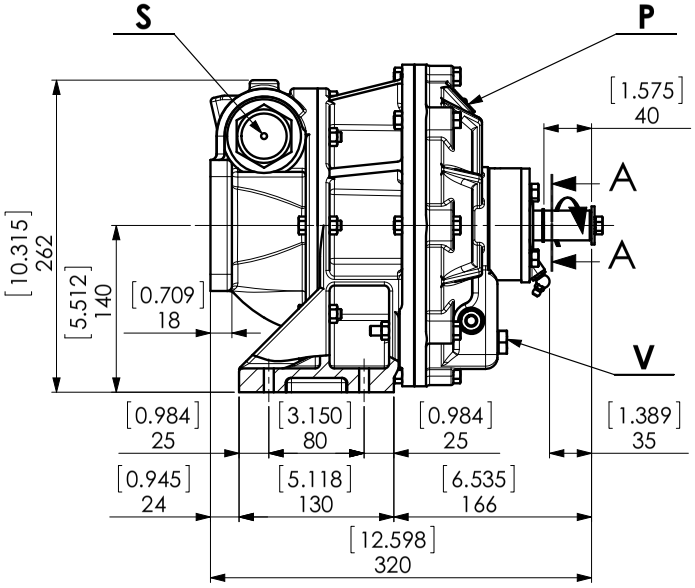
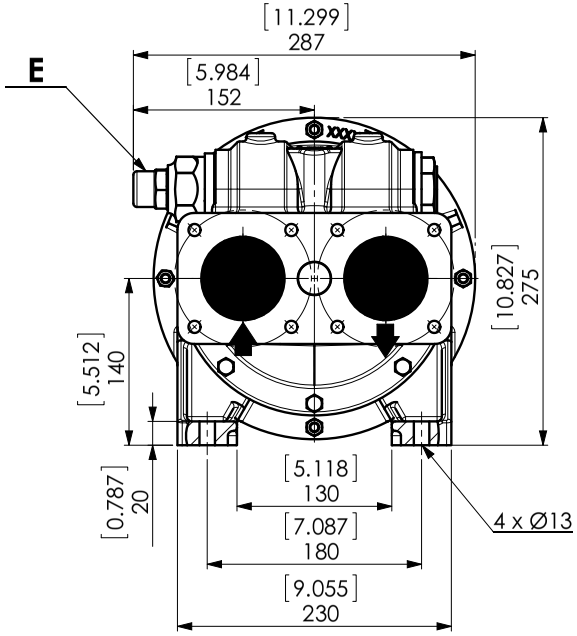
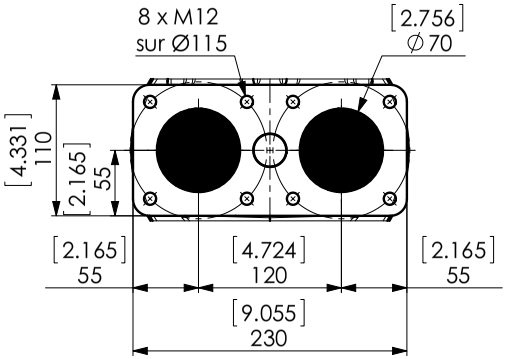
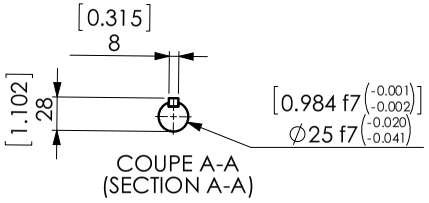
1. OVERALL DIMENSIONS

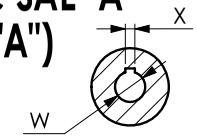








CC20 Lanterne Hydraulique SAE "A"
(CC20 Hydraulic Trunk SAE "A")



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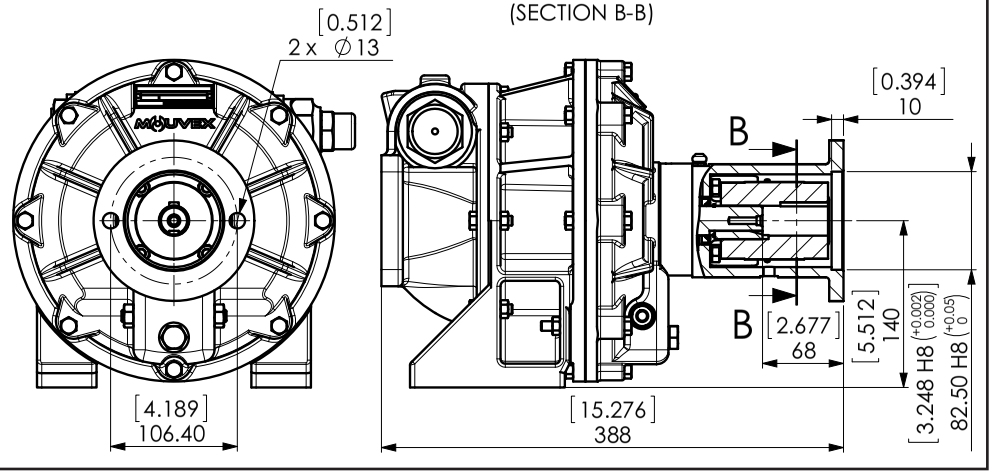
X	6.35 [1/4]	8 [0.315]



E	Bypass cap
P	Pump plate
B	Drain plug
S	Mounting point for temperature sensor M6 - threaded 8 mm.

2. OPERATING LIMITS

Construction	Maximum speed (rpm)	Product pumped	Viscosity max. (cSt)	Flowrate (m^3/h)	Pressure max. (bar)
A	500	Clean petroleum products	750	20	3,5
	600		400	24	3,5
	750		110	30	3,5
SRRHU	400	Used products : oils, glycol	750	16	1,5
SOLVENTS	500	Clean, non-corrosive solvents	110	20	3,5
WATER	500	Clean water	10	20	2,5

The CC20 pumps are equiped with a bypass which could receive several types of springs.

Spring	Range (bar)	Set à (bar / PSI)
C1	1,1 → 1,5	1,5 / 22
C2	1,8 → 2,5	2,2 / 32
C3	2,3 → 3,8	3,5 / 51

Temperature range allowed : -20°C à +80°C

3. INSTALLATION

3.1 Choice of pump

To obtain the service expected from a MOUVEX pump, regarding both performance and longevity, it is vital that the type of pump, its speed and the materials used for its construction are determined as a function of the pump output, its installation and operating conditions.
You can contact our Technical Services at any time to ask for the information you require.

3.2 Direction of rotation

This pump is reversible and can therefore rotate in either direction, as required It is merely necessary :

- to take care to correctly position the suction and discharge connections to the corresponding pipes (see plate fixed to pump)
- to orientate the bypass according to the direction of rotation adopted for the pump (see plate fixed to pump)

The suction and discharge sides of the pump can be determined by positioning oneself facing the shaft end, with the pump placed on the ground. If the pump shaft is driven in a clockwise direction, then the suction end is on the left, and vice versa.

Check that suction and discharge sides are reversed if the pump is mounted with its legs upwards.

3.3 Pump protection

It is essential to protect the pump against possible foreign matter by connecting a filter to the suction pipe (see Instructions 1011-G00 Filters PF).

3.4 Pipe diameter

In order to achieve the best usage conditions, it is important to take the following recommendations into account when it comes to pipe dimensions :

- The pipe diameter should be chosen as a function of pipe length and the flow rate and viscosity of the pumped liquid, so that any head loss remains within the permissible limits for the motor/pump unit. Therefore it is difficult to give general and precise directions. However, it is never a disadvantage to over-dimension pipe diameters, especially for the section on the inlet side.
- In the case of thin liquids and the piping on the discharge side, one can generally allow a diameter equal to that of the ports on the pump and a larger diameter for the piping on the inlet side, if the value for the inlet power of the pump is negative or especially high.
- In the case of viscous liquids, special care should be given to choosing pipe diameters. In fact, the variation in head loss is proportional to viscosity and inversely proportional to the diameter as power of 3. A slight reduction in the pipe diameter could have serious consequences for the operating conditions of the pump.

Our Technical Services are always available to provide you with precise data if you give them accurate information or, better still, the installation plans.

3.5 Piping assembly

In order to achieve the best usage conditions, it is important to take the following recommendations into account when it comes to fitting pipes :

- The location of the pump in the transfer or recycling circuit should always be determined so as to reduce the height and length of the piping as much as possible.
- Wherever possible, siphons and reverse slopes should be avoided in the inlet piping.
- Particular care needs to be taken with the sealing on the inlet side to prevent air entering.
- Pipe elbows must always have a large radius (more than 3 times the diameter of the pipes) and must not be mounted too close to the pump flanges (min. recommended distance : 10 times the diameter of the pipes), on both the inlet and discharge sides.
- The pipes are supported and aligned with the pump in such a way as to avoid putting stress on the pump flanges. Non-compliance with this instruction can lead to deformation of pump parts, misalignment of bearings and accelerated material wear, even causing parts to break.
- For ease of adjustment and checking, it is recommended that pressure tapping ports for pressure gauges/vacuum gauges be provided as close as possible to the pump's inlet ports (preferably, at a distance of less than 5 times the diameter of the piping).
- If the suction head is especially high or if you want to prevent the pipes emptying at shutdown, you can install a foot valve. It should have a large diameter so as not to generate additional head loss.
- We recommend placing valves as close as possible to the pump ports to avoid having to drain the entire system each time maintenance is carried out. These valves should have the same diameter as the pipes and preferably by full bore models.
- All these steps should be taken to prevent foreign bodies entering the pump (the use of a filter in the pump inlet pipe is strongly recommended).
- Before installing new pipes or tanks, be sure to clean them very carefully to remove any solder, rust, etc. which could be carried along with the water and cause excessive pump wear.
- The pipes should be designed to allow for thermal expansion/contraction (the use of flexible hoses or expansion loops is recommended).
- If the liquid may freeze or solidify, prepare for draining the piping by installing drain taps at the low points and air vents at the high points.

4. DIRECT DRIVE BY MOTOR

4.1 Installation of units

WARNING	
	BE CAREFUL WITH THE WEIGHT OF THE PARTS WHEN THEY ARE BEING REMOVED.
The weight ot the parts can be dangerous and may provoke bodily injuries or material damages.	

The correct seating of the pump is vital for its efficient operation and its longevity. The base must be flat, level and sufficiently resistant to absorb the stresses caused by the motor-driven pump without deformation (if it is made of concrete, it must comply with standard BAEL 91).

In the case where the unit is fastened by anchor lugs or bolts, it must be carefully wedged to prevent any deformation of the chassis when tightening the bolts. Deformation of the chassis will cause stress prejudicial to the pump and the drive device and put the coupling out of true alignment, thereby causing vibrations, noise and premature wear. Care must be taken so that the chassis is clear of the ground, apart from the base plates.

If the chassis is a one-piece unit in doubled plate, it is recommended that a horizontal clearance of about 50 cm be left between one section of the chassis and the other to allow access for fastening the nuts on the pump, reduction gearbox and motor. In all cases, the clearance around the motor-driven pump should all room for demounting the pump (for distances, refer to the dimension drawing at the start of the notice).

The chassis is equipped with a ground connection that must be used to protect people and equipment.

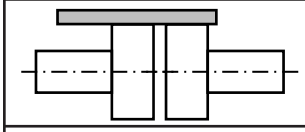
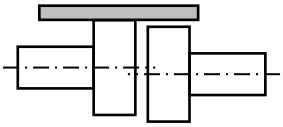
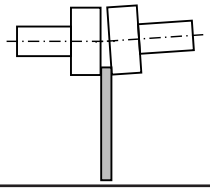
4.2 Alignment of motor/pump and reduction gearbox/pump shafts

WARNING	
	OPERATION WITHOUT THE SHAFT PROTECTOR CAN CAUSE SERIOUS PERSONAL INJURY, MAJOR PROPERTY DAMAGE OR DEATH.
Do not operate without guard in place.	

WARNING	
	DISCONNECT THE ELECTRICITY SUPPLY BEFORE ANY MAINTENANCE OPERATION.
Dangerous voltage. Can cause injury and death.	

The motor and pump shafts are accurately aligned at the factory before dispatch, but they should be checked carefully when received at the site and realigned if necessary. To align the coupling and the shaft, use a straight-edge to check the concentricity and thickness gauges for the angular misalignment.

The 3 figures below show the procedure in detail and the admissible deviations :

Carry out the control at four points : at the top - at the bottom - left - right	
	*Correct*
	*Bad alignment*
	*Angular fault (maximum : 1°)*

Controlling the alignment at each stage of the installation is important to be sure that none of the following procedures has generated stresses on the unit or the pump :

- after fastening on the foundations.
- after fastening the pipes.
- after the pump has been operated at the normal operating temperature.

REMINDER :

You cannot rely on the coupling to compensate for misalignment.

NEVER START A UNIT IF THE COUPLING ALIGNMENT IS INCORRECT. THIS WILL RENDER OUR WARRANTY INVALID.

4. DIRECT DRIVE BY MOTOR (continued)

4.3 Electric motors

WARNING	
 Dangerous voltage. Can cause injury and death.	DISCONNECT THE ELECTRICITY SUPPLY BEFORE ANY MAINTENANCE OPERATION.

Check that the supply voltage matches the indications on the motor rating plate.

Comply with the wiring diagram, make sure the wires are rated for the power and take care with the contacts, which must be thoroughly tightened. The motors must be protected by appropriate circuit breakers and fuses. Connect the regulatory ground connections.

Check the direction of rotation.

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.	PUMPS OPERATING AGAINST A CLOSED VALVE CAN CAUSE SYSTEM FAILURE, PERSONAL INJURY AND PROPERTY DAMAGE.

WARNING	
 Do not operate without guard in place.	OPERATION WITHOUT THE SHAFT PROTECTOR CAN CAUSE SERIOUS PERSONAL INJURY, MAJOR PROPERTY DAMAGE OR DEATH.

This check should be done with no liquid being pumped, and both the inlet and discharge circuits vented to avoid generating unexpected pressure (on the inlet side, for example). This will avoid damaging either the pump or the system.

Start the pump empty to check that the connections are good and that the direction of rotation corresponds to the system intake and discharge directions. If it is necessary to reverse the direction of rotation, follow the instructions below :

Three-phase motor : switch any 2 current input wires.

Bi-phase motor : switch two same phase wires.

Single-phase motor : follow the instructions on the notice supplied with the motor.

4.4 Diesel engines drive

CAUTION	
 Excessive temperature- can cause injury or severe damage.	THE SURFACES OF THE PUMP CAN BE AT A TEMPERATURE LIABLE TO CAUSE INJURY OR SEVERE DAMAGE.

Do not forget that these engines are not reversible. It is therefore vital to carefully check the inlet and outlet sides of the pump before connecting the pump unit to the piping.

The use of diesel engines drive is now well known. Nevertheless, we strongly recommend that you carefully read the technical manuals concerning them.

5. DRIVE BY POWER TAKE OFF

Refer to Instructions NT 1010-B00 CC8 CC10 CC20 PUMPS DRIVEN BY POWER TAKE OFF.

6. USE

The operator should remain nearby the equipment throughout the use to ensure the proper functioning of the system.

6.1 Pumping hot liquids

CAUTION	
	THE SURFACES OF THE PUMP CAN BE AT A TEMPERATURE LIABLE TO CAUSE INJURY OR SEVERE DAMAGE.
Excessive temperature- can cause injury or severe damage.	

When pumping hot liquids, make your you retighten screws and bolts after starting for the first time in order to compensate for contraction.

6.2 Pump full of liquid when stopped

WARNING	
	FAILURE TO INSTALL ADEQUATELY SIZED PRESSURE RELIEF VALVE(S) CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.
Hazardous pressure can cause personal injury or property damage.	

WARNING	
	IF PUMPING HAZARDOUS OR TOXIC FLUIDS, THE SYSTEM MUST BE FLUSHED PRIOR TO PERFORMING ANY SERVICE OPERATION.
Toxic or hazardous fluids can cause serious injury.	

If the pump circuit is to be located between valves and/or a non-return valve, you need to take account of the variations in temperature that can lead to contraction of the liquid in the circuit. In this case, you need to provide some means of compensating for the contraction. A discharge valve may be sufficient. The opening pressure for this valve should be compatible with the permitted pressure for the other components in the circuit.

It is also advisable to fit a discharge device to allow the circuit to be completely emptied for any maintenance work.

In the case of liquids containing particles settling on shut-down, it is necessary to make sure the consistency of the deposit will not impede restarting the pump.

6.3 Starting-up the pump

WARNING	
	FAILURE TO RELIEVE SYSTEM PRESSURE PRIOR TO PERFORMING PUMP SERVICE OR MAINTENANCE CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.
Hazardous pressure can cause personal injury or property damage.	

WARNING	
	OPERATION WITHOUT THE SHAFT PROTECTOR CAN CAUSE SERIOUS PERSONAL INJURY, MAJOR PROPERTY DAMAGE OR DEATH.
Do not operate without guard in place.	

Before starting the pump, make sure that the following conditions are met :

- The circuit should be in one of its pumping configurations, with the appropriate valves open, especially on the intake side.
- For products requiring heating, they must be brought to their pumping temperature before starting the pump.

6.4 Running without liquid in the pump

MOUVEX CC20 pumps can run without liquid in the pump for 5 minutes without causing damage, in particular during pump priming.

6.5 Using of the pump with a valve closed on the discharge line

The using of the pump with a valve closed on the discharge line implies the liquid is not renewed which generates a heating up. In consequence, that operating way must not exceed 3 minutes.

6.6 Shutting down the pump

When shutting down the pump, we recommend waiting for it to stop completely before closing the valves, especially the inlet valve.

6.7 Protection from frost

If there is a risk of frost with the product contained in the pump, it is necessary to drain the body after each use as follows :

Step 1 :

- Check there is no valve closed on the discharge side as well potential counter pressure due to a check valve or liquid remaining inside a vertical pipe.
- Rotate the pump.
- Create an air entering on the suction side during 30 seconds.
- Stop the pump and make sure no liquid is coming back > pump has to be closed.

Step 2 :

- Drain the cavity in front of the piston by opening the drain plug in front of the pump.

6.8 Restarting

Follow the standard start-up procedure for the pump/motor-driven pump, as well as the instructions below.

Turn the pump by hand to make sure the parts move freely.

Remove the cover and replace the grease used to lubricate the bearing.

If the pump has a safety bypass, remove it and inspect the parts and make sure they move freely.

7. NECESSARY TOOLS

- Flat wrenches 13 - 14 - 16 - 17 - 19 - 30 - 48
- Screwdriver

Makeup torques :

- M12 .....81 Nm
- M10 .....47 Nm
- M 8 .....23 Nm
- M 6 .....10 Nm

8. DISMANTLING AND REASSEMBLY

WARNING	
 Dangerous voltage. Can cause injury and death.	DISCONNECT THE ELECTRICITY SUPPLY BEFORE ANY MAINTENANCE OPERATION.

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 RELEASE ALL SYSTEM AIR AND WHEN EQUIPPED, HYDRAULIC PRESSURE, CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

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 ot 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.

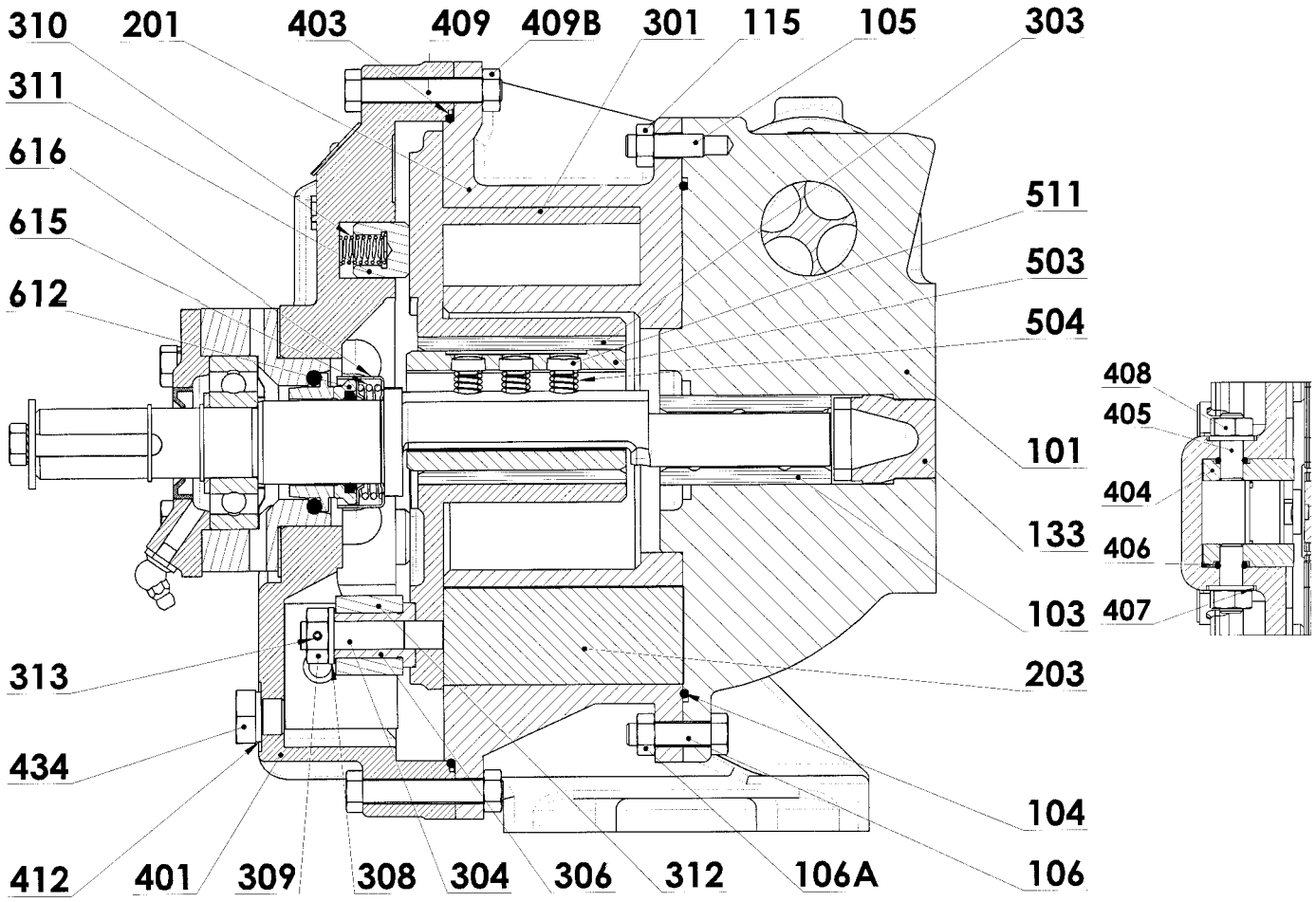
CAUTION	
 Slippery lubricant. Spills should be cleaned up.	THE PUMP LUBRICANT IS VERY SLIPPERY AND MAY CAUSE SERIOUS INJURY. ANY SPILLS MUST BE CLEANED UP.

CAUTION	
 Excessive temperature- can cause injury or severe damage.	THE SURFACES OF THE PUMP CAN BE AT A TEMPERATURE LIABLE TO CAUSE INJURY OR SEVERE DAMAGE.

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.

Before any disassembly, make sure that the pump has been drained and take all the necessary precautions to prevent it from starting up. The pump must not start up, even accidentally.

8. DISMANTLING AND REASSEMBLY (continued)



8.1 Dismantling

Opening the pump

Remove the end-plate bolts **409**.

Having levered all round the pump body until it is freed its socket, remove the end-plate **401** and, with it, a set of parts which includes piston **301** and shaft **501**.

Removing piston

Release piston **301** by sliding it along shaft **501**.

8.2 Reassembly

Before reassembling (by exactly reversing the order for dismantling) check that the piston bearing springs **504** and the piston back springs **310** have not weakened.

Removing shaft seal bearing and shaft

See § BLOCDIR SHAFT SEAL.

Reassembling piston and closing the pump

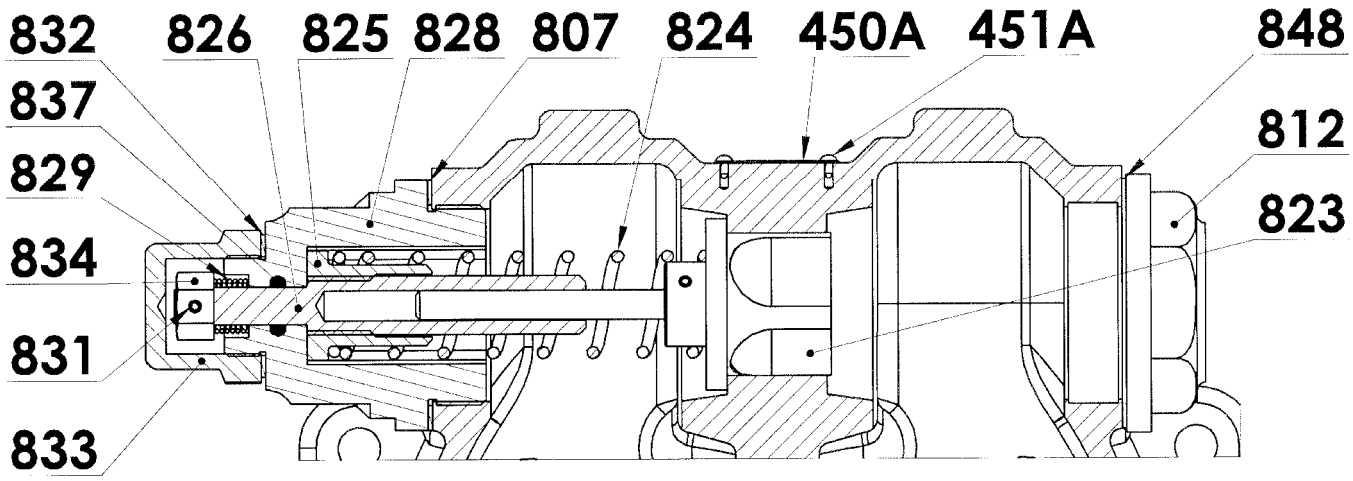
Having first fitted end-plate gasket **403**, slip piston **301** over shaft **501**, with the piston bearing screws **511** positioned upwards.

Insert piston **301** into cylinder **200** by flexing the springs **504** of piston bearing **503,** then push fully home. The end-plate **401** should register with the cylinder **200** without effort. Tighten up the end-plate bolts **409**.

Note :

Check the condition of the gasket during all these reassembly operations.

9. BYPASS ORIENTATION AND REVERSING



9.1 Bypass orientation

The bypass will protect the pump only for one direction of rotation, but can be reversed. It is therefore important to ensure that it is correctly orientated by checking that the cap is on the suction side, reversing it if necessary.

9.2 Reversing bypass

Unscrew cap **833** and loosen adjusting nut **834** so as to relax spring **824** as much as possible.

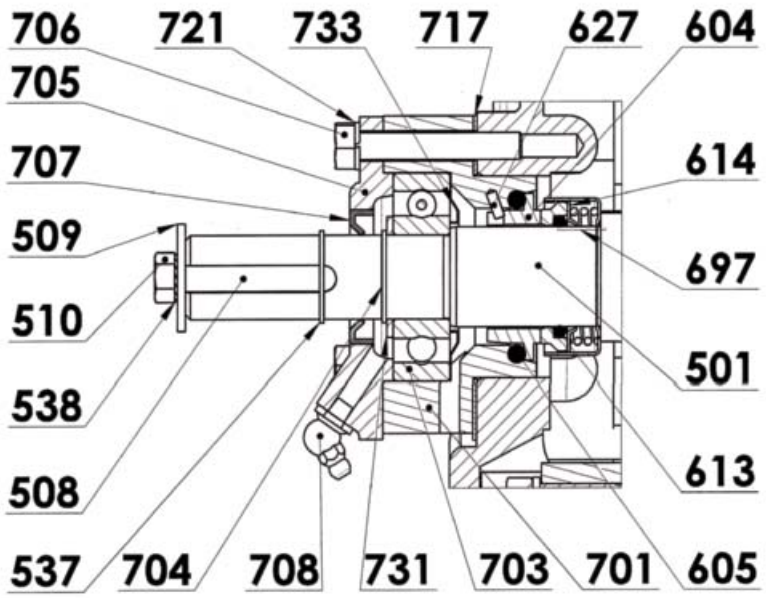
Remove part **828** and the parts fast with it. Remove valve **823**, spring **824** and guide **825** and assemble them all on the other side.

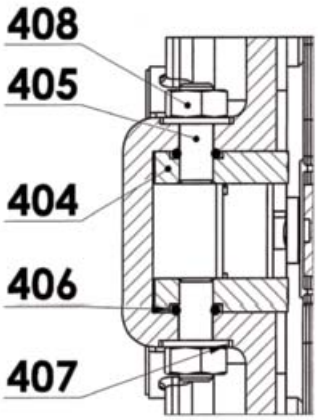
Fit plug **812** and gasket **848** in the position previously occuped by part **828**.

Then adjust the bypass by tightening up adjusting nut **834** so as tighten spring **824**.

Screw cap **833** back into position.

10. BLOCDIR SHAFT SEAL





10.1 Operation

Rotary seal **697** rotates with shaft **501** thanks to 2 tongues fitting into 2 notches on shaft.

Stationary seal **604** is held in pump body by rind **605** and pin **627**.

Sealing is therefore provided by :

1) ring of rotary seal **697** on shaft

2) faces of rotary seal **697** and stationary **604.**

3) ring **605** between retainer **701** and stationary seal **604**.

Tight sealing depends on rings and sealing faces being in good condition.

10.2 Dismantling

Pump being opened :

- Remove key **508** and snap ring **537.**
- Remove screws **706** and washers **721.**
- Remove cap **705** and seal **707.**
- Release shaft **501** by tapping with a hammer on shaft end.
- Remove snap ring **704**, washer **731**. Drive out retainer **701** bearing **703** - ring **733** by tapping on shaft end.
- Remove ring **605**, stationary seal **604** and rotary seal **697**.

10.3 Assembly

Check rings **605**, **707** and **616** (of rotary seal).

Check that sealing faces of new **604** and new **697** are flat and mirror smooth.

- Replace all parts on shaft in the reverse order.
- Make sure that the 2 tongues of rotary seal **697** fit into the notches on shaft **501**.
- Make sure that pin **627** fit into housing in stationary seal **604**.
- Install snap ring **704**.
- Replace gasket **717** and shaft with ball-bearing and seal into casing. Make sure that one of the drain vents is turned downwards **761**.
- Install cap **705** and seal **707,** taking care to damage seal **707** on key-groove, then screws **706** washers **721**, snap ring **537** and key **508**.

11. MAINTENANCE

11.1 Lubrication

- Grease to use : good quality ball bearing grease.
- Fréquency : every 500 hours or one time per year.
- Injected volume : the usage of a pneumatic grease pump is forbidden because of the risk to damage the mechanical seals. The grease has to be added with a manual pump, 2 blows on the grease nipple.

11.2 Cleaning the filter

The pump should always be protected against possible foreign matter by means of a filter connected into the suction pipe.

Check the cleanliness of the filter mesh from time to time as a.partly clogged filter could starve the pump and reduce its output.

To clean the filter, remove the meshes and clean them carefully. Before refitting them, drain the filter by removing the drain plug, then rinse it thoroughly.

12. TROUBLESHOOTING

CAUTION :
OBSERVE ALL SAFETY WARNINGS CONTAINED IN THIS MANUAL.

12.1 Abnormal noise

Main causes :

- Excessive suction vacuum, due to :
  - a pipe, accessories (valves, filter...) which are either clogged or of insufficient diameter,
  - excessive suction head (e.g. during liquid transfer operations),
  - a viscosity or vapour tension too high for the system to cope with (e.g. when changing the product to be pumped).
- Overly high rotation speed for the liquid being pumped.
- Pump damaged
  - as a result of binding due to :
    - an excessively high rotation speed,
    - failure to release the drive when pumping is ended,
    - sudden engagement of the drive,
    - an unduly high pulling force on the shaft, leading to a damaged ball-bearing and shaft.
  - as a result of foreign matter, due to :
    - the absence of a filter or inefficient cleaning,
    - the absence of a basket (faîlure to replace it after cleaning),
    - solder or rust particles remaining in the pipe between the filter and the pump.
- Bypass valve hammer on its seat due to incorrect adjustment of the spring's tension.

12.2 Leaking seal

Main causes :

- Abnormal pulling force on the shaft, leading to a damaged bearing and seal,
- Displacement of the shaft when mounting an unduly tight coupling making the seal unserviceable,
- Seal damage caused by pumping an agressive product,
- Ball-bearing lubricated excessively or at unduly high pressure.

12.3 Inadequate output

Main causes :

- Excessive suction vacuum (see § Abnormal noise - Excessive suction vacuum),
- Bypass setting too low,
- Air leaking in at suction end,
- Discharge pipe diameter too small,
- Speed of rotation too low,
- Bypass valve not closing properly due to foreign matters on valve seat or because the valve lifting wheel (in the case of pumps fitted with one) has not been returned to its initial position after use,
- Pump damaged (see § Abnormal noise - Pump damaged due to passage of foreign matter).

13. STORAGE

13.1 Short duration (≤ 1 month)

WARNING	
	**IF PUMPING HAZARDOUS OR TOXIC FLUIDS, THE SYSTEM MUST BE FLUSHED PRIOR TO PERFORMING ANY SERVICE OPERATION.**
Toxic or hazardous fluids can cause serious injury.	

MOUVEX pumps and motor-driven pumps are well lubricated when delivered to protect the internal parts during brief storage in a building where :

- the temperature remains between 10°C and 50°C.
- the relative humidity does not exceed 60%.
- exposure to vibration is limited (maximum movement : 0,05 mm).
- pump is stored in an area sheltered from bad weather and sun.

13.2 Long duration (> 1 month)

We recommend the following procedure for longer periods of storage :

The recommendations from the manufacturer should be followed if the pump is stored with its gear motor.

Pump ports should be filled with a non-corrosive liquid that it compatible with the pump components in order to prevent corrosion.

Unpainted external surfaces of the pump (e.g. shafts, couplings, etc.) should be covered in some form of anti-corrosion protection.

The bearing should be greased. If the pump is to be stored for more than three years, the grease should be replaced every three years to prevent it degrading.

The best storage conditions are inside a building that meets the conditions set out above.

If inside storage is not possible, the materials should be covered to prevent direct exposure to sun and bad weather. This protection should also prevent condensation.

It is recommended to turn the pump by hand every two months to distribute the lubricant around the interior. Items should then be placed where there is no risk of damage if they are moved slightly by vibrations.

14. SCRAPPING

The pump must be scrapped in compliance with the regulations in force.

During this operation, particular care must be paid to the drainage stages of the pump (pumped product).

DECLARATION UE DE CONFORMITE
EU CERTIFICATE OF CONFORMITY – EU KONFORMITÄTSERKLÄRUNG

MOUVEX sas, ZI La Plaine des Isles – 2 Rue des Caillottes – 89000 Auxerre France, déclare que l'équipement suivant / *declares the following equipment / erklärt, dass folgende Ausrüstung:*

Modèle :_____ **N° de série :**_____ (A) Répondant aux spécifications indiquées dans l'ARC N° : _____ (B)
Designation / Bezeichnung *Serial N° / Serien Nr* *According to the specifications recorded in the acknowledgment of order N°: Entsprechend den Spezifikationen aus AB-Nr :*

Pour la Sté MOUVEX sas, fait à Auxerre le : _____
For Mouvex sas company – Date :
Fur die Fa Mouvex sas - Datum :

Responsable Qualité Clients
Customer Quality Manager / Qualitätsbeauftragter

Configuration : *Konfiguration*
☐ Pompe / Compresseur arbre nu *(Pump / Compressor « bare-shaft »)* *(Pumpe / Kompressor, freies Wellenende)*
☐ Groupe de pompage / de compression *(Pumping Unit / Compressor Unit)* *(Pumpen- / Kompressoraggregat)*

Type / *Geräteart* :
☐ Pompe à mvt excentré *(Eccentric Disc Pump /* Ringkolbenpumpe*)*
☐ Pompe péristaltique *(Peristaltic Pump /* Schlauchpumpe*)*
☐ Pompe centrifuge *(Centrifugal Pump /* Kreiselpumpe*)*
☐ Pompe à lobes *(Lobes Pump /* Drehkolbenpumpe*)*
☐ Pompe à palettes *(Vanes Pump /* Flügelzellenpumpe*)*
☐ Autre pompe *(Other Pump / Andere Pumpe)*
☐ Compresseur à Vis *(Screws compressor /* Schraubenverdichter*)*
☐ Compresseur à palettes *(Vanes compressor /* Flügelzellenverdichter*)*
☐ Refroidisseur Hydraulique *(Hydraulic oil cooler /* Hydraulikkühler*)*

Est conforme aux dispositions suivantes :

☐ **Directive « MACHINES » 2006/42/CE** et aux législations nationales la transposant, portant sur les dispositifs de sécurité liés aux risques mécaniques et électriques applicables aux machines tournantes.

NF EN 809:2009 NF EN 1672-2:2009 NF EN ISO 13857:2008
NF EN 12162:2009

☐ **Directive « ATEX » 2014/34/UE** du 26 février 2014 et aux législations nationales la transposant, portant sur les appareils destinés à être utilisés en atmosphères explosibles. Conformité obtenue par application des normes :

NF EN 1127-1:1997 NF EN 13463-1:2009 NF EN 13463-5:2009

Certification ATEX délivrée par INERIS*, Organisme Certificateur, et portant le marquage suivant : (C)

Is in conformity with the provisions of the following Directive:

☐ ***« MACHINES » Directive 2006/42/EEC*** *as transposed by the national legislation, concerning safety equipments and arrangements relative to mechanical and electric risks applicable to rotative machines.*

NF EN 809:2009 NF EN 1672-2:2009 NF EN ISO 13857:2008
NF EN 12162:2009

☐ ***« ATEX » Directive 2014/34/EU*** *(26 Feb. 2014) as transposed by the national legislation, concerning equipment intended to be used in explosive atmospheres. Conformity obtained by application of the standards :*

NF EN 1127-1:1997 NF EN 13463-1:2009 NF EN 13463-5:2009

ATEX Certification delivered by INERIS, Notified Body, and with the following marking:* (C)

den Bestimmungen der nachstehenden Richtlinien entspricht:

☐ ***„Maschinen-Richtlinie“ 2006/42/EEC*** *wie umgesetzt im nationalen Recht hinsichtlich der Ausrüstungssicherheit und Sicherheitsvorkehrungen bezogen auf mechanische und elektrische Risiken, die für rotierende Maschinen gelten.*

NF EN 809:2009 NF EN 1672-2:2009 NF EN ISO 13857:2008
NF EN 12162:2009

☐ ***„ATEX“ Richtlinie 2014/34/EU*** *(26. Feb. 2014) wie umgesetzt im nationalen Recht in Bezug auf Ausrüstungen für den Einsatz in explosionsgefährdeter Atmosphäre. Die Konformität hat Geltung durch Anwendung folgender Normen:*

NF EN 1127-1:1997 NF EN 13463-1:2009 NF EN 13463-5:2009

Die ATEX-Zertifizierung wurde von der benannten Stelle INERIS erteilt, und mit folgender Kennzeichnung: (C)*

II __ G ____ II __ – T __ **Temp Max produit pompé / *Max Temp Flow / Max. T° Medium* = _____ °C** (X = voir notice / see IOM / siehe Handbuch)

L'équipement désigné ci-dessus doit impérativement respecter les conditions d'utilisation ATEX décrites dans nos notices d'instruction. Il doit être employé conformément à l'utilisation qui en a été prévue de par sa conception et sa fabrication, et conformément aux normes en vigueur.

Nous, soussignés, déclarons que l'équipement concerné est conforme aux Directives listées ci-dessus et aux normes applicables s'y rapportant.

The equipment indicated above must imperatively comply with the ATEX conditions of use described in our Instruction book. It must be used according to the foreseen use by its design and its manufacturing, and according to the current standards.

We, undersigned, declare that the concerned equipment is in conformity with the Directives listed above and in the applicable standards in force.

Oben stehend bezeichnete Ausrüstung muss unbedingt den in unseren Betriebsanleitungen beschriebenen ATEX Anwendungs-bedingungen entsprechen. Sie ist entsprechend dem durch Konstruktion und Fabrikation vorgesehenen Verwendungszweck und entsprechend den geltenden Normen einzusetzen.

Die Unterzeichner erklären, dass die bezeichnete Ausrüstung den oben aufgeführten Richtlinien und den diesbezüglich geltenden Normen entspricht.

* (INERIS – Parc Techno Atala – 60550 Verneuil-en-Halatte – France).