



**INSTRUCTIONS 1010-D00 e**

Section	1010
Effective	September 2011
Replaces	July 2011

Original instructions

# **CC8-40 - CC8-50 - CC8-65**

## ***pumps***

**INSTALLATION**

**OPERATION**

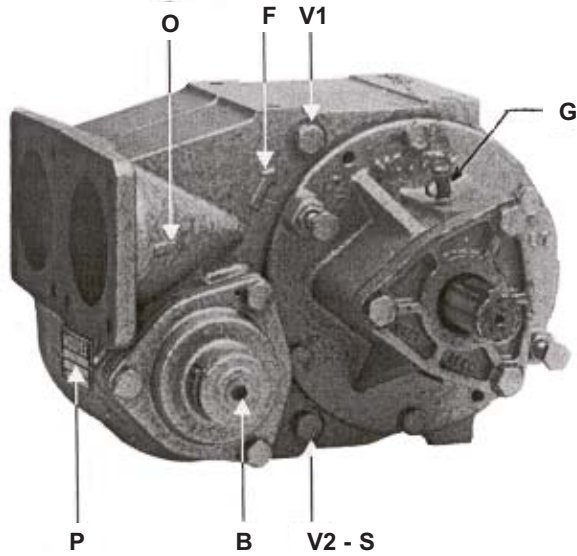
**MAINTENANCE**



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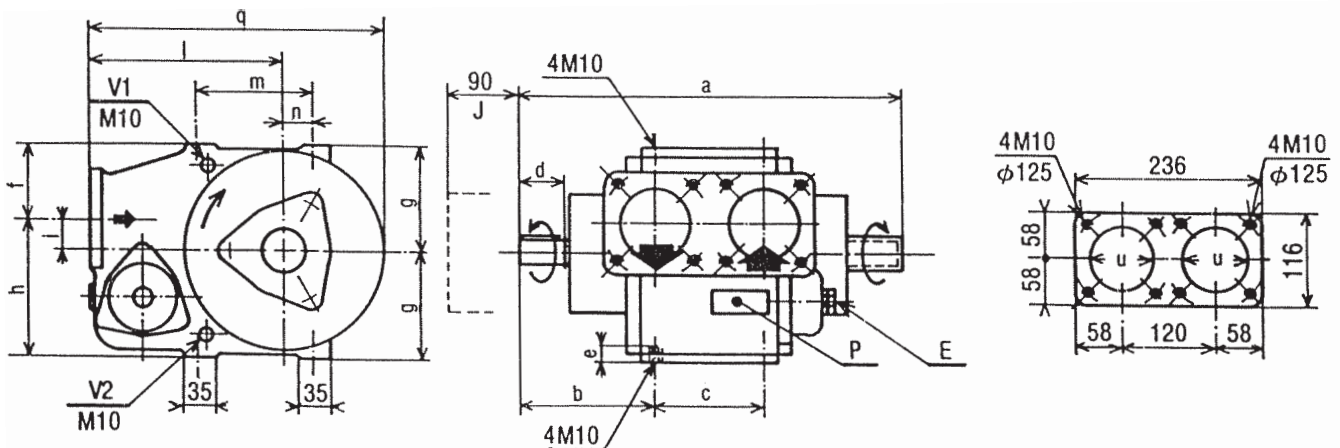
Your distributor :

# 1. PRESENTATION



- B Bypass setting
- P Pump plate
- V1 Drain plug-vacuum M10
- V2 Drain plug-pressure M10
- G Lubricator nipple (C construction)
- O Arrow suction
- F Arrow rotation
- S Mounting point for temperature sensor

# 2. OVERALL DIMENSIONS - mm



E	Bypass adjustment
J	End plate dismounting
V1	Drain/vacuum plug
V2	Drain/pressure plug
P	Pump plate
S	Mounting point for temperature sensor

Pump	a	b	c	d	e	f	g	h	i	l	m	n	q	r	s	t	u	Kg
CC8-40 CC8-50	443	158	110	50	17	79	112	145	33	216	120	30	318	30g6	33	8h9	80	48
CC8-65	745	170	120	52	18	85	118	151	33	222	130	30	338	30j6	33	8h9	80	57

The pump rotates in one direction only. This is indicated by an arrow on the pump housing. However, the pump has both of shaft-ends led out and must be driven through one the other depending on the direction of rotation of the power take-off.

Because the pump rotates in one direction only, the positions of the suction and discharge ports are not be reversed (see arrows on housing). The safety bypass has not to be reversed.

### 3. CHARACTERISTICS

CONSTRUCTION	SPEED RANGE rpm	FLOW RATE PRESSION m <sup>3</sup> /h			PRESSURE Max bar	REQUIRED POWER kw		
		CC8-40	CC8-50	CC8-65		CC8-40	CC8-50	CC8-65
<b>Construction A</b> Viscosity < 40 cst	400 à 1200	48	-	-	4	7.6	-	-
	450 à 750	28	35	44	8	7.8	10	1.3
	450 à 1000	40	50	65	4	6	6.5	8.5
<b>Construction I</b> Viscosity < 40 cSt.	450 à 750	-	-	45	6	-	-	9.2
<b>Construction C</b> Viscosity < 400 cSt.	400 à 750	31	36	44	8	9.7	11	13
	Viscosity < 900 cSt.	400 à 600	-	-	35	6	-	-

The pumps CC8 can work at a pressure equal to 8 bar.

They are normally delivered with spring (4 or 8 bar) adjusted at 4 bar.

When requested, they can be delivered with a 8 bar spring adjusted at the maximum pressure of use.

### 4. USE

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

### 5. ASSEMBLY - DISASSEMBLY

Before any disassembly, makes sure that the pump has been drained and must not start up, even accidentally.

### 6. NECESSARY TOOLS

- Flat wrenches de 13, 17, 22
- Tube wrench 17
- Circlip opening pliers
- Screwdriver

Makeup torques :

- M10 .....3347 da N.mm
- M 8 .....1684 da N.mm
- M 6 .....687 da N.mm

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## 7. DISMANTLING PUMP ON SIDE OPPOSITE TO DRIVE SYSTEM

Unscrew the screws **723**, and remove the cover **712** and the seal **714**.

Remove circlip **537**.

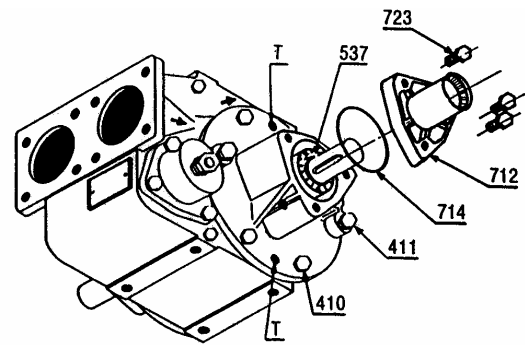
Carefully clean the shaft end (remove any trace of paint, oxidation, burrs...).

Unscrew the 4 screws **410**.

Unscrew the 4 screws **411** fitted with their nut **412** and place them in the 2 tapped holes T.

Screw up the 2 screws at the same time so that the end-plate is gradually released along the centre line.

When the end-plate is free on the shaft, hold it by hand supporting it.



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## 8. DISMANTLING PUMP ON DRIVE SIDE

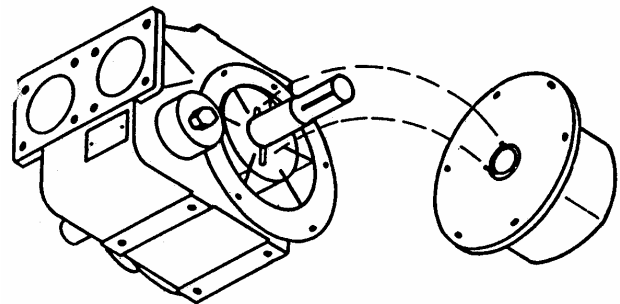
Uncouple the pump by removing the coupling.

Remove the key **508** and clean the end shaft. Then proceed in the same way as when dismantling on the other side. On CC8-40 and CC8-50 pumps, it is necessary to push cover **705** slightly a side to avoid damaging O-ring **707** on key.

Unscrew the screws **723**, remove the cover **705** with its seal **714** taking care not damaging seal **707**.

Remove the circlip **537**.

Operate then in a identical way in § DISMANTLING PUMP ON SIDE OPPOSITE TO DRIVE SYSTEM.



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## 9. REASSEMBLY OF THE PUMP

When putting the end-plate back into place, take care to have the shaft seal drive lugs facing the notches on rotor.

Replace the cover **712** or **705** on the end plate **401** with screws **723**.

Lubricate the shaft **501** slightly.

Make sure that the end-plate seal **403** is correctly positioned, check it and change it if necessary.

Position the end plate **401** on the shaft and approach it as far as possible by hand.

Finish fitting the end-plate, screwing the 2 nuts **412** gradually on to the 2 screws **411**.

Make sure that end-plate is centred while screwing.

When the end-plate is in place, remove the screws **411** and their nuts **412** and screw them up in the 2 bosses taking care to position one of the drainage port L pointing down.

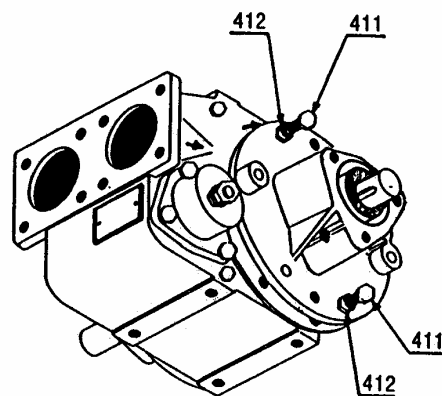
Replace the screws **410**.

Remove the cover **712** or **705**.

Replace the circlip **537**.

Replace the cover **705** with its seal **707** after check condition of seal.

Free the shaft line by a light blow of mallet on its extremity and make sure that the pump rotates freely when turned by hand.



## 10. CHANGING THE VANES

Open the pump on one side or the other.

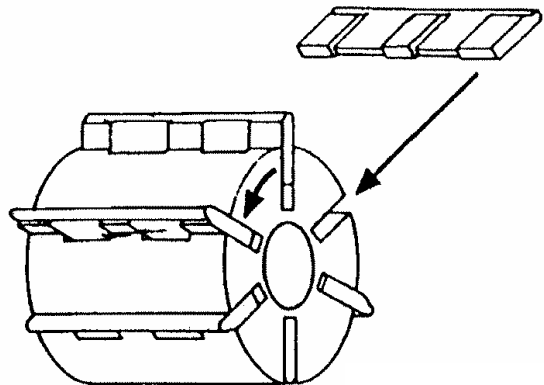
Remove the vanes **317**.

Check for wear (see § MAINTENANCE).

If vane wear is abnormal, check surface condition of body and of end-plate faces.

Refit the vanes (new if necessary) respecting the direction of assembly.

Reassemble the pump and check that it rotates freely when turned by hand.



## 11. CHANGING MONOBLOC SHAFT SEAL

### 11.1 Disassembly

Open the pump and remove the end-plate on its machined side taking care not to damage the shaft seal drive lugs.

Remove parts.

Remove shaft seal by inserting fingers in shaft seal center hole.

### 11.2 Reassembly

#### IMPORTANT

**Lubricate the bore which takes the roller bearings.**

Pumps constructions C : Bearings to greased and mounted head-to-tail (seals on the outside).

Make sure that the seals **605**, **613** and the shaft seal are in good condition. Change them if necessary.

Place the seal **605** in the end plate **401**.

Make sure that the seal **613** is correctly positioned in the shaft seal **630**.

Refit the shaft seal **630** (a new one if necessary), in the end plate **401**, supported on the seal **605**.

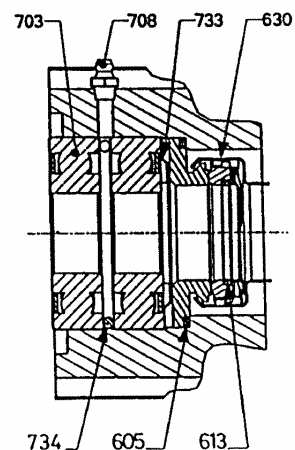
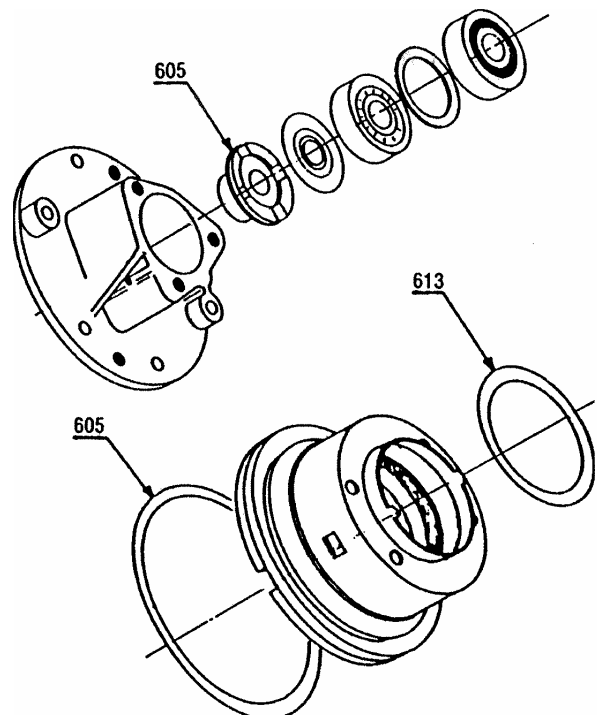
Place the protection ring **733** so as to be supported on the shaft seal **630**.

Place a bearing **703** supported on the protection ring **733**.

Position the spacer **734** with its aperture opposite a grease nipple **708** (if present).

Place the second bearing **703** so it is supported on the spacer **734**.

Refit the end plate (see § REASSEMBLY OF THE PUMP).



## 12. DISMANTLING AND REASSEMBLY OF THE BYPASS

### 12.1 Dismantling

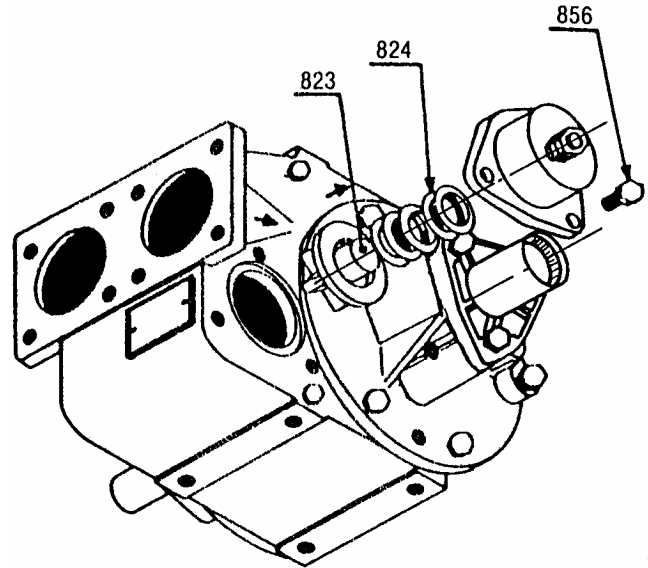
Set bypass at minimal pressure by unscrewing the lock-nut **835** taking care to count the number of rotations so as to be able to reset bypass at initial pressure setting.

Unscrew the 3 screws **856** of the bypass cap.

Remove spring **824**.

Remove the valve **823** by pulling its cylindrical section with the fingers.

Check condition of bypass.



### 12.2 Reassembly

Clean all parts before reassembly.

Reassemble in reverse order of disassembly.

Set bypass at initial pressure setting by tightening nut with the same number of rotations as counted during dismantling.

## 13. MAINTENANCE

### 13.1 Inspection of the vanes

Pump	CC8-40	CC8-50	CC8-65
Original height h	35	35	38
Change when h < to	30,5	32,5	35,5

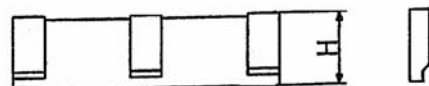
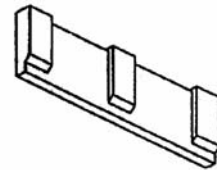
### 13.2 Lubrication of bearings

**Pumps CC8-40A ; CC8-50A ; CC8-65C :**

- Grease to use : good quality ball bearing grease. In case of pumps operated higher than 100°C, a high point of drop grease has to be selected.
- 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 an only one grease nipple of every pump end.

**Pump CC8-65A :**

Ball bearing are lubricated for life and don't require any grease adding.



## 14. STORAGE CONDITIONS

The equipment must be systematically stored in an area sheltered from bad weather.

The equipment must bear its original protective components until it is installed in its final application.

If installation is interrupted, put back in place the original protective components or equivalent components.

## 15. 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.

## 16. CERTIFICATE OF CONFORMITY



### CERTIFICATE OF CONFORMITY CE

**Mouvex**, ZI La Plaine des Isles - Rue des Caillottes - 89000 Auxerre France, declares the following equipment :

Set-up :  Pump / Compressor « bare-shaft »     Pumping Unit / Compressor Unit  
Type :  Eccentric Disc Pump                     Vanes Pump                     Lobes Pump  
 Peristaltic Pump                     Centrifugal Pump                     Other Pump  
 Screws compressor                     Vanes compressor                     Hydraulic cooler

Designation : \_\_\_\_\_ s/n° : \_\_\_\_\_

According to the specifications recorded in the file N° : \_\_\_\_\_

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

And with the following marking :  **II2 G c IIB-T4    Max T° Flow = 80°C**

is in conformity with the provisions of the following Directive :

- « **ATEX** » **Directive 94/9/EC** (23 march 1994) 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 (INERIS - Parc Technologique Alata – 60550 Verneuil-en-Halatte - France).

The equipment indicated above 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.

For Mouvex SAS Company.  
Date : \_\_\_\_\_



Quality Manager

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