

PUMP CC20



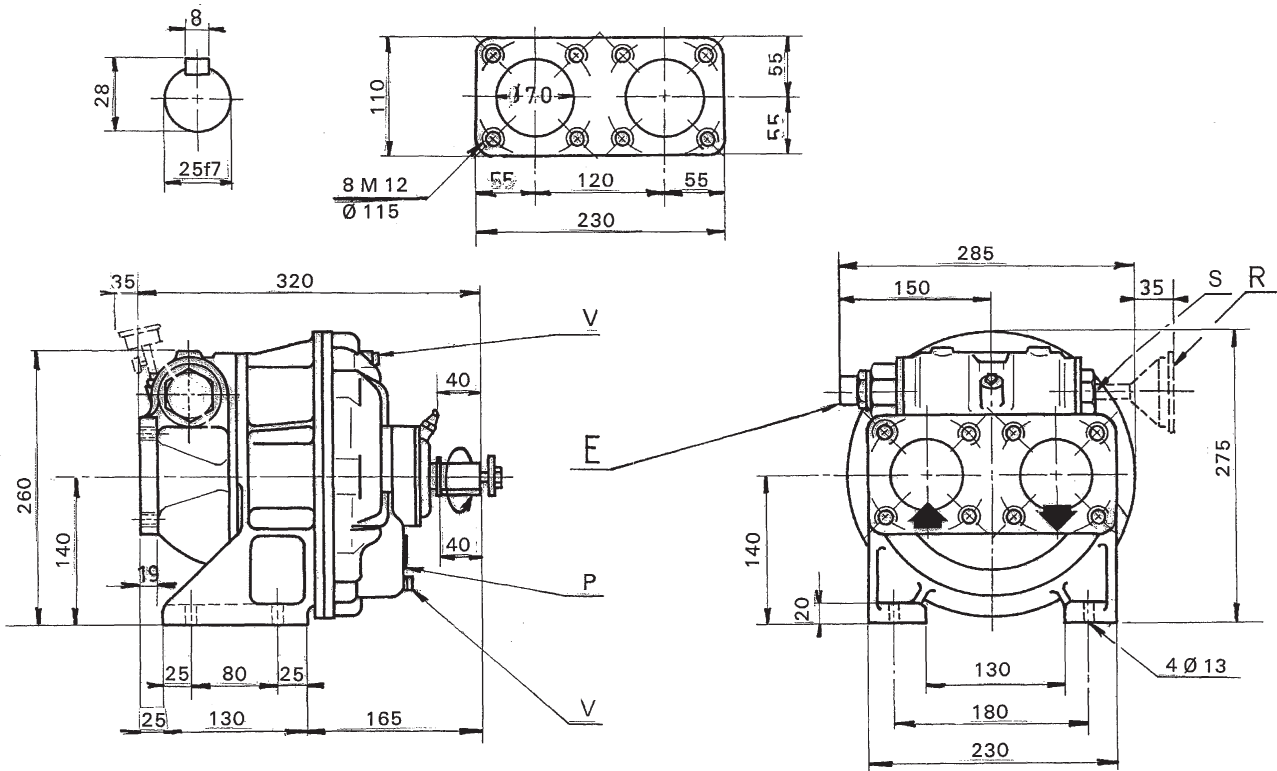
INSTALLATION

OPERATION

MAINTENANCE

OVERALL DIMENSIONS - mm

- E - Bypass cap
- P - Pump plate
- V - Drain plugs (on request)
- S - Mounting point for temperature sensor
- R - Lifting device variant



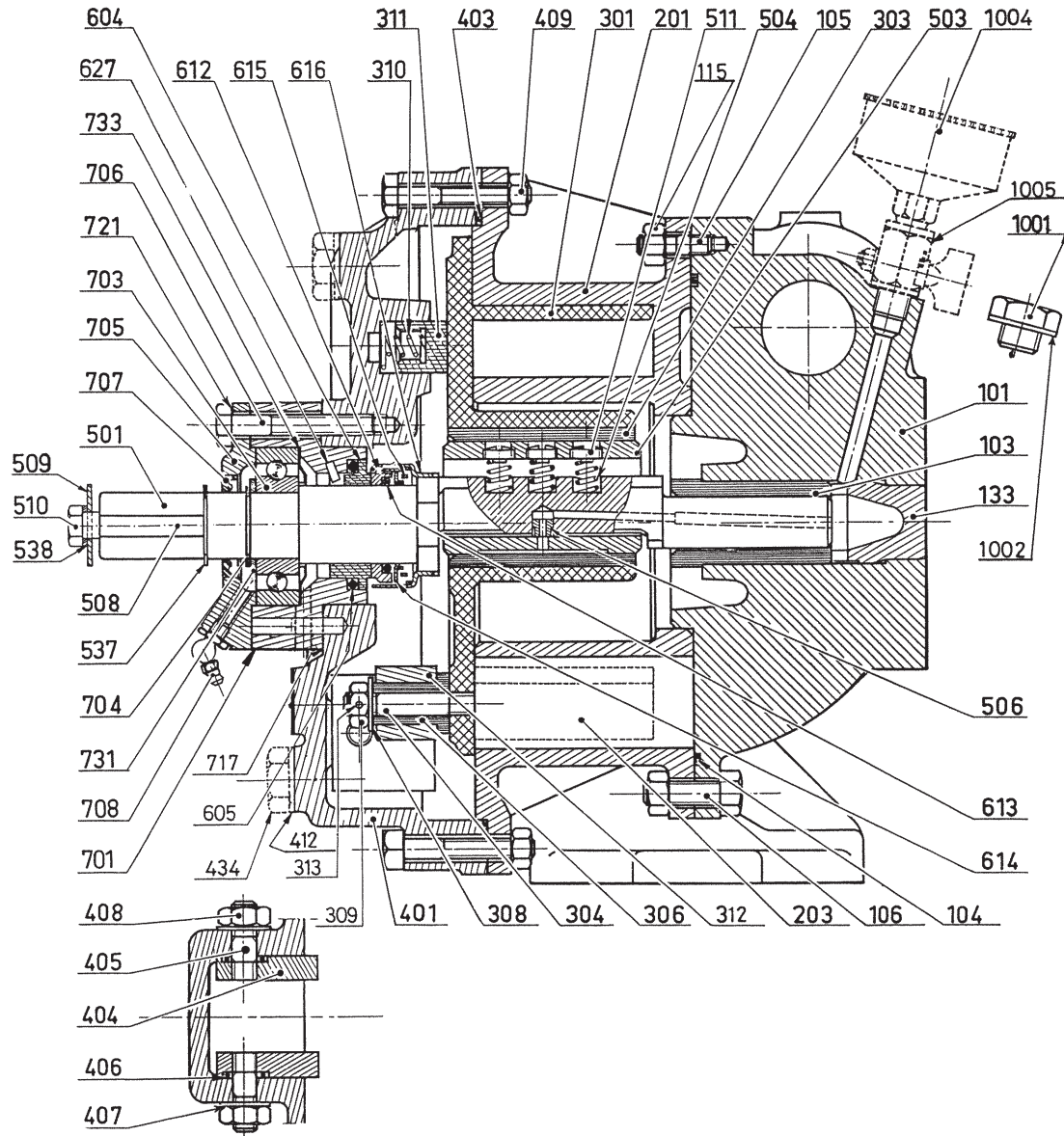
CHARACTERISTICS

PUMP TYP	ROTATION SPEED rpm	OUTPUT			PRESSURE max. bar	CONSTRUCTION
		m ³ /h	IGPM	USGPM		
CC 20	750 Diesel oil and fuel oils of viscosity less than or equal to 80/110 cSt	30	110	132	4	Bronse fitted
	600 Gasoline, kerosene, solvents, fuel oils of viscosity between 80 and 400 cSt	24	88	106	4	All iron
	500 Fuel oils of viscosity between 400 and 750 cSt	20	73	87	4	Stainless steel fitted

USE

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

DISMANTLING FOR INSPECTION - REASSEMBLY



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**.

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.

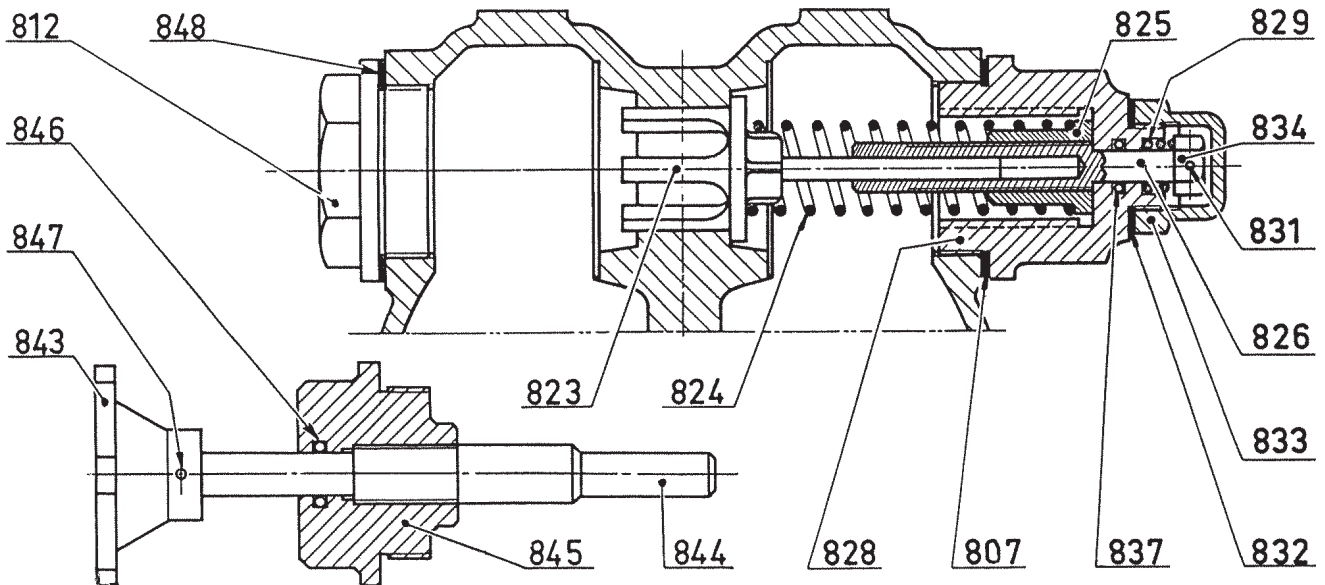
Reassembling piston and closing the pump

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.

ORIENTATION AND REVERSING OF BYPASS



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.

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 occupied by part **828**.

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

Screw cap **833** back into position.

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.

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.

SPARE PARTS LIST

REP	Nb.	DESIGNATION
•098	1	SET OF SCREWS (105-106-115-409)
•099	1	SET OF PUMP GASKETS (104-403-406-1002)
•100	1	CASING COMPLETE
101	1	Casing
•103	1	Bushing
104	1	Gasket (voir 099)
105	3	Stud and nut (voir 098)
106	5	Bolt (voir 098)
115	3	Plug (voir 098)
•133	1	Obturator
•1000	1	APG CUP, COMPLETE
1001	1	Cup
1002	1	Gasket (voir 099)
•1003	1	COCK-TYPE LUBRICATOR, COMPLETE - Option
1002	1	Gasket (voir 099)
1004	1	Lubricator
1005		Cock-type
•200		CYLINDER COMPLETE
201		Cylinder
•203		Bulkhead
•300	1	PISTON, COMPLETE
•301a	1	PISTON + SLIDE BLOCK PIN
301	1	Piston
304	1	Pin
•303	1	Bushing
398a	1	SLIDE BLOCK, COMPLETE
308	1	Washer
309	1	Nut
•307	1	Slide block + bushing + pin
306	1	Bushing
312	1	Slide block
313	1	Pin
•398	1	SLIDE BLOCK, COMPLETE (304-307-308-309)
•399	1	GUIDE BLOCK, COMPLETE
310	3	Piston back spring
311	3	Piston back spring thrust piece
•400	1	END PLATE, COMPLETE
401	1	End plate
•402	1	GUIDE SET, COMPLETE
404	2	Guide
405	2	Stud
406	2	Gasket
407	2	Washer
408	2	Nut
•403	1	End plate gasket (voir 099)
409	8	End plate bolt (voir 098)
•411	1	Drain plug complete - option
412	2	Gasket (voir 099)
434	2	Plug

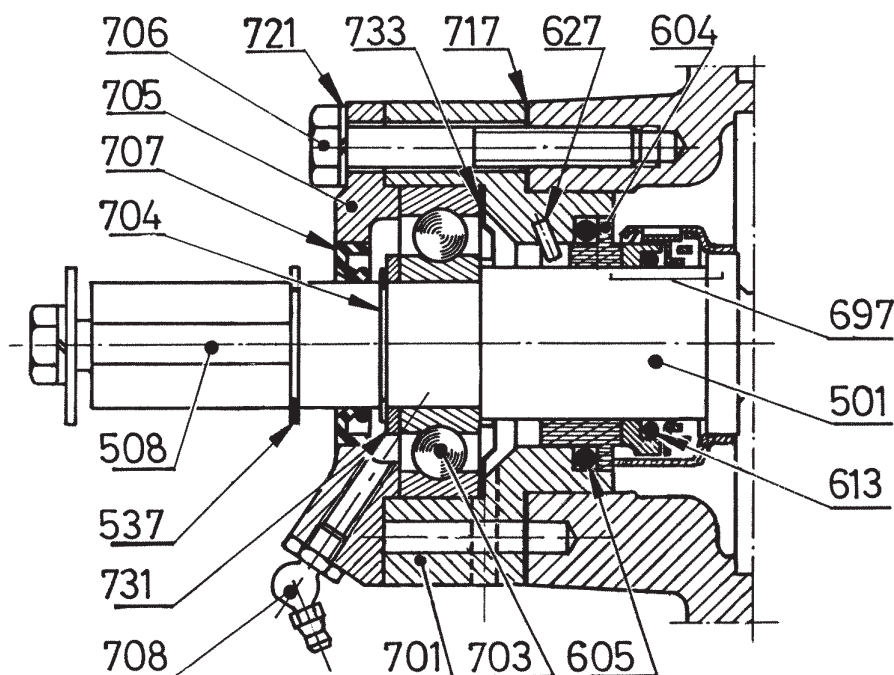
● Assemblies and parts available for supply

SPARE PARTS LIST (continued)

REP	Nb.	DESIGNATION
•500	1	SHAFT, COMPLETE
•503	1	Bearing
•598	1	BEARING SPRING, COMPLETE
504	3	Spring
511	3	Screw
•505	1	SHAFT WITH LUBRICATION DUCT
501	1	Shaft
506	1	Lubrication duct
•599	1	KEY ASSEMBLY, COMPLETE
508	1	Key
509	1	Washer
510	1	Screw
537	1	Ring
538	1	Washer
•820	1	COMPENSATED BYPASS, COMPLETE
812	1	Plug
848	1	Gasket (voir 899)
•869	1	BYPASS CAP+ GASKET
832	1	Gasket (voir 899)
833	1	Bypass cap
•897	1	ADJUSTING SCREW VALVE
807	1	Gasket (voir 899)
•823	1	Compensated Valve
825	1	Spring guide
826	1	Adjusting screw
828	1	Screw
829	1	Spring (voir 899)
831	1	Nut pin (voir 899)
834	1	Adjusting nut
837	1	Gasket (voir 899)
•824	1	Spring specify n° (see Pressure range)
•899	1	SET OF BYPASS GASKETS (807-829-831-832-837-848)
VALVE LIFTING TYPE BYPASS		
Same parts as for bypass without valve lifting device, except that 812 is replaced by assembly 839.		
•839	1	LIFTING DEVICE, COMPLETE
843	1	Wheel
844	1	Screw
845	1	Nut
•846	1	Gasket
847	1	Wheel pin
Spring n°	PRESSURE RANGE	
	Pressure in bar - valve closed bypass spring being :	
	Fully loosened	Fully tightened
1	1,1	1,5
2	1,8	2,5
3	2,3	3,8
4	3,0	5,2

● Assemblies and parts available for supply

BLOCDIR SHAFT SEAL



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 ring **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.

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**.

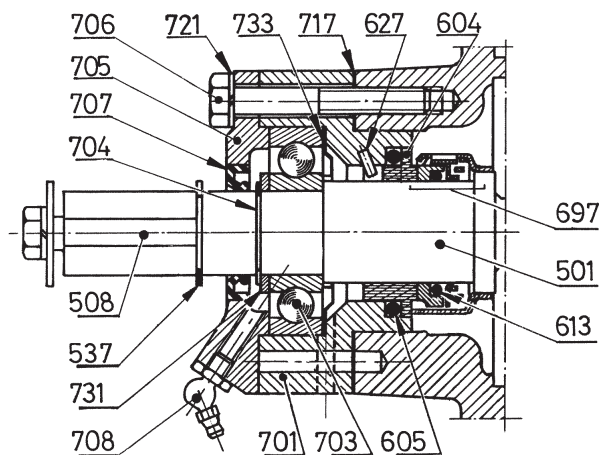
Assembly

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**.

BLOCDIR SHAFT SEAL (continued)



● Assemblies and parts available for supply

REP.	Nb.	DESIGNATION
●698	1	FULL SET OF SCREWS (706+721)
●699	1	FULL SET OF SEAL GASKETS (605+613+704)
●500	1	BLOCDIR SHAFT, COMPLETE
501	1	Shaft
508	1	Key (see 599)
537	1	Snap ring (see 599)
●600	1	BLOCDIR SHAFT SEAL, COMPLETE
●610	1	STATIONARY SEAL FACE COMPLETE
604	1	Stationary seal face
605	1	Stationary face ring (see 699)
●697	1	BLOCDIR ROTARY SEAL
612	1	Seal housing
613	1	Seal (see 699)
614	1	Spring guide
615	1	Spring
616	1	Cage
●700	1	BLOCDIR BALL BEARING, COMPLETE
701	1	Retainer
●627	1	Stationary face pin
●703	1	Ball bearing
705	1	Bearing cap
706	4	Retainer screw (see 698)
708	1	Lubrication nipple
721	1	Lockwasher (see 698)
●797	1	SET OF BALL BEARING WASHERS AND GASKETS (704-707-717-731-733)

When ordering replacement parts, mention :

- the TYPE and SERIAL NUMBER of the pump (stamped on the pump plate)
- INSTRUCTIONS n° 1010-C00
- the REFERENCE and NAME of the parts required.

Note : Only complete assemblies or individual parts whose index number is preceded by (●) can be supplied.

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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