

INSTRUCTION MANUAL

**HP CIRCULATING PUMP
& FLUID SECTION, model 4 BALLS
(stroke 200 mm / 8")**

	Version	Pump #	Fluid section #
	40/1 - 750 cc std	# 49 224 134 xx xx	# 104 134 xx xx
	53/1 - 570 cc std	# 49 224 135 xx xx	# 104 135 xx xx
	53/1 - 570 cc st steel	# 49 225 743	# 105 743

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KREMLIN REXSON → SAMES KREMLIN

TRANSLATION FROM THE ORIGINAL MANUAL

IMPORTANT : *Before assembly and start-up, please read and clearly understand all the documents relating to this equipment (professional use only).*

THE PICTURES AND DRAWINGS ARE NON CONTRACTUAL. WE RESERVE THE RIGHT TO MAKE CHANGES WITHOUT PRIOR NOTICE.

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Dear Customer,

You are the owner of our new equipment and we would like to take this opportunity to thank you.

To make sure your investment will provide full satisfaction, special care has been taken by SAMES KREMLIN during all designing and manufacturing processes.

To obtain the best result, safe and efficient operation of your equipment, we advice you to read and make yourself familiar with instructions and service manual. Indeed, the non-compliance with instructions and precautions stated in this manual, could reduce the equipment working life, result in operating trouble and create unsafe conditions.

1. WARRANTY

We reserve the right to make changes; these changes may be carried out after the receipt of our order. No claim will be accepted as a consequence of any change carried out in the instruction manuals or in the selection guides.

Our equipment is checked and tested prior to shipment. In the case of a problem arising with the equipment, this must be in writing, within ten days from the delivery date.

SAMES KREMLIN warrants all equipment manufactured bearing its name, to be free from defect in material or workmanship for a period of 12 months (one shift per day or 1800 hours - 1 term reached) from the date of delivery. Work life is based on single shift working - 8 hours per day. Warranty claims for defective items will only be accepted in writing and will be verified and confirmed by us.

The warranty does not cover fair wear tear, damage or wear caused by misuse, improper maintenance or non-observance of our recommendations.

SAMES KREMLIN will repair or replace parts (carriage paid to our plant and accepted as defective by us). We shall not be liable for any losses, resulting from a production breakdown. Upon request, we can carry out service work at your premises; all expenses (travelling and accommodation) for SAMES KREMLIN technicians will be chargeable.

In the event that it is found that equipment has been tampered with, this will invalidate the warranty. Equipment that is bought in will be subject to the supplier's warranty.

2. SAFETY INSTRUCTIONS

GENERAL SAFETY INSTRUCTIONS



CAUTION : The equipment can be dangerous if you do not use it according to the rules mentioned in this instruction manual. Read carefully all the instructions hereafter before operating your equipment.

Only trained operators can use the equipment.

The foreman must ensure that the operator has perfectly taken in the safety instructions of this equipment as well as the instructions in the manuals of the different parts and accessories.

Read carefully all instruction manuals, label markings before operating the equipment.

Incorrect use may result in injury. This equipment is for professional use only. It must be used only for what it has been designed for.

Guards (air motor cover, coupling shields, housings,...) have been designed for a safe use of the equipment.



















The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.

Never modify the equipment. The parts and accessories supplied must be regularly inspected. Defective or worn parts must be replaced.

Never exceed the equipment components' maximum working pressure.

Comply with regulations concerning safety, fire risks, electricity in force in the country of final destination of the material. Use only products or solvent compatible with the parts in contact with the material (refer to data sheet of the material manufacturer).

PICTOGRAMS

					
NIP HAZARD	WARNING MOVING ELEVATOR	WARNING MOVING PARTS	WARNING MOVING SHOVEL	DO NOT EXCEED THIS PRESSURE	HIGH PRESSURE HAZARD
					
RELIEF OR DRAIN VALVE	WARNING HOSE UNDER PRESSURE	WEAR GLASSES OBLIGATORY	WEAR OF GLOVES IS OBLIGATORY	PRODUCT VAPOR HAZARDS	WARNING HOT PARTS OR AREAS
					
ELECTRICAL HAZARD	WARNING FIRE HAZARDS	EXPLOSION HAZARDS	GROUNDING	WARNING (USER)	WARNING SERIOUS INJURIES

PRESSURE HAZARDS



Current legislation requires that an **air relief** shut off valve is mounted on the supply circuit of the pump motor to let air off when closing the supply circuit. Without this precaution, the motor residual air of the motor may let the pump beat and cause a serious injury.

Please ensure that, a **material drain valve** is mounted on the material circuit to drain it (after shutting down air to the motor and the pressure relief) before any servicing on the equipment. These valves must be closed for air and opened for product when processing.

HIGH PRESSURE INJECTION HAZARDS

When working with high pressure equipment, special care is required. Fluid leaks can occur. Then there are injection risks in exposed parts of body that may cause severe injuries or amputations :



- Medical care must be handled immediately if product is injected under the skin or in other parts of the body (eyes, fingers).
- Never point the spray gun at any one. Never try to stop the spray with your hands or fingers nor with rags or similars.
- **Follow the shut down procedure and always depressurize air and fluid circuits** before carrying out any servicing on the gun (cleaning, checking, maintenance of the material or cleaning of the gun nozzles).
- For the guns equipped with a safety device, always lock the trigger when you do not start the gun.

FIRE - EXPLOSION - SPARKS - STATIC ELECTRICITY HAZARDS



A poor earth connection, inadequate ventilation, sparks or static electricity can cause an explosion or fire. to avoid these risks when using or servicing SAMES KREMLIN equipment, the following safety procedures must be followed :



- ensure a good earth connection and ground the parts to be handled i.e. solvents, materials, components and equipment,
- ensure adequate ventilation,
- keep working area clean and free from waste solvents, chemicals, or solid waste i.e. rags, paper and empty chemicals drums,
- never use electrical switches / power if in an atmosphere of volatile solvent vapour,
- stop working immediately in case of electrical arcs,
- never store chemicals and solvents in the working area.

TOXIC PRODUCT HAZARDS



Toxic products or vapours can cause severe injury not only through contact with the body, but also if the products are ingested or inhaled. It is imperative :

- to know the material products and their risks,
- notified or hazardous materials must be stored in accordance with the regulations,
- the material must be stored in an appropriate container, never place materials in a container where there is a risk of spillage or leakage,
- a procedure must be applied for the safe disposal of waste material. It must comply with all prevailing regulations and legislations of the country where the equipment is to be used,
- protective clothing should always be worn in compliance with the material manufacturers' recommendations,
- depending on the application and chemical safety instructions, safety glasses, hearing protective earplug, gloves, foot wear, protective masks and possible breathing equipment should be worn to comply with the regulations

(Refer to chapter "Safety equipment of SAMES KREMLIN selection guide).



CAUTION!

It is forbidden using any solvent or with halogenated hydrocarbon base and also products with these solvents facing **aluminium** or **zinc**. The non-compliance with the instructions may cause explosion hazards causing serious or fatal injuries.

EQUIPMENT REQUIREMENTS

**Guards (air motor cover, coupling shields, housings,...) have been designed for a safe use of the equipment.
The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.**

PUMP

Before carrying out any work, it is imperative to get used with the compatibilities of motors with pumps before coupling. The operator shall understand the equipment and the safety instructions. These instructions are available in the manuals of the pumps.



The air motor is designed to be mounted with a pump. Never modify any components or couplings. Where operating, please keep hands away from moving parts. Before starting up the equipment, please read the PRESSURE RELIEF instructions. Please ensure that any relief or drain valves fitted are in good working order.

HOSES

- Keep hoses out of circulation areas, moving parts or hot surfaces,
- Never expose product hoses to temperature higher than + 60°C / 140° F or lower than 0°C / 32° F,
- Never pull or use the hoses to move the equipment,
- Tighten all fittings as well as the hoses before operating the equipment,
- Check the hoses regularly; change them if they are damaged,
- Never exceed the maximum working pressure (MWP) indicated on the hose.

USED PRODUCTS

Considering the variety of products that may be used by the users and the impossibility to check off all chemical data, of possible reactions of chemicals to each other and their long term evolution, SAMES KREMLIN can not be considered as liable for :

- the bad compatibility of wetted parts,
- risks for staff and surroundings,
- for worn or out of order parts, for wrong working of equipments or units, as well as for the qualities of final product.

The user must know and prevent the possible risks as toxic vapours, fires or explosions due to used products. He shall determine the risks of immediate reactions or pursuant to repeated exposures of the staff.

SAMES KREMLIN shall not be liable for psychic injuries, direct or indirect material damages further to the use of chemicals.

3. INSTALLATION

■ HANDLING

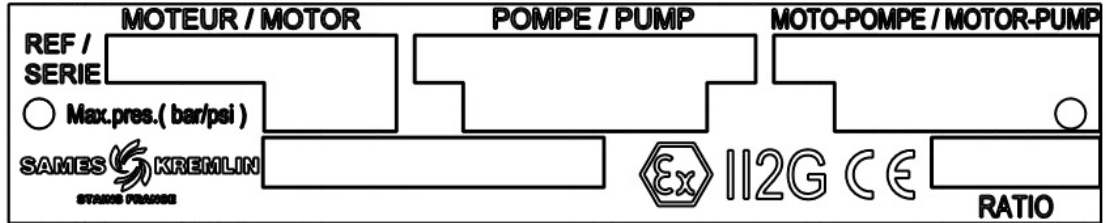
The pumps and the fluid sections with important weight and dimensions must be handled with the appropriate means.

■ STORAGE

Place the equipment safe from dampness after having closed the different air inlets and ports (plugs).

■ DESCRIPTION OF THE LABEL MARKING

Marking in accordance with the ATEX directive



SAMES KREMLIN STAINS FRANCE	Name and address of the manufacturer
MOTEUR / MOTOR	-
POMPE / PUMP	Fluid section part number and serial number. The two first numbers indicate the manufacturing year.
MOTO-POMPE / MOTOR-PUMP	Pump part number and serial number. The two first numbers indicate the manufacturing year.
II 2 G CE	CE : European conformity : For use in explosive area II : group II 2 : class 2 G : gas Surface equipment meant to an area where explosive atmospheres due to gas, vapours, mists are liable to appear from time to time in usual operating.



Associated to a pneumatic motor, the fluid sections must be grounded via the earth cable of that motor.

The earth cable must be grounded to a safe earth.

The pumps are designed to be installed in a spray booth.

■ CONNECTION OF THE SUBSETS

These fluid sections are designed for the coupling of pneumatic or hydraulic motors with similar stroke.

You must conform to a motor / fluid section association as planned by SAMES KREMLIN.

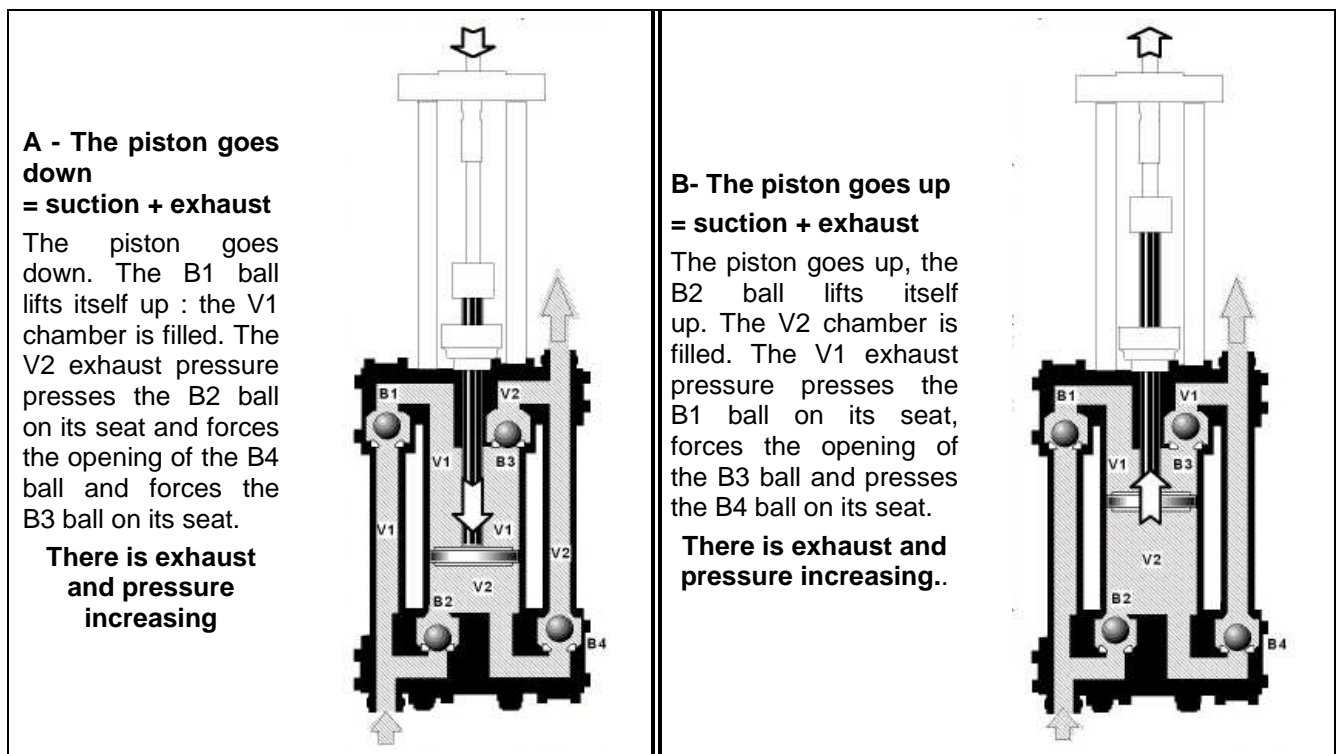
4. OPERATING

■ EXPECTED USE

These pumps are designed for the transfer, the pouring off or the spraying of different liquid or viscous fluids with a requested outlet flow and pressure.

■ OPERATING DESCRIPTION

DOUBLE EFFECT pump : suction and exhaust are carried out in the 2 translations stages.

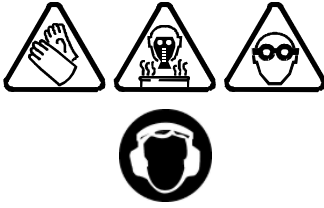


WARNING!

The frictions due to the displacement of fluid inside the pumps and accessories, as well as the one created by the tightness seals, generate static electricity that may cause fire or explosion. This is why the pump must be grounded (refer to the instruction manual of the motor for its grounding).

Never place hands on the suction port of the pump. The suction power can lead to serious injuries.

5. USE



Protective clothing (gloves, protective masks, glasses, hearing protective earplug, protective clothing...) should be worn to comply with the recommendations.

The working area must be correctly ventilated.

Guards (air motor cover, coupling shields, housings,...) have been designed for a safe use of the equipment.

The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.

■ ADJUSTMENTS

Before starting the equipment, half fill the cup as well as the 2 tanks with T lubricant.

The cup nut must be slightly tightened. A too important tightening would damage the cup seals. A wrench is supplied to allow a correct tightening.

Tightening of the cup :

- Fill the cup with T lubricant,
- Start the pump, then tighten the cup after 10 minutes, then one hour and then one day of operating,
- If you notice a leakage, the cup must be tightened.

Tightening instructions :

- Depressurize the motor (refer to pressure relief instructions),
- Depressurize the fluid circuit (refer to pressure relief instructions),
- Tighten the cup, clean it and fill it with T lubricant,
- Close the pump drain circuits,
- Open the motor air valve.

■ START UP

Guards (air motor cover, coupling shields, housings,...) have been designed for a safe use of the equipment.

The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.

The pumps are tested in our workshop with lubricant.

Before starting up, you must flush the pump with the appropriate solvent.

At the end of the working day, carry out a flushing with the appropriate solvent. We advice you to stop the fluid section in the "low position" to prevent material spreading on the piston rod.

■ TROUBLESHOOTING



Before any intervention on the pump, please carry out the release pressure and drain general instructions.

Guards (air motor cover, coupling shields, housings,...) have been designed for a safe use of the equipment.

The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.

To prevent from injuries, material injections, injuries due to moving parts or sparks during the stopping of the system, the assembly, the cleaning or changing of the nozzle, **you must follow the stages hereafter** before intervening :

- Close the guns,
- Shut off the air inlet using the pressure release to evacuate the residual air.
- Move the gun near to a metallic drum to get back the fluid. Keep it against the drum to maintain the grounding (if necessary use a wire to ground the metallic drum).
- Open the gun to drain the circuit.
- Open the drain valve of the pump and get back the fluid in a metallic drum correctly grounded.
- Let the drain valve open during the intervention.

Check the conformity of cabling before intervening.

DEFECTS	CAUSES	SOLUTIONS
Leakage at the cup seals	Insufficient tightening of the cup. Bad mounting of the seals Damaged or worn seals. Bad choice of the seals' material	Screw the cup. Check the mounting Replace them. Check the compatibility.
The cup seals get rapidly damaged	No lubricant in the cup (pumped product drying on the piston rod). Compatibility product / seals.	Clean, replace parts if necessary. During a long duration shutdown, stop the pump, the piston is in the the low position. Check.
The pump is stopped	The fluid is polymerized, hardened, dried in the pump. The cup nut is too tightened. Broken part(s) in the pump.	Clean the pump; change parts if necessary. Unscrew. Remove, check and replace.
The motor seems to operate but the pump does not deliver product	Internal parts of the motor defective. Defective coupling.	Check the operating of the motor. Check coupling.
The pump operates but irregular flow	Valve clogged on the seat, incorrectly mounted or worn. Air inlet in the suction circuit.	Check mounting, state of the parts, tightening of parts and seals.

DEFECTS	CAUSES	SOLUTIONS
At stop, pump piston carries on going down	Valve worn or incorrectly mounted Plug or drain valve not tightened	Check and replace parts.
At stop, pump piston carries on going up	Head piston seals or upper valve worn or incorrectly mounted. Plug or drain valve not tightened	Check and replace parts.
The piston is going down quickly (simple effect working)	Bad feeding of the pump. Product is too viscous. Lower valve worn. A foreign product obstructs the lower valve.	Check use parameters of the accessories (pressure on follower plate or suction rod,...). Accessories can be not adapted or clogged. Bad definition of the pump. Check and replace parts. Clean and check.
The piston goes up quickly	Valve worn or damaged. A foreign product obstructs the upper valve.	Check and replace parts. Clean and check.
The piston goes out and down at different speeds	Valve, head piston seals or cylinder worn. Seals incorrectly mounted or damaged	Replace parts. Check the mounting; change if necessary.
The pump does not deliver enough pressure	Insufficient air pressure to the motor (valve insufficiently open, air leak,...) Insufficient air inlet on the motor or outlet clogged.(hose not adapted) Cup or head piston seals too tightened.	Check; adjust. Check filter, mounting, hose not adapted. Check mounting or loosen cup nut.
Abnormal operating after racing or too important temperature.	Head piston or cup seals too tightened, damaged. Product drum empty.	Check mounting; reduce pumping rhythm. Replace parts if necessary. Fill the drum; check the suction circuit and possible air leakage.

6. MAINTENANCE

Guards (air motor cover, coupling shields, housings,...) have been designed for a safe use of the equipment.
The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.



WARNING!

Before any intervention, please follow the pressure release instructions and read carefully the safety instructions.

During a long duration shutdown, stop the pump when the piston is in low position.

■ PREVENTIVE MAINTENANCE

Daily care :

Check if there are leaks. Check that the hoses are in good conditions.

Keep the piston of the pumps clean to prevent from material drying.

Check the PE level inside the shell (keep the level halfway up). Fill it if necessary. The lubricant will normally be coloured by the material.

Check the PE level inside the two tanks located near the flanges. Fill them if necessary.

Tighten moderately if necessary the cup nut with the wrench provided.

Check the tightening of the different parts.

Manipulate (open and close) all the valves of the installation.

Keep the spray area clean.

Bimonthly care :

If the lubricant is excessively coloured in the cup, fill the cup with new lubricant. Leave the cup clean and clean it regularly with lubricant after having drained the lubricant.

Yearly care :

Remove the fluid section completely. Clean all the parts with the appropriate solvent cleaning. Install new seals during the assembly of the pump (refer to package of spare seals). Lubricate the piston and the inside of the cylinder to prevent from damaging the seals. Install new parts if necessary.

■ CURATIVE MAINTENANCE

We advice you to schedule a systematic maintenance after a given working time. The rhythm is defined by the maintenance staff of the user and is done according to the product, the rate of work and the regular using pressure. Refer to disassembly / assembly of the pump and of the spare parts.

7. DISASSEMBLY / ASSEMBLY

Guards (air motor cover, coupling shields, housings,...) have been designed for a safe use of the equipment.
The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.



WARNING!

Before any intervention, please follow the pressure relief and safety instructions.

Disassembly of the pump :

- Flush the pump,
- Stop the pump if possible in low or intermediate position,
- Shut off the pump main air supply,
- Carry out the relief pressure instructions,
- Disconnect the outlet and inlet hoses or the outlet and inlet suction systems,
- Take off the spring ring,
- Lift up the closing ring,
- Take off the two half bushes and remove the closing ring,
- Unscrew the 3 screws from the pump bracket,
- Take off the pump.

Flanges (26)

- Unscrew the 2 screws (22),
- Take off the protective tube (21),
- Drain and dismount the lubricate assembly which consists of :
 - the tank cover (33),
 - the tank (31),
 - the elbow (30),
 - the sleeve (29).
- Unscrew the cup nuts (3),
- Unscrew the 4 nuts (27),
- Remove the washers (28).
- Take off the lower flange assembly, check and replace if necessary the O-Rings (32),
- Remove the inlet (40) and outlet (42) units' assembly,
- Take off the cylinder (41), the piston rod (17) assembly and the upper flange assembly (26), check and replace if necessary the O-Rings (32),
- Take off and check the cylinder (41) and remove the adjustment blocks (51).



NOTA : If the cylinder is damaged, you must change at the same time the seals (Refer to § 'Disassembly of the piston seals').

Reinstall the parts in the reverse order of the disassembly sequence taking care of the following instructions :

During the assembly of the flanges, place the adjustment blocks if necessary.

During the assembly of the nuts (27), you must mount them with a maximum screwing torque of 250N.m / 184.4 ft/lbs.

Lower or upper cup seals :

- Unscrew the cup nut (3),
- Take off, check and change if necessary in the following order :
 - the 'F' washer (4),
 - the seals (60 & 61 or 65 & 66 depending upon version → refer to detail A & C - § 10),
 - the 'M' washer (6).
- Take off, check and change if necessary the O-Rings (23 & 45),
- Remove the lower flange (26).

Clean and reinstall the parts in the reversing order of the disassembly sequence (refer to seals' assembly - § 10).

Piston seals

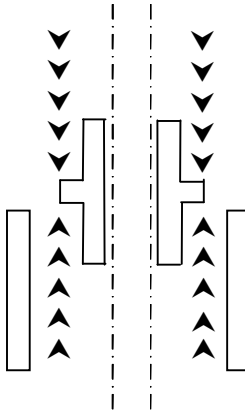
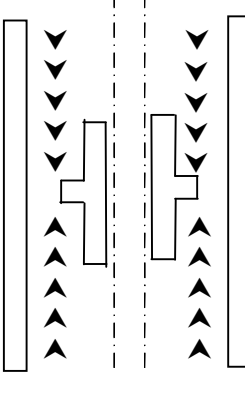
- Take off the rings (38),
- Take off the closing rings (34),
- Take off the two half bushes (37),
- Take off, check and change if necessary in the following order :
 - the 'M' washer (18),
 - the seals (62 & 63 or 67 & 68 depending upon version → refer to detail B - § 10)
 - the 'F' washer (20).
- Remove the piston (35),
- Take off, check and change if necessary the O-Ring (9) located at the middle of the piston rod (17).



NOTA : If the piston is damaged, when changing it, you must change the seals indicated previously (refer to § 'lower or upper cup seals').

Clean and reinstall the parts in the following order :

	Detail ①	Detail ②
<ul style="list-style-type: none">- Install the piston (35) in the piston rod (17),- Prepare the piston (35) to install the Chevron seals (9) (lower packings) → refer to detail ①,- Install the 'F' washer (20) in the lower part of the piston,- Install the seals (62 & 63 or 67 & 68 depending upon the version → refer to detail B - § 10),- Install the 'M' washer (18) in the lower part of the piston,- Add an adjustment block (69) if necessary,- Install the two stop bushes (37),- Install the rings (38) on the piston rod (17),- Lubricate the packing,- Insert the lower part of the cylinder (41) in the reverse order of the Chevron seals until reaching the seals and recovering them → refer to detail ②,		

<ul style="list-style-type: none"> - Install the other Chevron seals (upper packings) as well as the 'F' washer, the seals, the 'M' washer on the piston (35) → refer to detail ③, - Install the stop bushes (37), - Install the rings (38), - Make the cylinder slide upwards → refer to detail ④, - Lubricate the cylinder (41). - Add an adjustment block (69) if necessary. 	<p>Detail ③</p> 	<p>Detail ④</p> 
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Nota : the 'F' washers (4 & 20) are :

- plastic ones for the fluid sections # 104 134 0001 & 104 135 0001
- brass ones for the fluid sections # 104 134 0008 & 104 135 0008.

The plastic washers are in the spare parts of the package of seals of the concerned fluid sections.

Inlet unit valves :

- Unscrew and take off the terminals (10),
- Take off, check and change if necessary the O-Ring (9) and the first seal (11),
- Take off, check and change if necessary in the following order :
 - the retaining grids (12),
 - the springs (13),
 - the balls (14),
 - the spacers (15),
 - the seats (16),
 - the second O-Rings (11),
- Take off the inlet block (40).



NOTA : Check the seat of each valve. If the seat is damaged, when changing it, you must change the ball.

Clean and reinstall the parts in the reverse order of the disassembly sequence.

Outlet unit valves :

- Unscrew and take off the terminals (10),
- Take off, check and change if necessary the O-Ring (9) and the first seal (11),
- Take off, check and change if necessary in the following order :
 - the second O-Rings (11),
 - the seats (16),
 - the balls (14),
 - the springs (13),
 - the spacers (15),
 - the retaining grids (12).
- Take off the outlet block (42).



NOTA : Check the seat of each valve. If the seat is damaged, when changing it, you must change the ball.

Clean and reinstall the parts in the reverse order of the disassembly sequence.

Before intervening on the equipment :

- **Clean the parts with the appropriate cleaning solvent,**
- **Install new seals if necessary after having lubricated them,**
- **Lubricate the piston and the inside of the cylinder to prevent from damaging the seals,**
- **Install new parts if necessary.**

8. CODIFICATION OF THE PUMPS

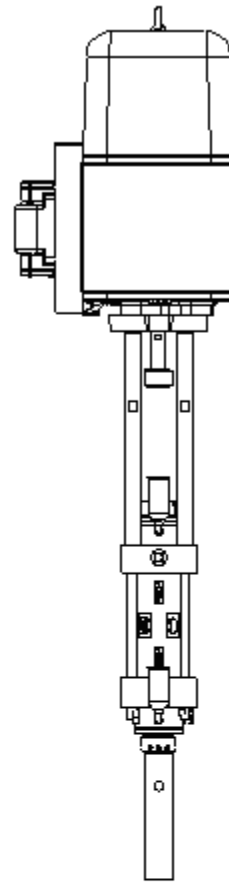
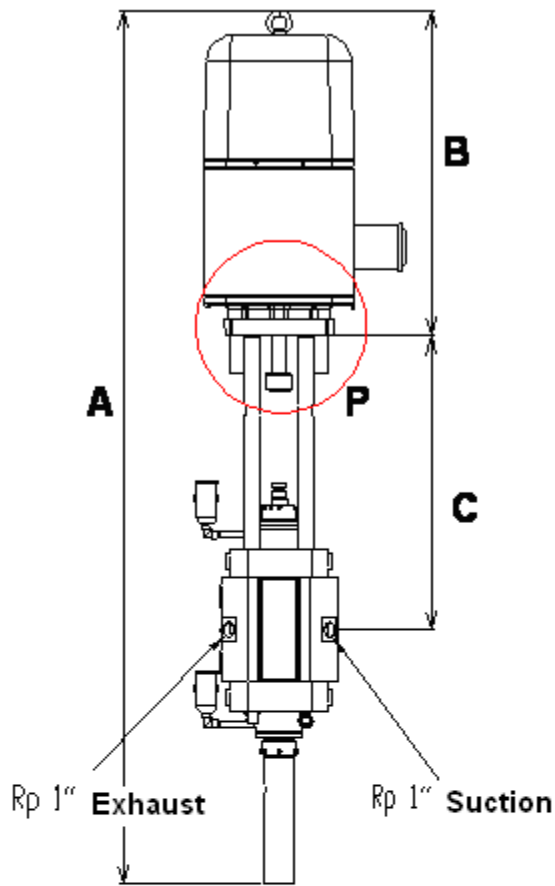
Pump		Motor associated		Fluid section	
Version	#	Model	#	Model	#
40/1 - 750cc	49 224 134 xxxx	9200	105 292	750cc std	104 134 xxxx
53/1 - 570cc	49 224 135 xxxx			570cc std	104 135 xxxx
53/1 - 570cc inox	49 225 743			570cc st steel	105 743

9. SPECIFICATIONS

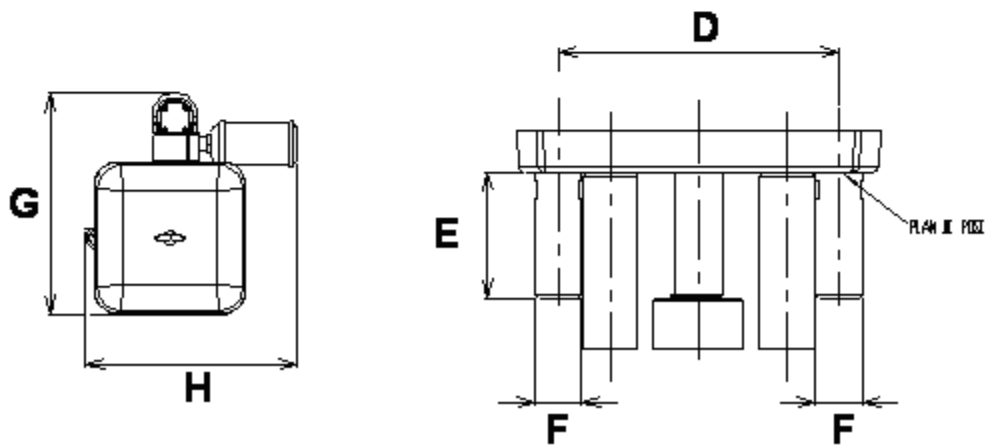
■ FEATURES OF THE PUMPS

FEATURES	Pump # 49 224 134 xx xx	Pump # 49 224 135 xx xx # 49 225 743
Pressure ratio	40/1	53/1
Maximum air pressure	6 bar / 87 psi	6 bar / 87 psi
Maximum fluid pressure	240 bar / 3481 psi	318 bar / 4612 psi
Delivery per cycle	750 cc / 25.35 oz	570 cc / 19.3 oz
Fluid flow rate	15 l for 20 cycles / mn	11.4 l for 20 cycles / mn
Noise level	< 80 dBa	< 80 dBa
Weight	135 kg / 297.5 lb	120 kg / 264.5 lb

■ PUMP DIMENSIONS



P Detail



1:3 SCALE

Ind.	A	B	C	D	E	F	G	H
mm	1857	692	624	180	80	∅ 80	470	452
"	73.1	27.2	24.6	8	3.1	∅ 3 5/32	18.5	17.8

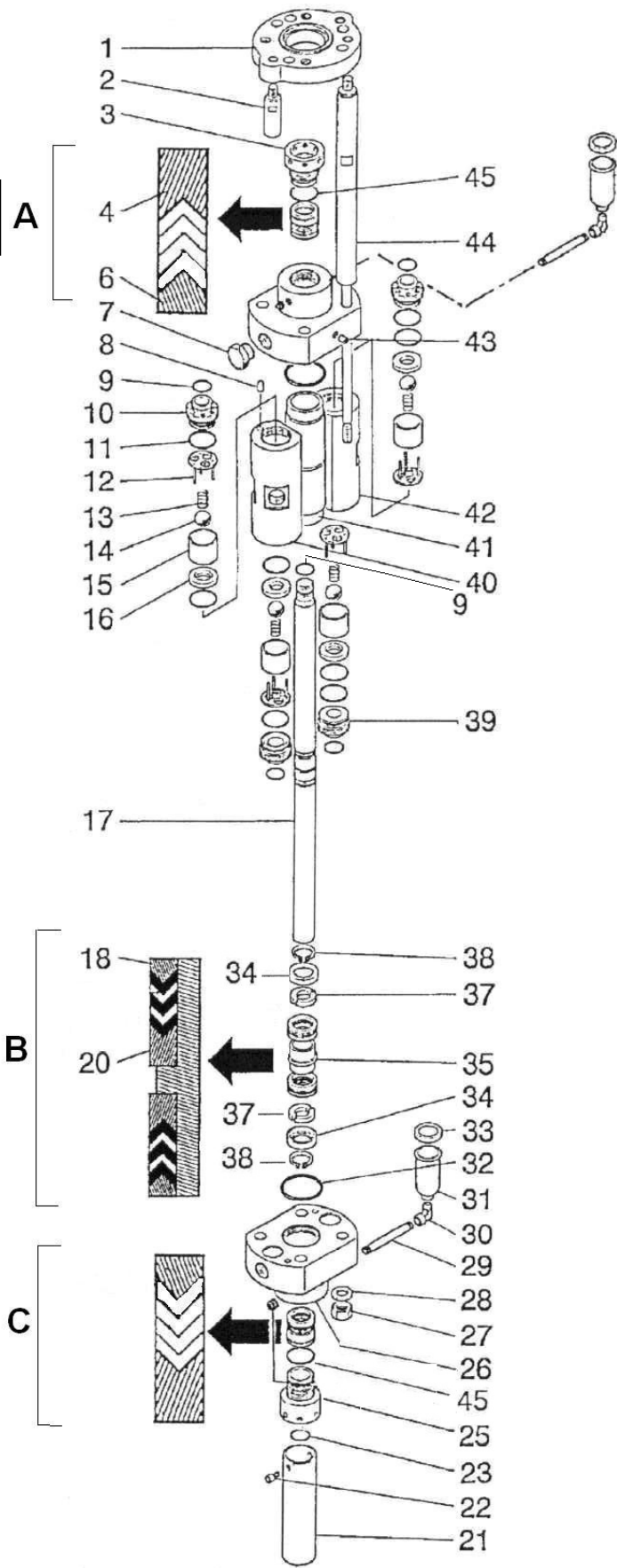
■ FEATURES OF THE FLUID SECTIONS

Features	FLUID SECTION, model 750cc		
	# 104 134 00 01	# 104 134 00 08	# 104 134 01 01
Capacity	375 cc / 12.7 oz		
Delivery per cycle	750 cc / 25.35 oz		
Stroke	200 mm / 8"		
Fluid inlet connection	F 1" G		
Fluid outlet connection	F 1" G		
Weight	93 kg / 451.8 lb		
Maximum fluid temperature	80°C / 176° F	120°C / 248° F	80°C / 176° F
Wetted part	Treated steel, hard chromium steel		Treated steel, hard chromium steel Carbide seats and balls
Cup packings	PU / UHMW	PTFE G / PEEK	PU / UHMW
Piston packings	PTFE V / UHMW	PTFE G / PEEK	PTFE V / UHMW
Tightness seals	FPM		FPM

Features	FLUID SECTION, model 570 cc		
	104 135 0001	104 135 0008	105 743
Capacity	285 cc / 9.6 oz		
Delivery per cycle	570 cc / 19.3 oz		
Stroke	200 mm / 8"		
Fluid inlet connection	F 1" G		
Fluid outlet connection	F 1" G		
Weight	82 kg / 180.8 lb		88 kg / 194 lb
Maximum fluid temperature	80°C / 176° F	120°C / 248° F	80°C / 176° F
Wetted part	Treated steel, hard chromium steel		Steel
Cup packings	PU / UHMW	PTFE G / PEEK	PU / UHMW
Piston packings	PTFE V / UHMW	PTFE G / PEEK	PTFE V / UHMW
Tightness seals	FPM		FPM

10. EXPLODED VIEW AND PARTS' LIST

Refer to for seals' assembly ind. A , B , C



■ PARTS' LIST

		Fluid section, model 750 cc			
		104 134 00 01	104 134 00 08	104 134 01 01	
Ind.	Description	#	#	#	Qty
1	Connecting plate	207 284			1
2	Pin	209 582			2
3	Cup nut	209 325			2
*4	'F' washer	210 362 (Seal kit)	211 713 (Seal kit)	210 362 (Seal kit)	2
6	'M' washer	55 581			2
7	Plug, model 1"	551 247			6
8	Cotter-pin	88 467			4
10	Terminal	207 815			2
*12	Retaining grid	207 496			4
*13	Spring	625 519			4
*14	Ball, model Ø 32	86 032	86 032	87 532	4
15	Spacer	207 819			4
*16	Seat	207 818	207 818	211 175	4
*17	Piston rod	207 820			1
18	'M' washer	207 826			2
*20	'F' washer	210 364 (Seal kit)	211 716 (Seal kit)	210 364 (Seal kit)	2
21	Protective tube	209 307			1
22	Screw, model CHc M 5x10	88 120			2
25	Plug, model 1/4G	906 333 102			2
26	Flange	207 807			2
27	Lock nut	91 225			4
28	Washer	91 226			4
29	Sleeve	207 812			2
30	Elbow, model MF	552 431			2
*31	Tank	107 011 06			2
33	Tank plug	107 011 10			2
34	Closing ring	208 301			2
*35	Piston	207 824			1
*37	Stop bush	208 300			2
*38	Ring	88 497			2
39	Terminal	207 817			2
40	Inlet unit	207 814			1
*41	Cylinder	207 823			1
42	Outlet unit	207 816			1
43	Plug, model 1/8"	906 333 106			2
44	Tie-rod	207 808			4
51	Adjustment block	208 124			4
*52	Seal kit	106 981 (Ind. 4-9-11-20-23-32-45-60-61-62-63)	107 283 (Ind. 4-9-11-20-23-32-45-65-66-67-68-69)	106 981 (Ind. 4-9-11-20-23-32-45-60-61-62-63)	1
53	Wrench	207 835			1
54	T lubricant (125 ml)	149 990 020			1

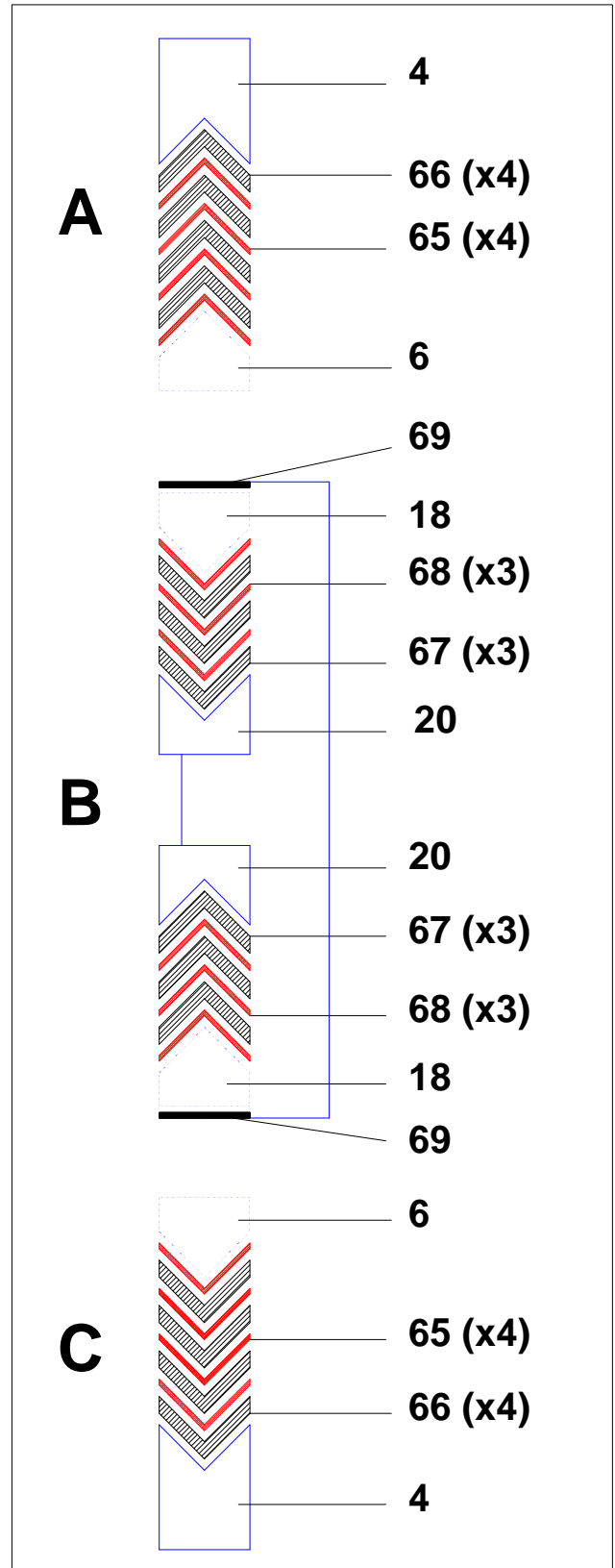
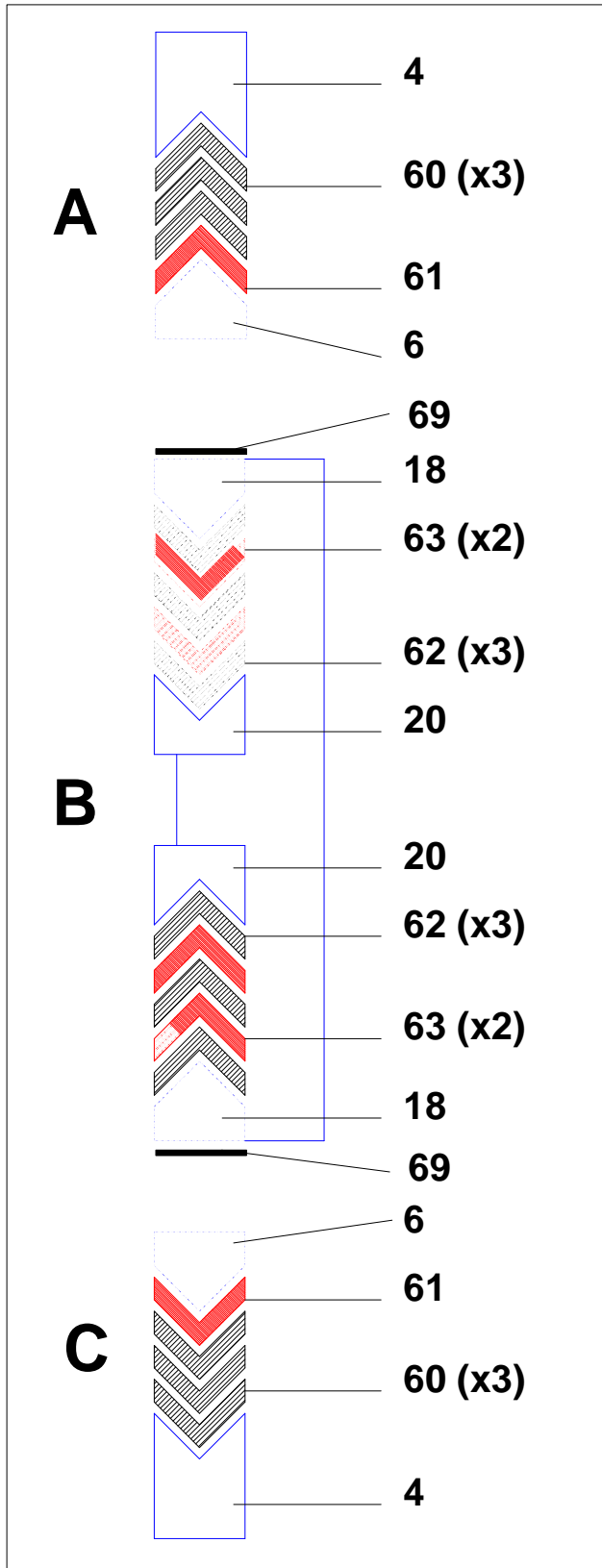
■ PARTS' LIST

		Fluid section, model 570 cc			
		104 135 00 01	104 135 00 08	105 743	
Ind.	Description	#	#	#	Qty
1	Connecting plate	207 284			1
2	Pin	209 582			2
3	Cup nut	209 325	209 325	210 221	2
*4	'F' washer	210 362 (Seal kit)	211 713 (Seal kit)	210 362 (Seal kit)	2
6	'M' washer	55 581	55 581	210 204	2
7	Plug, model 1"	551 247	551 247	906 314 219	6
8	Cotter-pin	88 467			4
10	Terminal	207 815	207 815	210 208	2
*12	Retaining grid	207 496	207 496	210 213	4
*13	Spring	625 519	625 519	91 643	4
*14	Ball, model Ø 32	86 032	86 032	87 332	4
15	Spacer	207 819	207 819	210 212	4
*16	Seat	207 818	207 818	210 211	4
*17	Piston rod	207 820	207 820	210 214	1
18	'M' washer	207 832	207 832	210 224	2
*20	'F' washer	210 363 (Seal kit)	211 720 (Seal kit)	210 363 (Seal kit)	2
21	Protective tube	209 307			1
22	Screw, model CHc M 5x10	88 120			2
25	Plug, model 1/4G	906 333 102	906 333 102	552 237	2
26	Flange	207 807	207 807	210 203	2
27	Lock nut	91 225			4
28	Washer	91 226			4
29	Sleeve	207 812	207 812	210 206	2
30	Elbow, model MF	552 431			2
*31	Tank	107 011 06			2
33	Tank plug	107 011 10			2
34	Closing ring	207 822	207 822	210 228	2
*35	Piston	207 830	207 830	210 223	1
*37	Stop bush	207 821	207 821	210 227	2
*38	Ring	88 497	88 497	88 902	2
39	Terminal	207 817	207 817	210 210	2
40	Inlet unit	207 814	207 814	210 207	1
*41	Cylinder	207 829	207 829	210 222	1
42	Outlet unit	207 816	207 816	210 209	1
43	Plug, model 1/8"	906 333 106	906 333 106	552 236	2
44	Tie-rod	207 808			4
51	Adjustment block	208 124	208 124	-	4
*52	Seal kit	107 036 (Ind. 4-9-11-20-23-32-45-60-61-62-63)	107 284 (Ind. 4-9-11-20-23-32-45-65-66-67-68-69)	107 036 (Ind. 4-9-11-20-23-32-45-60-61-62-63)	1
53	Wrench	207 835			1
54	T lubricant (125 ml)	149 990 020			2

Assembly of the seals

Seal kits : # 106 981 & 107 036

Seal kits : # 107 283 & 107 284



Composition of the seal kits (Ind. 52)

		Seals :		Qty	
		PU / PEHD - PTFE V / PEHD			
Ind.	Description	Fluid section, model 750 cc 104 134 00 01 104 134 0101		Fluid section, model 570 cc 104 135 00 01 105 743	
		Seal kit # 106 981		Seal kit # 107 036	
9	FPM O-Ring	84 479		5	
11	FPM O-Ring	84 480		8	
23	FPM O-Ring	80 025		1	
32	FPM O-Ring	84 481		2	
45	FPM O-Ring	84 180		2	
60	PU chevron seal	84 331		6	
61	UHMW chevron seal	210 907		2	
62	UHMW chevron seal	210 219	210 225	6	
63	PTFE chevron seal 20% glass	210 906	211 046	4	
69	Adjustment block	211 719	-	2	
4	Female washer (PA 11)	210 362		2	
20	Female ring (PA 6/6)	210 364	210 363	2	

		Seals :		Qty	
		PTFE G / PEEK - PTFE G / PEEK			
Ind.	Description	Fluid section, model 750 cc 104 134 00 08		Fluid section, model 570 cc 104 135 00 08	
		Seal kit # 107 283		Seal kit # 107 284	
9	FPM O-Ring	84 479		5	
11	FPM O-Ring	84 480		8	
23	FPM O-Ring	80 025		1	
32	FPM O-Ring	84 481		2	
45	FPM O-Ring	84 180		2	
65	PEEK chevron seal	211 714		8	
66	PTFE G chevron seal	211 715		8	
67	PTFE G chevron seal	211 718	211 722	6	
68	PEEK chevron seal	211 717	211 721	6	
69	Adjustment block	211 719	211 723	2	
4	Female washer	211 713		2	
20	Female ring	211 716	211 720	2	

The adjustment block (Ind. 69) is mounted if necessary.

* Preceding the index number denotes a suggested spare part.