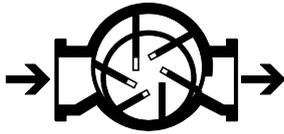
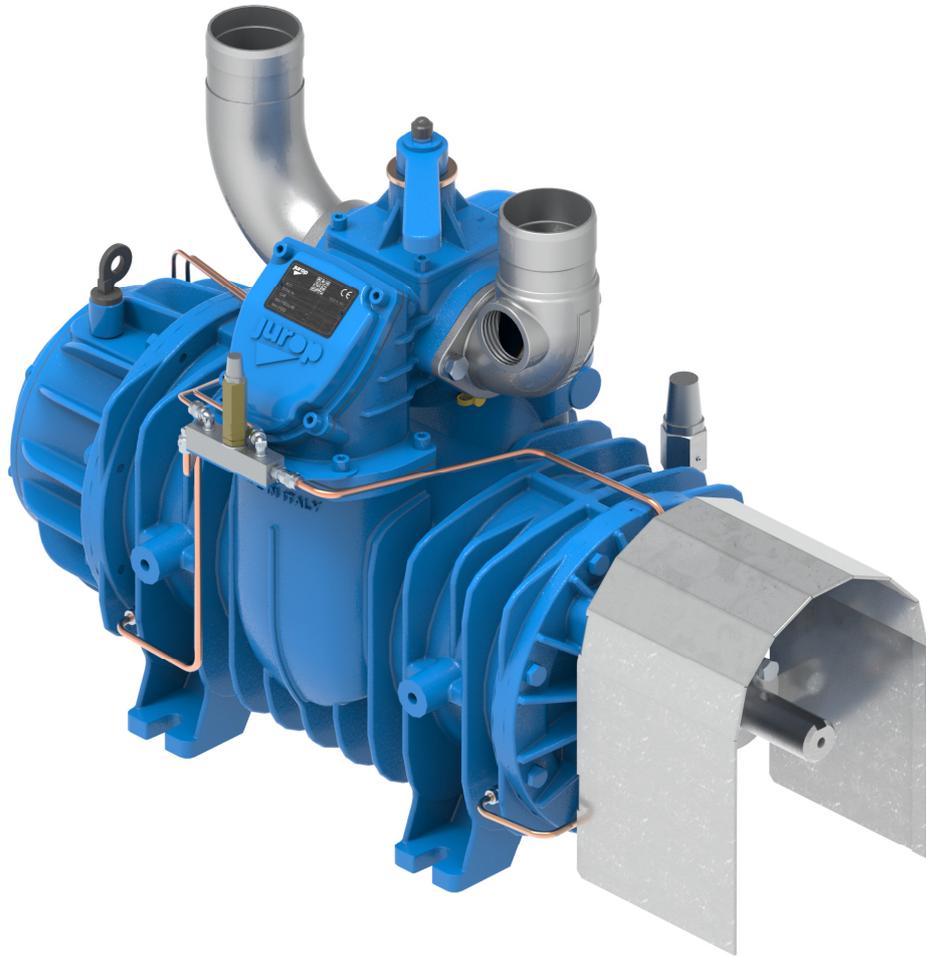


EN

R 260



ORIGINAL INSTRUCTIONS



**INSTALLATION, USE AND
MAINTENANCE MANUAL**



Rev. 05
05-02-2025

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

COMPANY WITH
ENVIRONMENTAL SYSTEM
CERTIFIED BY DNV
ISO 14001

2025 – **Juop** – Azzano Decimo (PN)

Reproduction, electronic storage and dissemination, even partial, are prohibited.

Juop reserves the right to modify the products described in this manual without prior notice.

Any product names mentioned herein are the trademarks of their respective owners.

Contents

1. General warnings	pag. 4	SPARE PART DATA SHEET – R 260 / R 260 HYD	19
1.1 Introduction	4	SPARE PART DATA SHEET – R 260 WITH SIDE OIL TANK	21
1.2 Spare part request	4	SPARE PART DATA SHEET – R 260 ACCESSORIES	23
1.3 Warranty terms and conditions	4		
2. Technical data	pag. 5		
2.1 Dimensions and arrangements	5		
2.2 Performances	6		
2.3 Usage limitations	6		
2.4 Sound pressure level	6		
2.5 Lubrication	6		
3. Safety and accident prevention	pag. 7		
3.1 General recommendations	7		
3.2 Intended use	7		
3.3 Conveyed fluids	7		
4. Installation	pag. 8		
4.1 Compulsory accessories	8		
4.2 Checking upon receipt	8		
4.3 Storing in the warehouse	8		
4.4 Handling and installation	8		
4.5 Mounting	8		
4.6 Vacuum – Pressure Line	9		
4.7 Overheating alarm (optional)	9		
4.8 Vacuum-pressure inverter: remote control actuators	10		
4.9 Pump mounting – Drive connection	11		
5. Start up	pag. 13		
5.1 Pump starting-up	13		
5.2 Precautions when starting the system	13		
6. Maintenance	pag. 14		
6.1 Ordinary maintenance	14		
6.2 Extraordinary maintenance	15		
7. Malfunctions: troubleshooting	pag. 17		
8. Scarapping	pag. 17		
9. Accessories	pag. 18		

1. General warnings

1.1. Introduction

- This booklet contains the necessary instructions for a correct installation, running, use and maintenance of the pump, as well as some practical suggestions for a safe operating.
- The knowledge of the following pages will grant a long and trouble-free operation of the pump.
- Following the instructions below contributes to limiting pump repair expenses by extending its duration, as well as preventing hazardous situations, thereby increasing its reliability.
- If the pump is driven by an hydraulic motor please refer to manufacturer's specific manual.
- It is recommended to:
 - Read, understand and apply carefully the instructions before running the pump.
 - Keep the booklet at hand and have it known to all operators.
- Below is a brief description of the symbols used in this manual.



If these safety rules are not respected, operators can be injured and the pump or oilers damaged remarkably.



If these safety rules are not respected, the pump or system can be damaged.



Suggestions for an environment friendly use of the pump.



Useful information for an easy usage and maintenance of the pump.

- The graphic representations and photographs contained in this manual are there to illustrate the product in the parts that make it up and in specific operating phases. Though the model shown in the manual may differ from the one purchased, the operating principle at the base of the illustrated operating phase is the same.
- Every R260 has to be fitted with its own tag reporting the following data: Model, Serial number, Year, Max speed, Max pressure.

<small>Via Crosera, 50 - 33082 Azzano Decimo - ITALY</small>	
MADE IN ITALY	
MOD.	
SERIAL No.	
YEAR	
MAX PRESSURE (bar)	
MAX SPEED (rpm)	

Pic. 1.1

1.2. Spare part request

- Use only **genuine spare parts** for maintenance and repairs. To order spare parts, provide the following details:

EXAMPLE:

a) The model of the pump (see pump tag)	R 260
b) The serial number of the pump (see pump tag)	J90001
c) A description of the parts (see parts list)	VANE
d) The quantity (see parts list)	5
e) The code number of the part (see parts list)	16016 042 00

1.3. Warranty terms and conditions

- Compliance with the installation, use and maintenance instructions provided by this manual **is crucial for the recognition of warranty** against defective parts.

2. Technical data

- Sliding vanes vacuum pump injection cooled. Is meant for heavy duty.
- The suction unit consists of a 4-way valve (which acts as flow inverter between the suction line and the discharge line) and of a suction one-way non-return valve, all integrated to the vacuum pump in a single in-built manifold.
- Automatic lubrication. Copper oil piping. Rear oil tank. Side oil tank available on request.
- Built-in vacuum-pressure changeover valve. Pneumatic or hydraulic actuator are available.

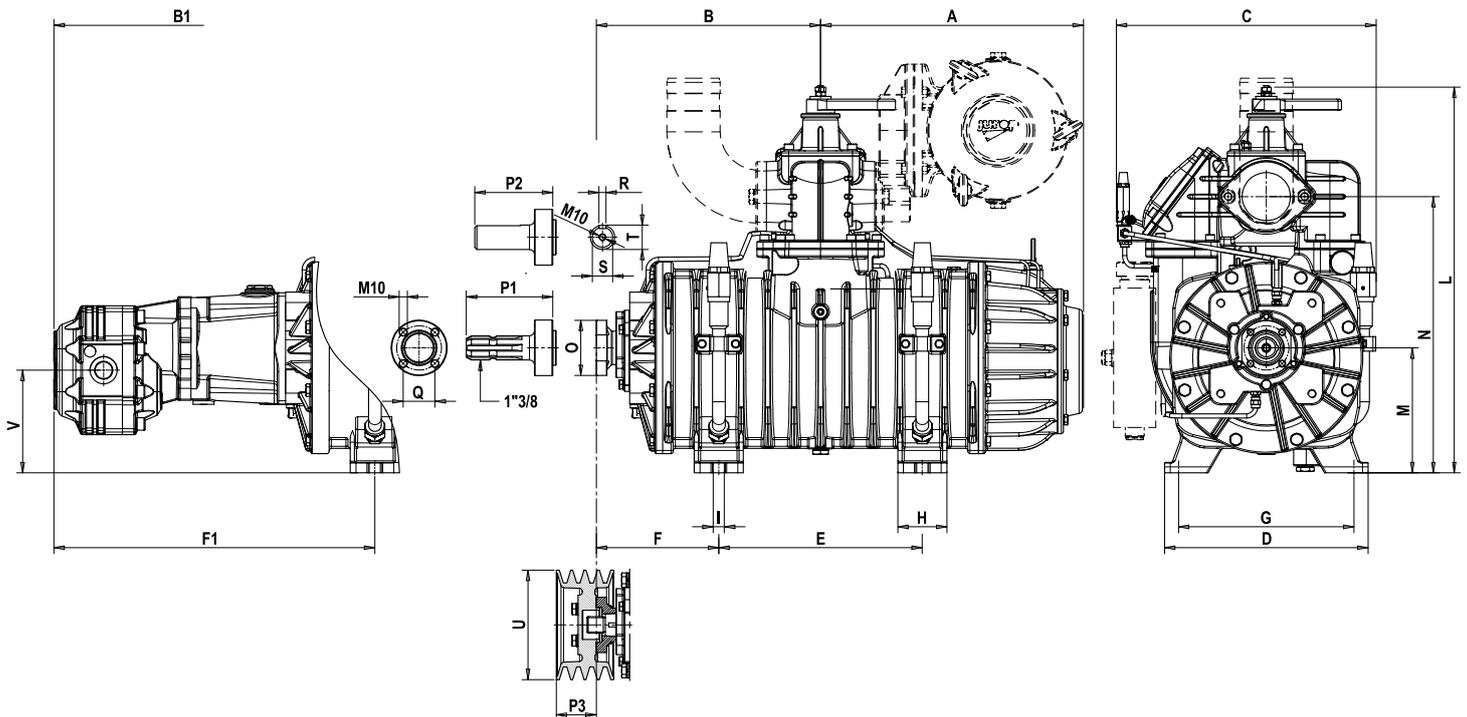
STANDARD EQUIPMENT

- Sliding-vanes, air cooled vacuum pump.
- Asbestos-free sliding vanes.
- Automatic lubrication by means of a volumetric pump and an oil tank.
- Asymmetrical manifold with check valve installed on the pump inlet.
- Pivoting suction and exhaust conveyors in aluminum alloy.
- Direct transmission with smooth or splined shaft (ASAE 1 3/8").
- Counter clockwise rotation.
- Injection cooled.

AVAILABLE ON REQUEST

- Clockwise rotation.
- Side oil tank.
- Transmission with hydraulic motor.
- Gearbox transmission.
- Pulley for the belt drive.
- Pneumatic actuator for the vacuum/pressure changeover valve.
- Hydraulic actuator for the vacuum/pressure changeover valve.
- Safety thermostat.

2.1. Dimensions and arrangements



R 260	A	B	B1	C	D	E	F	F1	G	H	I	L
mm	374,5	320	602	370	290	290	175	457	250	70	16	553,5
in	14,8	12,6	23,7	14,5	11,4	11,4	6,9	18	9,8	2,7	6,2	21,8

R 260	M	N	O	P1	P2	P3	Q	R	S	T	U	V
mm	179	396,5	79	123	111	57	45	10	29	35	157 / 207	147
in	7	15,6	3,1	4,9	4,4	2,2	1,8	0,4	1,1	1,4	6,2 / 8,1	5,8

2.2. Performances

Performances		R 260	
Maximum speed		1300 rpm	
Air flow at free air condition		10300 l/min	364 CFM
Air flow at 60% vacuum rate		8600 l/min	304 CFM
Maximum vacuum		95 %	28,5 lnhg
Maximum vacuum at continuous duty		70 %	21,0 lnhg
Power required at 0,5 bar rel (1,5 abs) at maximum vacuum		14,5 kW	19,5 HP
Max operating rel. pressure		2 bar abs	29 psi
Noise (60% vacuum rate, distance of 7 meter)		78 dB (A)	
Oil consumption		130 g/h	80 drops/min
Rear oil tank capacity		2,3 l	
Weight	Direct transmission (smooth or splined shaft)	170 kg	375 lbs
	Hydraulic transmission	205 kg	450 lbs

REFERENCE CONDITIONS	
Conveyed gas: air	Vacuum condition: atmospheric discharge
Ambient reference temperature: 20°C (68°F)	Pressure condition: atmospheric suction
Absolute reference pressure: 1013mbar (14.7psi)	Actual performance may vary of ± 5%

2.3. Usage limitations

Model	Max. Speed (Direct – HDR)	P bar abs (psi)	T °C (°F)	Room Temperature
R 260	1300 rpm	2 bar abs (29 psi)	180 °C (356 °F)	-20 ÷ +40 °C (-4 ÷ +104 °F)

P: absolute pressure during delivery	T: temperature during delivery
--------------------------------------	--------------------------------

2.4. Sound pressure level

Lw (A)		
Noise power of the only pump, without drive transmission suction group, mufflers.		[dB(A)]
RPM	VACUUM / PRESSURE	RV 260
NOMINAL SPEED	vac 80%	90
	Δ press 0,6 bar	104

2.5. Lubrication

- To operate correctly, the machine must be lubricated/greased regularly, using the recommended products listed in the tables below.
- Products are recommended according to working temperature and are in compliance with normative:
 - ISO VG: industrial sector lubricants (recommended);
 - SAE: Automotive sector lubricants (equivalent).
- Carry out the operations above following the instructions provided in this manual.
- Recommended lubricant: mineral oil.

T°	Viscosity	ENI	ESSO	SHELL	TOTAL	MOBIL	BP	TEXACO	Q8
< 10°C	ISO VG 46	Acer 46	Nuto 46	Morlina oil 46	Drosera MS 46	Nuto H 46	Bartran HV 46	Rando HD 46	SHUBERT 46
> 10°C	ISO VG 150	Acer 150	Nuto 150	Morlina oil 150	Drosera MS 150	Nuto H 150	Bartran HV 150	Rando HD 150	SHUBERT 150

- Recommended grease (range temperature: from -20°C to +40°C): grease NLGI 2.

3. Safety and accident prevention



Attention: carefully apply these prescriptions.

3.1. General recommendations

- When transporting the compressor use proper slinging. Store the compressor in stable places.
- Installation and maintenance must be carried out with the unit totally disengaged from its drive system and must be performed by qualified personnel.
- Use adequate clothing (avoid ties, loose sleeves, necklaces and so on) and suitable protection equipment (gloves, protection glasses, boots...).
- Before each maintenance operation, stop the pump and restore the atmospheric pressure.
- Make sure that all the parts of the unit are idle and cool, before performing any maintenance operation.
- To prevent errors and hazardous situations, establish what each operator is responsible for in the different maintenance operations.
- Do not start the machine if the protection devices provided for transmissions are removed. Replace damaged part.
- Final manufacturer must make the transmission inaccessible by means of a fixed guard or interlocked movable guard.
- Operators working nearby must avoid prolonged exposure to the noise emitted by the aspirator, if not equipped with the proper ear-protection devices (IPDs recommended: ear protectors).
- When the pump is running, some parts may reach very high temperatures (above 70°C). Use all necessary precautions to avoid contact.
- Avoid accidental suction of solids: solids may be projected at high speed through the exhaust manifold and cause injuries. A filter must be mounted on the suction line (Mesh 55).
- Pressure relief valve: point the air flux away from the operators.
- Do not use the aspirator over its designed limits: the machine may be damaged and the operator may be injured.



Do not exceed the speed and the power supply parameters indicated in the technical tables (see par. 2.2 - 2.3).

- Based on the final use of the decompressor, the insertion in the housing machine and the typology of the same, the designer of the housing machine must apply safety signals (pictograms) to warn the operator on the risk still present. These pictograms essentially refer to three categories:
 - Signals prescribing the use of Individual Protection Devices (IPDs) such as, in this case, the use of gloves and ear protectors.
 - Signals indicating to pay particular attention to the dangers related to the machine's components, such as: risk of dragging in the transmission equipment and contact with hot surfaces.

- Signals indicating specific parts of the machine for an easier identification, such as: greasing points, oil tanks, etc.

3.2. Intended use

- R260 vacuum pump is commonly used on stationary or mobile equipment for suction and transfer by means of vacuum or so-called pneumatic-transportation of liquid and solid wastes. Any other usage shall be considered improper.
- R260 is air-cooled and consequently foreseen for a non-continuous duty. R260 do not accept operating temperatures over 180°C, checked at not more than 150 mm from the discharge connections.
- In order to the maximum efficiency of the forced air cooling system the filters of the injection valves must be kept clean.
- Do not suck toxic substances and inflammable or explosive gasses, since the internal components of the pump may reach high temperatures.



Avoid suction of toxic (poisonous) explosive or flammable gasses because internal components may reach high temperatures.

- Avoid suction of liquids or solids, they can seriously damage the pump.



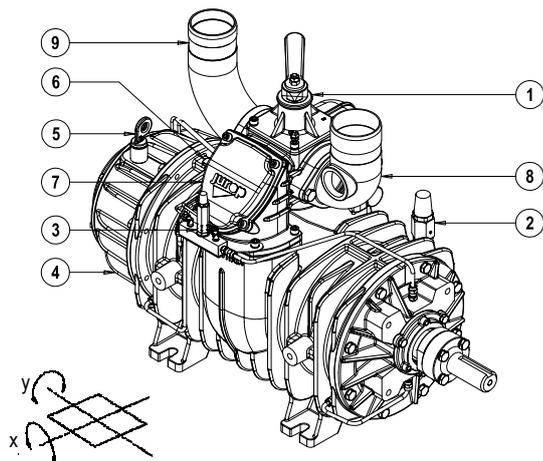
Attention: liquids or solids infiltrations can seriously damage the pump.

- Do not run the pump over its designed operating limits (see par. 2.3): it may break and transmission can be damaged.

3.3. Conveyed fluids

- R260 is suitable for conveying filtered air. Before conveying other kind of gases, verify compatibility with pump's characteristics.
- The machine was not designed and built to operate in environments with potentially explosive atmosphere (outdoor or indoor).
- Please contact JUROP's Technical dept. if necessary.

4. Installation



Pic. 4.1

1.	Vacuum/Pressure change-over valve
2.	Air injection valves (with sintered filter)
3.	One-way valve
4.	Oil tank
5.	Oil filling port and dip stick
6.	Vanes inspection port
7.	Non-return valve (Intake manifold)
8.	Suction conveyor
9.	Exhaust conveyor

4.1. Compulsory accessories

- Compulsory accessories for a correct running of the pump:
 - Safety filter mounted between the pump and the secondary shutoff.
 - Over-pressure safety relief valve.

4.2. Checking upon receipt

- When the goods are delivered, make sure that all parts listed on the delivery note are in perfect condition and have suffered no damage during shipping.
- Remove the parts of the packaging that can be dangerous if sucked by the compressor.
- Make sure the vacuum pump has its identification plate. Pumps without such identification are to be considered anonymous and potentially dangerous: in such an event, they must not be used, otherwise the manufacturer will be deemed free from any liability whatsoever.

4.3. Storing in the warehouse

- If the compressor will not be installed inside a short time after delivery:
 - Store in a closed and dry place.

- Remove the guards from the ports and spray a film of protective oil over the inner surfaces of the body, rotors and sides. Then attach again the guards.
- Renew the preserving oil periodically.
- To temporarily store a used pump, follow the instructions below:
 - Thoroughly clean the pump.
 - Equip the pump with suitable anti-corrosion protection.

4.4. Handling and installation

- Before each movement, verify that the lifting equipment has a suitable capacity (check the weight of the decompressor, possibly showed in this manual, in the paragraph 2.1).
- Do not lift the packaging or the machine when moving more than 50 cm from the ground. Proceed with the final lifting only near the installation point.
- Harness the machine with suitable straps / chains near the main body, paying attention to the position of the mass centre of gravity to ensure the load stability.



Warning: do not stand under the machine when it is lifted during the installation.

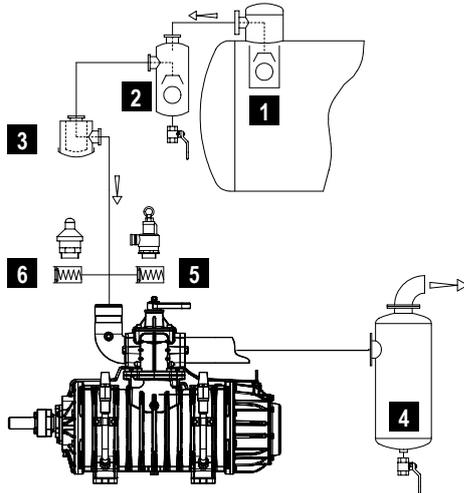
4.5. Mounting

- The pump must be assembled for an easy access for maintenance operations and secured rigidly to a frame or levelled base (max. 3° slant to the horizontal plane. See Fig. 4.1). The base must be such as to avoid vibrations, bending or deformation.
 - It is recommended to install the pump on vibration adsorbing pads to reduce the noise and vibrations produced during its operation.
 - Leave enough space around the pump to allow the free circulation of air for cooling; avoid exposure to dirt and debris.
 - Provide the necessary space to reach all points of lubrication control (oil level), and the oil tank filler cap, the lever of the 4-way switch, vanes inspection ports. See Pic. 4.1.
 - In case of R260 with hydraulic motor, provide the necessary space to disassemble the motor itself and proceed with joint lubrication.
 - Provide for suitable manoeuvring spaces of the inverter lever. The control lever has two possible switching positions well defined by the latches and numbers reported on the fusion. It is directly connected to the internal diverter tang of the inverter, making it very intuitive: 90° of the lever switching corresponds to 90° of the inverter switching.
 - Based on the functionality of the system which will house the decompressor, the designer of the end machine, must:
 - Properly signal the functionality of the inverter according to the position of the manual operating lever or of the pneumatic actuator or of the hydraulic one.
 - Install suitable pressure and / or vacuum restrainer valves near the inlet and outlet points of the machine.
 - In the event that the decompressor is electrically isolated, connect it to the ground or make it equipotential with the housing machine. Check that the paint does not prevent its passage.

• The machine expels gas during delivery at temperatures that can reach the maximum permitted values for operation, with its lubricating oil in suspension. Oil consumption is stated in paragraph 2.5, the quantity of consumed oil corresponds to the quantity of oil emitted at delivery.

4.6. Vacuum / Pressure line

• Si faccia riferimento alla figura seguente.



Pic. 4.2

1.	Primary shutoff
2.	Secondary shutoff
3.	Suction filter
4.	Silencer /
5.	Over-pressure safety relief valve
6.	Vacuum control valve

• The weight or dimensions of the pipes must in no way stress the R body. Use high temperature resistant rubber sleeves.

• Remove the port guards when mounting. The pipes and components of the whole line must be clean.

• Avoid constrictions and tight curves where they are not essential.

• Connect the pump to the tank through the suction manifold (Fig. 4.1 - pos. 8) which has a threaded port for fitting the over-pressure valve.

• The exhaust pipes can reach high temperatures. Protect those adequately from the operator reach.

• A clapet valve on suction pipe avoids rotation in the opposite direction when the pump stops.

• To avoid that foreign liquids will enter the vacuum pump it is necessary to mount on the suction line an over-flow valve of "floating-ball" type (Fig. 4.2. - pos. 1). The flow section of this valve must be equivalent to the suction hose's one.

• It is also necessary to have on the line a suitable air filter for preventing solids to be sucked inside the vacuum pump. It is also recommended to mount a "secondary shutoff" of floating-ball type (Fig. 4.2 - pos. 2) between vacuum pump and over-flow (primary shutoff), along with the previously mentioned air filter (Fig. 4.2 - pos. 3).

• Called also 4-way valve, normally is manually operated but it can be at any time transformed in pneumatically or hydraulic operated upon request of the appropriate kit.

• During normal running of the pump the resulting noise should be reduced by means of a suitable silencer (Fig. 4.2 - pos. 4) mounted as close as possible to the pump itself. It has to be dimensioned for the air flow produced by the pump model. The oil used for the pump's inside lubrication has to be separated from the exhausted air by means of an adequate oil-separator, placed directly inside the silencer. The silencer is fitted also with a draining tap for the collected oil and condensed liquids.



Do not dispose of in the environment. Dispose of in compliance with the standards in force.

• Over-pressure safety relief valve. It must be dimensioned to discharge the entire air-flow of the pump. The adjustment of this valve has to be kept inside 10% of tolerance of the pump's working pressure and in any case it has to stay inside the given value of the tank's work pressure.

• For pumps that reach, during normal operating, discharge air temperature close to 150 °C (300°F) - (checked at not more than 150 mm from the discharge connection) it is necessary to use a device (overheating limiter) that will not allow to exceed such temperature. Contact our Technical Department.

• An adjustable curved pipe is installed on the outlet of the silencer, in order to prevent rain from entering and to enable positioning (during installation) of the output airflow.

• Direct the silencer discharge output away from the silencer suction inlet in order to prevent the input of hot fluids into the injection inlet.



Attention: direct the silencer discharge output away from the silencer suction inlet.

4.7. Overheating alarm (optional)

• The vacuum pump can be equipped at the request of thermostat sensor. (See Fig. 4.1).

• Overheating alarm is strongly recommended in the following cases:

- Operations close to the use limits.
- Under pressure operations.
- Not well defined or monitored operation conditions.

• The alarm (available upon request) is composed of a blinking light and a warning buzzer that have to be connected to the thermostat (sensor). It is available at 12V or 24V.

- Consider the thermostat characteristics.
 - Voltage from 6V to 24V with CC, from 6V to 12V with AC.
 - Maximum power: 3W.

• When threshold temperature is reached the alarm system is enabled and a gate valve (along vacuum line) is opened.

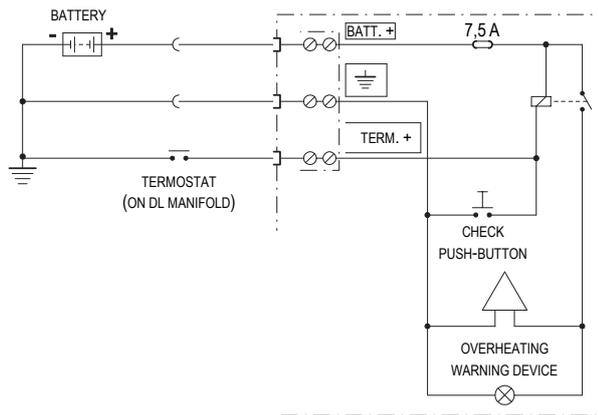
• It has to be mounted in a protected position in order to keep it free from water and other damaging media. Prepare the necessary connections for the electrical feeding.

• If the box supplied as an accessory is not used, make a check circuit as illustrated in Fig. 4.3.

• Overheating can seize the vacuum pump, causing a damage also in the drive line. Stop the pump for cooling or drive it at free ports conditions (with the suction valves fully opened) to let it cool down properly. The pump can be again operated only when the alarm is turned off after cooling.

• Check the muffler cleanliness. Obstructions may cause overheating.

Attention: overheating can seize the vacuum pump, causing a damage also in the drive line.



Pic. 4.3

4.8. Vacuum-pressure inverter: remote control actuators

	Pneumatic actuator	Hydraulic actuator
Fluid	Filtered, dried compressed air	Hydraulic oil ISO-L-HM
Filtration	ISO 8573-1 classe 4 (15 micron)	ISO 4406 21/19/16
Temperature	-20 ÷ 80 °C (-4 ÷ 176 °F)	-20 ÷ 80 °C (-4 ÷ 176 °F)
Rated pressure	5,6 bar (81,2 psi)	150 bar (2175 psi)
Maximum pressure	8.4 bar (122 psi)	200 bar (2900 psi)
Supply holes	G 1/4	G 1/8

Hydraulic actuator installation

- Adjust movement speed using the two built-in valves.
- Use a closed-centre distributor or apply a block valve.

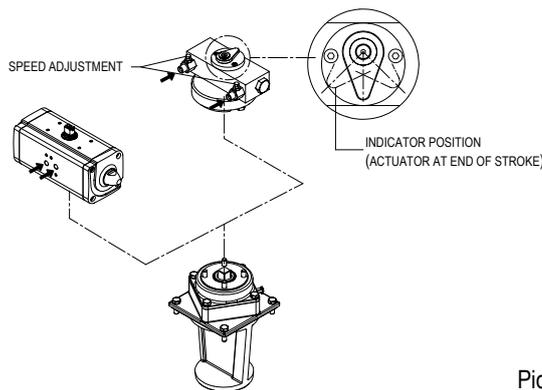
Pneumatic actuator installation

• Adjust movement speed by applying two unidirectional flow control valves.

For both actuators

- Adjust speed: full rotation should not take less than 1 second.
- Fluid filtration: ensure a level equal to or greater than the recommended value.

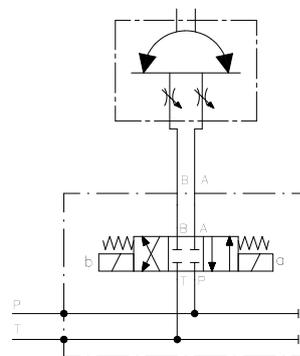
• In the event of a (hydraulic or pneumatic) supply failure, the suction unit inverter will remain in the same position it was when the failure occurred.



Pic. 4.4

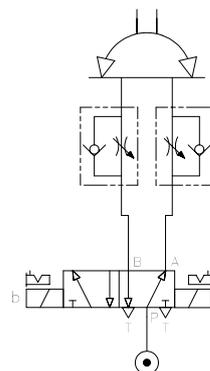
Maintenance

- The diverter is adjusted before shipment and does not usually require further adjustments.
- Diverter lubrication:
 - Use NLGI 2 Lithium grease. Quantity: 80-100 grams for 1000 working cycles.
 - A bleeder hole covered by a filter is preventing the hole to overflow. Clean the filter whenever clogged.
- Hydraulic actuator: the control valves are equipped with an internal metal filter. Disassemble and clean if movement stops.
- Pneumatic actuator: for non-dried air, use temperature 0 ÷ +80°C.
- The following figure shows a possible schematic view of a correct hydraulic connection.



Pic. 4.5

• The following figure shows a possible schematic view of a pneumatic connection.



Pic. 4.6

• In case of interruption of the pneumatic or hydraulic supply, the inverter of the suction unit remains in the same position it was when the failure occurred.

4.9. Pump mounting - drive connection

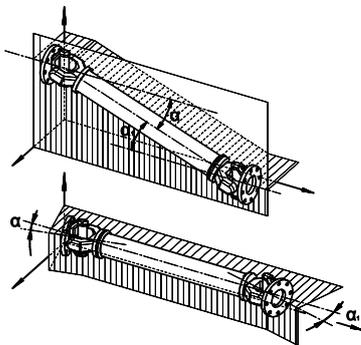
• For the machines of this series, the allowed power transmissions are:

- Direct transmission (e.g.: from agricultural cardan shaft)
- Oil hydraulic transmission (HDR).

• Protect with a fixed or interlocked guard and signal with pictograms the power transmission chosen and applied by the final installer, if there is the possibility that the operator will come into contact during handling.

A) Cardan shaft drive

• Use telescopic cardan shafts.



Pic. 4.7

• In order to achieve a uniform motion of the driven shaft, the following requirements must be met (see Pic. 4.7):

- Equal working angle α and α_1 of both couplings;
- The internal fork joints must be coplanar;
- Both driven and driving shafts must be coplanar.

• It is also recommended working with limited articulated joint angles (max 15°) and disengaging the transmission for those operations requiring great angles (steering or lifting).

Follow the rotation direction as indicated on the pump front conveyor protection. Follow the instructions of the cardan shaft's manufacture.

• Use the cardan guard supplied with the pump, by fixing it to the pump itself.

Use the cardan guard supplied with the pump, by fixing it to the pump itself. In any case, the installation, by the final installer, must comply with the current EC accident prevention regulations and must be compatible with the geometry of the protection cap supplied with the machine.

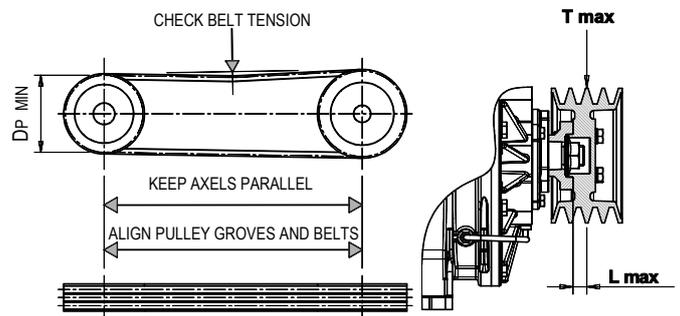
• The protection must not be removed; in case of removal, it is the responsibility of the final installer to provide for suitable guards according to the assembly.

• It is the responsibility of the final installer to provide for suitable guards, in presence of transmission shafts exposed during normal operation.

B) Belt drive

	R 260
Max. Speed	1300 rpm
T. max	2500 N
L. max	20 mm (0,8 in)
Pitch diameter	150 mm (5,9 in)
Nr. Grooves	4
Belts type	XPB

Pitch Diameter. min.: Minimum drive of pulley pitch diameter.



Pic. 4.8

• When using the belts and pulley, the pulley can be mounted directly on the rotor shaft.

• Always use pulleys that are suitable to be installed on the shaft end. Pulleys supplied by Jurop are strongly recommended. Look at the parts breakdown at the end of this manual.

• Install the pulley, max. overhanging. L Max 20 mm.

• Max belt tension: 2500 N Max.

• A limited speed ratio will extend the belts life and reduce stress on the shafts. When possible prefer:

- Pulleys with a pitch diameter bigger than the one indicated;
- Engines or power take-offs with a speed similar to the one of the vacuum pump.

C) Trasmisione oleodinamica

	R 260
Displacement	72 cc/rev
Operating pressure (vac. max)	120 bar (1740 psi)
Max speed	1300 rpm
Max flow	100 l/min (3,5 CFM)
Max pressure draining line	5 bar (72,5 psi)
Max pressure motor exhaust	5 bar (72,5 psi)
Max pressure	220 bar (3190 psi)

Oil temperature, used in the main circuit.

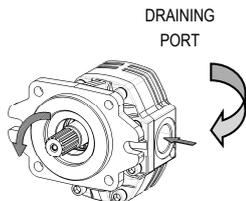
• **Fluid:** mineral oil for hydraulic systems in compliance with ISO/DIN.

Temperature	Optimum viscosity ale	Max. viscosity allowed
-20 / +80 °C	12 – 100 cSt	750 cSt

• **Filtration:** class 21/19/16 contamination according to ISO 4406 to be obtained with a $\beta_x = 75$ filter.

• **Check circuit connections:** they must be applied in the same rotation direction as that indicated by the arrow on the pump front flange.

• **Draining:** connect directly to the tank above the maximum oil level. Operating without draining line may damage the motor.



Pic. 4.9

• **Distributor:** open-centre distributor in central idle position (vacuum pump off). It must be equipped with an adjustable overpressure safety valve.

• **Motor pipeline:** outlet pipe must not be of a smaller diameter than that of the inlet port. Inlet pipes always have a diameter smaller than outlet pipes. Choose preferably flexible pipes to avoid vibration transmission.

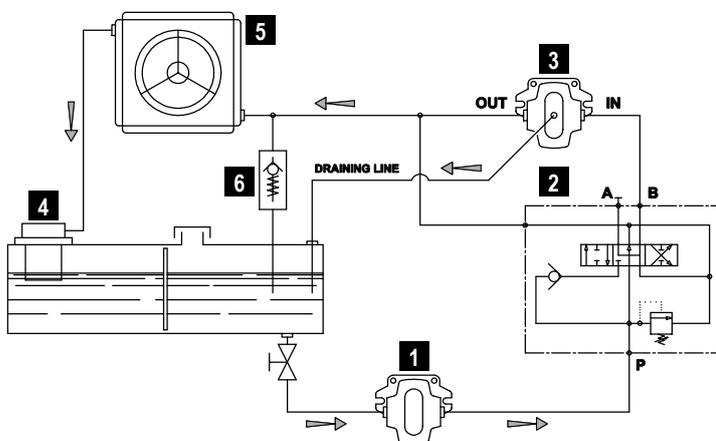
• **Tank:** with suction pipe and return separated by baffles. If necessary, use a heat exchanger to avoid oil heating above 70-80°C and protect it from extreme pressure with a pressure relief valve. Minimum approximate capacity: as twice as the circulation flow.

• **Starting-up:** be sure that the system is well cleaned and pour oil into the tank and into the motor housing (necessary to lubricate the internal bearings).

• Vent the circuit and adjust the overpressure safety valve to the lowest possible value.

• Check the oil tank level.

• Increase pressure and rotation speed until operating values are reached.



Pic. 4.10

1	Hdr pump	4	Oil filter
2	Distributor	5 *	Heat exchanger
3	Hdr motor	6 *	Safety valve

* optional components

• The machine/system manufacturer is responsible for dimensioning the lines.



The machine/system manufacturer is responsible for dimensioning the lines.

5. Start up

5.1. Pump starting-up

- Before starting the equipment check the lubricating oil level of the pump.
- Refill the tank with lubrication oil.
- Check the oil level in the gear box (if the pump is provided with it).
- In order to choose the most suitable oil, see paragraph. 2.5.
- Check that all protection and safety devices are correctly installed.
- Check that no obstacles obstruct the vacuum and pressure line or the air injection cooling system.
- Check rotation direction: open all system valves and start running at slow speed.



Do not rotate in the wrong direction: pump may be damaged.

- Check which position of the 4-way integrated valve lever allows vacuum or pressure functioning.
- If the pump has been in storage for a long time: inlet. liter of oil in the pump for an easy cleaning of internal parts.
- Close the valve and increase vacuum rate (or operating pressure).
- Check loading and operating speed for vibrations or unusual noises.



This vacuum pump is designed to work at maximum speed. For longer operating we recommend the pump be run at working speed.

- Prepare adequately transmission.

5.2. Operating precautions

- Run the vacuum pump at a room temperature of -20°C e +40°C.
- Do not make the vacuum pump overheat. Maximum air temperature on exhaust (or delivery) side: 160-180°C.
- Do not operate the pump without lubrication: it may cause quick wear and possible breakdown of vanes.
- Do not start running the pump under load: that causes stress to the drive system and the hydraulic motor.
- Check rotation speed. The vacuum pump must never exceed the maximum speed or run below the minimum speed.
- Do not accidentally operate the pump in the wrong direction: it may break the vanes.
- Do not convey the exceeding delivery outlet towards the suction port, otherwise it will suck warm gas.
- Control the air flow by adjusting the rotation speed: do not use the pressure relief valve to discharge the exceeding flow.
- Once that the wanted vacuum rated has been attained it is recommendable to decrease the speed. (see par. 2.3): This useful procedure, that will not increase the time requested to fill up the tank, will however result in a lesser wear of the vanes. It is suggested to reduce the speed also when operating with pressure.
- When, exhaust temperature is reduced, vane durability is increased and both oil consumption and power absorption are reduced.



Once the needed vacuum rate has been reached, we recommend reducing the vacuum pump speed to its working speed.

- After operation in dusty environments, after accidental sucking of liquids inside the pump or before a long inoperativity period it is recommended to wash the pump inside according to the following procedure:

1. Before washing the pump, be sure that it has cooled down. To obtain this in a short time, it is possible to run the pump for a few minutes at zero vacuum conditions, or stop it at all.



Attention: Do not carry out this operation on very hot pumps (for example after a working day) until they have cooled down.

2. Use 1-2 liters of water mixed with a non-flammable detergent. We suggest some product like Henkel Bonderite C-NE 5225: 5% concentration in water. This detergent grants a good protection against rust and oxidation.
3. Use one of the openings placed in the vacuum line (closest on the pump) to suck some water mixed with detergent.
4. Start the pump at low speed leaving opened all the suction valves in the tank, in order to keep low the vacuum rate (max vac. 10-20%). Let the detergent mix entering the pump very slowly.
5. The detergent mix stays suspended in the pump inside, before being expelled through the exhaust silencer.
6. After keeping the pump speed for a while to make the product reaching the internal parts, it is necessary to dry the pump preventing oxidation. When the detergent mix is finished, continue running the pump at the lowest possible vacuum rate for a few minutes, then close venting and suction valves up to 50-60% maximum, for a couple of minutes. With this operation the pump will dry from the heated air and protected from the chemical attack of the detergent.
7. Washing the pump with this detergent guarantees a protection after some days of inoperativity. If the pump is not used for more than two weeks, after having washed and dried the inner parts as described above, it is recommended to suck slowly 200 cc anti-rust and water-repellent protective oil (or, if not available, a very fluid gear oil).



Attention: do not carry out also this operation on very hot pumps (for example after a working day) until they have cooled down.



In case the exhaust line cannot be disconnected, drain the liquids accumulated in the separator of the exhaust silencer.

6. Maintenance

6.1. Ordinary maintenance

- Any interventions must be performed when the machine is cold, stopped and switched off.
- Installation and maintenance must be operated only by qualified personnel wearing the proper clothes and the necessary tools as well as protection devices.
- Use suitable protection equipment (gloves, protection glasses, boots...)
- In the following table summarizes the main controls to be performed and the frequency of intervention.

Operating Condition	Maintenance Area	Check	8H	50H	500H	1000H
OPERATING	Vacuum line	Check safety valve (non-return valve)				
		Operating pressure				
	Transmission / Pump	Rotation speed				
		Sound pressure level (also HDR motor)				
STANDSTILL	Vacuum line	Suctions filters				
		4-way changeover valve: check and lubricate				
	Pump	Sintered filter cleaning				
		Check vanes wear				
		Change oil in the gear box, if the pump is provided with it (*)				
		Pump's inner washing (**)				
	Overall	Greasing				
		Check cardan shaft drive				
		Check transmission pulley				
		Swing valve wear check				

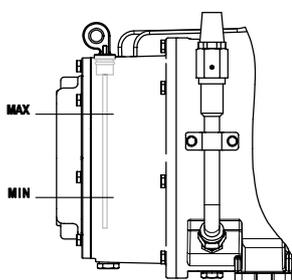
(*) The first oil change must be done inside 500 hours operation. Following changes every 5000 hours or 12 months. In order to choose the most suitable oil, see paragraph 2.5.

(**) After operation in dusty environments, after accidental sucking of liquids inside the pump or before a long inoperativity period it is recommended to wash the pump inside according to the procedure described at paragraph 5.2.

Checking the oil tank level

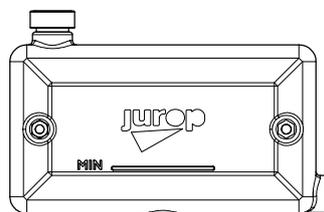
- Check the oil tank level.
- Do not run the pump with oil level under the minimum level: that may lead to dry functioning and cause serious damages. (Pic. 6.1).

OIL LEVEL - REAR TANK



Pic. 6.1

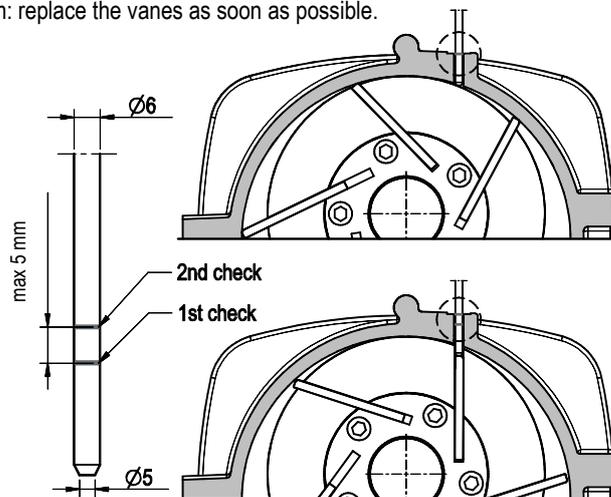
OIL LEVEL - SIDE TANK



- Rear mounted tank capacity: **2,3 l.**
- Side mounted tank capacity: **4 l.**
- Use pure and fresh oil. In order to choose the most suitable oil, see paragraph 2.5.

Checking the vanes wear

- Unscrew the vanes wear check-plug on the rear flange. See Pic. 4.1.
- Turn the shaft by hand until vanes appearance.
- Vanes usually slip on seat bottom due to gravity. Check their right entry in the seat.
- Insert a $\varnothing 6$ mm stick until it touches the rotor and then mark like in Pic. 6.2.
- Turn the rotor slowly until the stick touches the vane in idle position in its seat. The vanes slide to the bottom of the seat due to gravity: check they really do and mark again on the stick.
- Repeat the same procedure for all the vanes. If wear exceeds 5 mm: replace the vanes as soon as possible.



Pic. 6.2

- Replace all the pump vanes at the same time.

Replace the vanes when their wear exceeds 5 mm (L – L min): they may break. Replace all vanes at the same time.

- Replace the cap after the measurement.

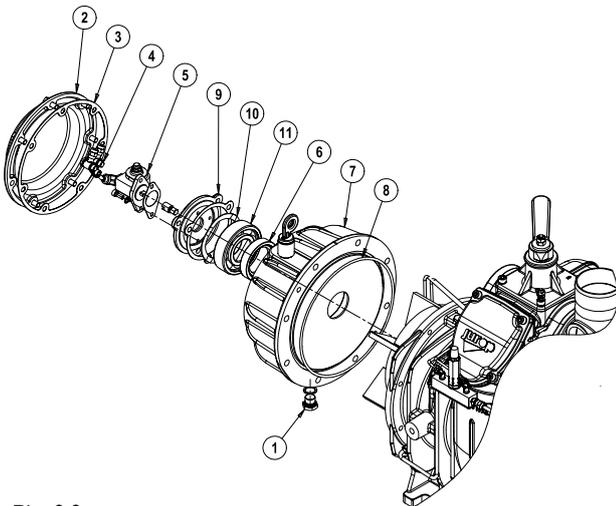
6.2. Extraordinary maintenance

• Except for the cases described below, extraordinary maintenance on a R260 must be carried out by specialized personnel only; otherwise the guarantee will be invalidated.

• All extraordinary maintenance interventions must be carried out when the machine is cold, stopped and switched off. Implement the safety instructions reported in the “Safety and accident prevention” Chapter, before performing any maintenance operation.

Follow the safety prescriptions as described in Cap. “Safety and accident prevention”.

Replacing the vanes (R260 with rear oil tank)



Pic. 6.3

1	168400000	PLUG 3/8
2	1640101100	TANK'S CAP
3	1680707500	CAP'S GASKET
4	4026706101	PIPE'S FITTING
5	4024251500	2-WAY OIL PUMP (LEFT)
	4024251000	2-WAY OIL PUMP (RIGHT)
6	4022200111	SEAL 72X48X15
7	1612500300	OIL TANK
8	4022200341	OR
9	1610508500	PUMP'S FLANGE
10	4026300020	COMPENSATION RING
11	4023100140	BEARING

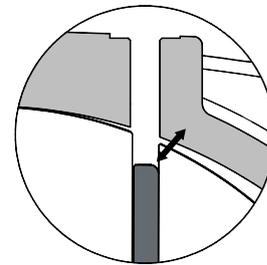
• Remove the vacuum pump from its bearing frame and wash it before disassembling.

• It is suggested to remove the oil tank on the rear part because generally the pump's drive components are fitted on the front flange. Use always the specific kit of gaskets for the pump model at hand (see also spare parts list).

- Material that is subject to wear: replace.

Disassemble operation

- Drain the oil tank through the proper port (pos. 1).
- Remove the tank's cap (pos. 2) and change the gasket (pos. 3); unscrew the lubrication pipe's fittings (pos. 4) connecting the oil pump to the oilers.
- Remove the oil pump (pos. 5).
- Remove the screws fixing the oil tank (pos. 7) and carefully remove it, eventually using two screws partially wended inside the threads. Avoid that the rotor falls down inside the housing, supporting it if necessary with adequate tools. Change the OR (pos. 8). Remove the oil pump's flange (pos. 9), the compensation ring (pos. 10) and the bearing (pos. 11) this will make the reassembly of the oil tank much easier (pos. 7).
- Lubricate the new vanes before inserting them in the rotor's slots.
- The new vanes have to be inserted with the rounded corner facing towards the housing (See Pic. 6.4).



Pic. 6.4

Assemble operation

Reassemble everything again in the right sequence, absolutely avoiding to leave foreign parts inside the pump. Always change all the gaskets and the OR after having them properly lubricated and also the seal (pos. 6) if necessary add some grease in the space between the bearing (pos. 11) and the flange (pos. 9).

- Reassemble the oil tank (pos. 7) and the OR (pos. 8) carefully inserting the drive shaft without damaging the seal.
- Insert the bearing (pos. 11), the compensation ring (pos. 10), and the oil pump's flange (pos. 9).
- Insert correctly the lubrication pump in the driving slot and refit the flange.
- Reassemble the lubrication pipes and fittings.
- Reassemble the tank's cap (pos. 2) and the gasket (pos. 3).
- Replace the plug on the tank (pos. 1) and refill it with lubrication oil.

Mounting the hydraulic drive

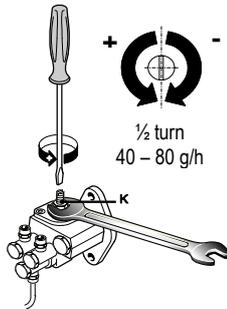
- We recommend the drive coupling be oiled when vanes are being replaced.
- However, lubricate the drive coupling every 1500 hours.

We recommend the drive coupling be oiled every 1500 hours.

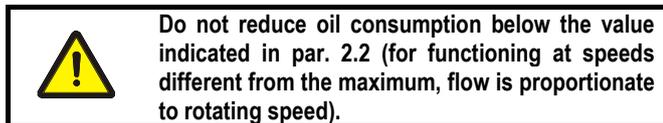
- Apply coupling hub to vacuum pump axis respecting the position marked during disassembly: the grain must go back into the seat on the rim.
- Mount the coupling and lubricate internally with NLGI 2 Lithium grease. Provide an adequate quantity of fat, in order to have a medium filling.
- Reassembly the motor without forcing onto the seals.

Adjusting the self-lubricating pump

- The automatic lubricating pump is adjusted by the manufacturer before the shipping.
- If consumption noticeably differs from the indicated value, adjust it as follows:
 - Remove the upper protection cover;
 - Using a screwdriver and a 10 mm wrench, adjust the adjusting screw (K). Close the nut and remount the upper protection cover;
 - It is advisable to turn the screw of $\frac{1}{4}$ of turn and verify the actual consumption.



Pic. 6.5



- $\frac{1}{2}$ turn of the adjusting screw causes a variation in the flow of approximately **40 - 80 g/h**, depending on using conditions.

Cleaning of the inside exhaust port of the pump housing and the 4-way manifolds

- Frequency: at every changing of the vanes.
- How to proceed: dismantle the manifold and remove possible oil scales or other foreign parts.
- The clogging-up of this manifold and the exhaust port depends mainly from heavy duty use of the pump and causes an increase of temperature and a non-perfect closing of the check valve. A careful cleaning of all components, including the insides of the housing and the non-return check valve and its seat, is therefore strongly recommended.

7. Malfunctions: troubleshooting

PROBLEMS

Overheating	
Cause	Solution
• Faulty lubrication	• Check the oil pump
• Missing oil	• Fill up the oil tank
• Revolutions too high	• Reduce the speed
• Operating time too long at too high vacuum rate	• Decrease the vacuum rate
• Clogged filters on the air injection system	• Clean the filters
• Insufficient diameter of vacuum and discharge line	• Check the correct dimensions of the line (minimum suggested 3")

The pump is blocked	
Cause	Solution
• Broken vanes:	• Dismantle the pump and change the vanes
- due to foreign parts	• Check/clean the filters and elements on the vacuum line
- due to faulty lubrication	• Check the lubrication pump
• Damaged drive system	• Change the damaged parts
• Frozen up pump	• Warm-up the pump

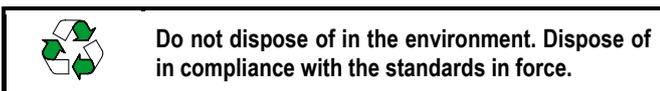
Reduced performances	
Cause	Solution
• 4-way valve handle in neutral position	• Move the handle against the resting pin
• Worn vanes	• Change the vanes
• Leaking check valve	• Clean the check valve
• Worn O-rings	• Change the seals
• Leaking gaskets and/or valves on the vacuum tank	• Change that damaged parts
• Clogged connecting pipeline	• Change the damaged hoses - pipes
• Floating ball or air filter obstructed	• Dismantle and clean
• Crusted up exhaust manifold	• Dismantle and clean
• Vacuum line components under-dimensioned	• Check the dimensioning for the pump model at hand
• Rubber connection obstructed or damaged	• Change the connections

Abnormal oil consumption	
Cause	Solution
• Insufficient lubrication	• Adjust the oil pump flow
• Excessive oil consumption	• Loss of adjustment of the oil pump • Probable wear or breakage of the seal rings of the vacuum pump shaft. Replace them • Check the fittings built on the automatic oil pump and screw tight

8. Scrapping

• Recycling materials allow reducing the environmental impact and respecting the environment.

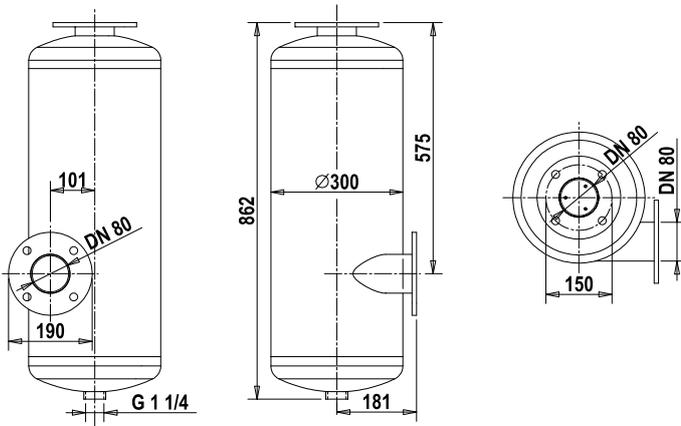
• Before scrapping the machine, the following materials need to be separated and suitably disposed of.



Material	Cast Iron	Steel	Alluminum	Copper	Bronze	Rubber	Vaness	Oil	Plastic
R 260	91 %	7 %	0,3 %	0,2 %	0,1 %	0,1 %	0,8 %	0,3 %	0,2 %

9. Accessories

Silencers / Oil separators



MODEL	R 260
TYPE	DISCHARGE
CODE	15470 D2C B0
MAX FLOW	912 m ³ /h
OIL TRAP	4,4 l
WEIGHT	35 kg

Note: Direct the silencer discharge output away from the silencer suction inlet in order to prevent the input of hot fluids into the injection inlet.

R 260

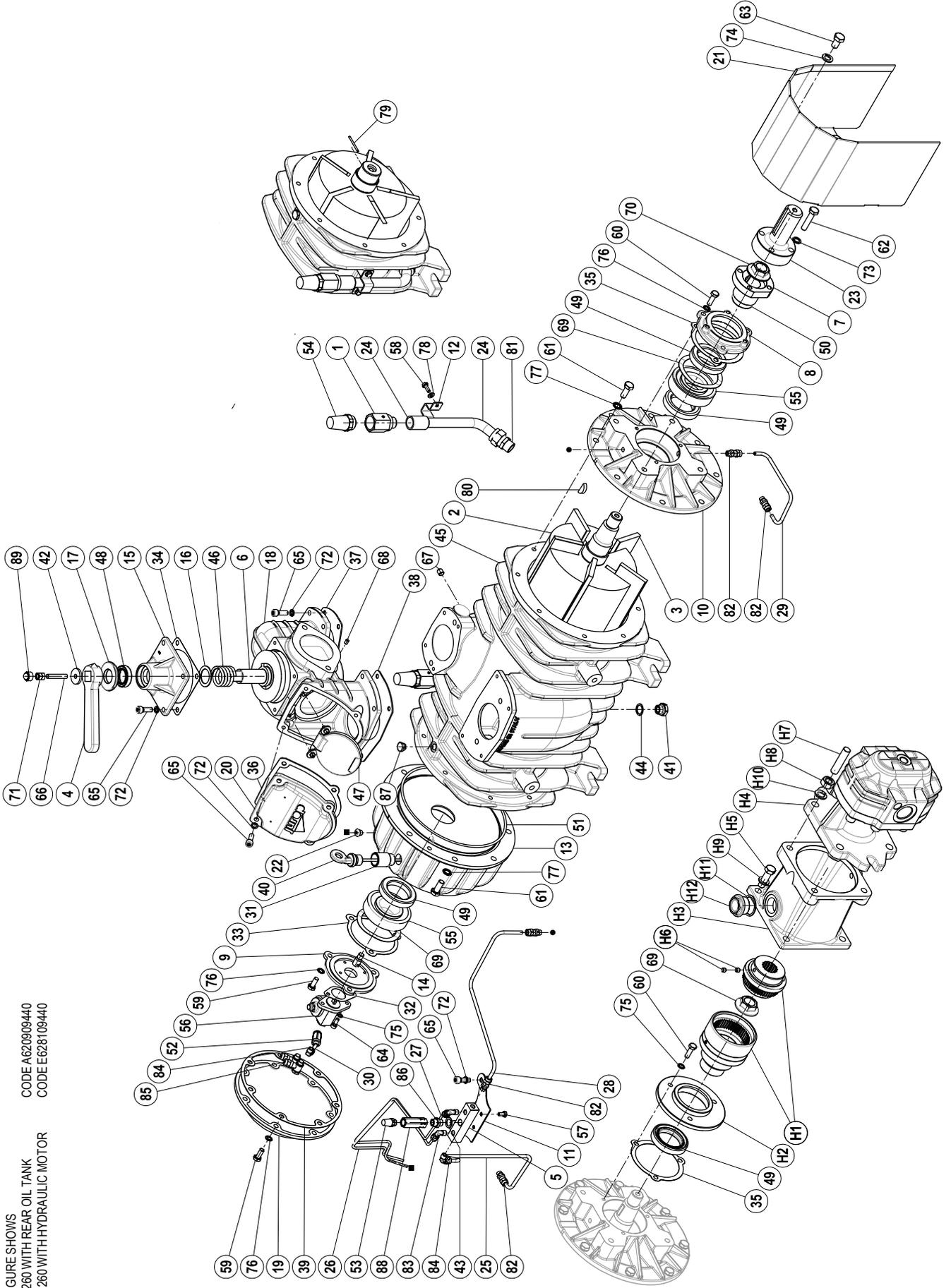


FIGURE SHOWS
R 260 WITH REAR OIL TANK
R 260 WITH HYDRAULIC MOTOR
CODE A620909440
CODE E628109440

R 260

Pos.	Code	Description	Q.ty	Pos.	Code	Description	Q.ty
1	14933006E0	AIR INJECTION VALVE ½"	2	53	4022301001	OIL BLOCK FILTER ¼"	1
2	1521500900	ROTOR R 260	1	54	4022301004	OIL BLOCK FILTER ¾"	2
3	1601604200	VANE	5	55	4023100040	BEARING 6308	2
4	1605500000	HANDLE	1	56	4024251500	2-WAY OIL PUMP (LEFT)	1
5	16081001E0	DISTRIBUTOR	1		4024251000	2-WAY OIL PUMP (RIGHT)	1
6	1608501700	CONVEYOR	1	57	4026102702	SCREW TE 8.8 M6X12	2
7	1610006600	FLANGE	1	58	4026102704	SCREW TE 8.8 M6X16 GALV.	4
8	1610500400	FLANGE	1	59	4026102806	SCREW TE 8.8 M8X20	10
9	1610508500	AUTOMATIC LUBRICATION PUMP FLANGE	1	60	4026102807	SCREW TE 8.8 M8X25	3
10	16105E5BB0	DIRECT TRANSMISSION FLANGE	1	61	4026102907	SCREW TE 8.8 M10X25	16
11	16120816F0	DISTRIBUTOR BRACKET	1	62	4026102911	SCREW TE 8.8 M10X45 GALV.	4
12	16120820E0	BRACKET PLATE	2	63	4026103000	SCREW TE 8.8 M12X20 GALV.	4
13	1612500300	OIL TANK	1	64	4026121305	SCREW TCEI 8.8 M6X16 GALV.	2
14	1622002600	OIL-PUMP DRIVE PIN	1	65	4026121407	SCREW TCEI 8.8 M8X25 GALV.	16
15	1623100000	CONVEYOR CAP	1	66	4026135415	GRUB SCREW 14.9 M8X50 GALV.	1
16	162409YKBO	SPACER	1	67	4026135504	GRUB SCREW 14.9 M10X10 GALV.	1
17	1624202300	SPACER	1	68	4026135904	GRUB SCREW 12.9 M6X10 GALV.	1
18	16275008E0	MANIFOLD	1	69	4026300020	COMPENSATION RING	2
19	1640101100	OIL TANK COVER	1	70	4026305614	NUT M24X2	1
20	16401098E0	CLAPET COVER	1	71	4026308005	NUT M8 ESAG. GALV.	2
21	1642003000	DRIVE SHAFT PROTECTION	1	72	4026350505	WASHER GROWER 8 GALV.	16
22	1642600000	PIPELINE PROTECTION	2	73	4026350708	WASHER GROWER 10 GALV.	4
23	1650004300	SMOOTH SHAFT	1	74	4026350709	WASHER GROWER 12 GALV.	4
	1650004700	SPLINED SHAFT 1"3/8	1	75	4026351504	WASHER M6 GALV.	2
24	1663014000	AIR INJECTION PIPE	2	76	4026351505	WASHER M8 GALV.	13
25	16630254E0	PIPE DISTRIBUTOR - HOUSING (LEFT)	1	77	4026351506	WASHER M10 GALV.	16
	16630259E0	PIPE DISTRIBUTOR - HOUSING (RIGHT)	1	78	4026357003	WASHER M6 GALV.	4
26	16630255E0	PIPE 2 OIL PUMP - DISTRIBUTOR (LEFT)	1	79	4026414617	PIN 3X40	1
	16630261E0	PIPE 2 OIL PUMP - DISTRIBUTOR (RIGHT)	1	80	4026500018	TAB 6X10	1
27	16630256E0	PIPE 1 OIL PUMP - DISTRIBUTOR (LEFT)	1	81	4026701301	FITTING 1/2X18	2
	16630260E0	PIPE 1 OIL PUMP - DISTRIBUTOR (RIGHT)	1	82	4026702004	FITTING 6X1/8	5
28	16630257E0	PIPE DISTRIBUTOR - FLANGE (LEFT)	1	83	4026706000	FITTING 90° 4X1/8	2
	16630262E0	PIPE DISTRIBUTOR - FLANGE (RIGHT)	1	84	4026706003	FITTING 90° 6X1/8	2
29	16630258E0	PIPE FLANGE (LEFT)	1	85	4026706101	ADJUSTABLE FITTING 4-1/8	2
	16630263E0	PIPE FLANGE (RIGHT)	1	86	4026740011	FITTING G1/4	1
30	1663041200	SUCTION PIPE (OIL PUMP)	1	87	4026905002	PLUG 1/4	1
31	1673004100	OIL DIP-STICK SLEEVE	1	88	4027409920	ONE-WAY VALVE G1/4	1
32	1680609700	GASKET (OIL PUMP)	1	89	4029602701	PROTECTION CAP FOR NUT M8	1
33	1680609800	GASKET (OIL PUMP FLANGE)	1				
34	1680700200	GASKET (CONVEYOR CAP)	1		1892006100	KIT OF GASKETS FOR R260	
35	1680700400	GASKET (DIRECT TRANSM. FLANGE)	1				
36	16807020E0	GASKET (CLAPET COVER)	1			R260 WITH HYDRAULIC MOTOR	
37	16807021E0	DISCHARGE GASKET	1	H1	1470100400	HYD JOINT	1
38	16807022E0	SUCTION GASKET	1	H2	1610005500	FLANGE	1
39	1680707500	GASKET (OIL TANK COVER)	1	H3	1612501400	HYD MOTOR MOUNTING FLANGE	1
40	1683600300	OIL STICK	1	H4	4024107001	HYDRAULIC MOTOR	1
41	1684000000	DRAIN PLUG 3/8	4	H5	4026103004	SCREW TE 8.8 M12X40 GALV.	4
42	1685002800	WASHER FE 30X8,5 SP.4	1	H6	4026136003	GRUB SCREW 14.9 M8X8 GALV.	2
43	1685100000	WASHER 14X20X1,5	1	H7	4026171304	STUD SCREW 8.8 M14X40 GALV.	4
44	1685100200	WASHER 17X22X1,5	4	H8	4026308008	NUT M14 ESAGONALE GALV.	4
45	16875026E0	HOUSING PUMP	1	H9	4026350709	WASHER GROWER 12 GALV.	4
46	1691000000	SPRING	1	H10	4026350710	WASHER GROWER 14 GALV.	4
47	18930009E0	CLAPET DN100 INOX	1	H11	4026359001	WASHER 33,5X40X1,5 ALU.	1
48	4022200030	SEAL 41X27X10	1	H12	4026904003	PLUG 1" ZINC.	1
49	4022200111	SEAL 72X48X15	3				
50	4022200313	O-RING 2162	1				
51	4022200341	O-RING 4825	2				
52	4022300001	NYLON FILTER	1				

R 260 SIDE OIL TANK

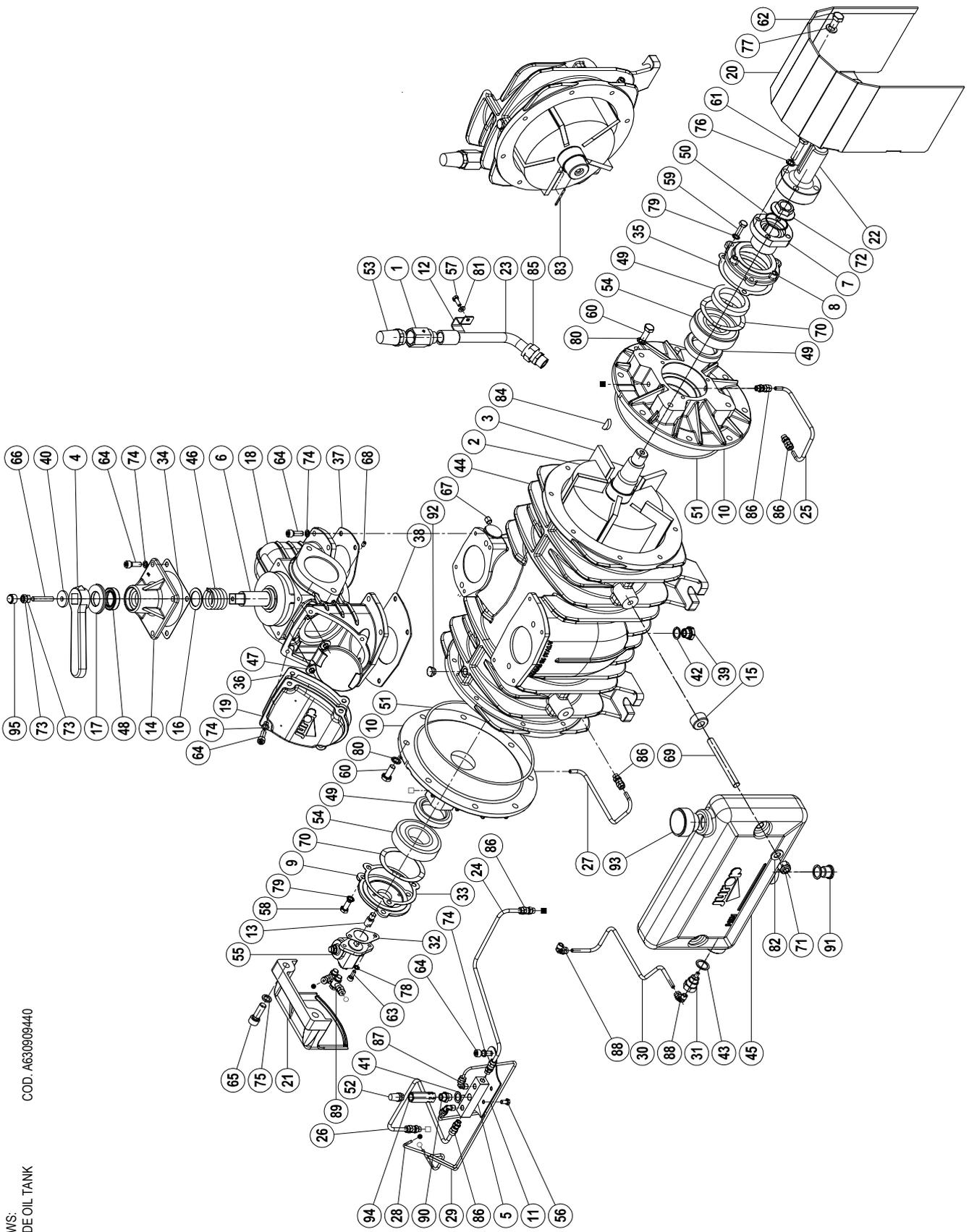
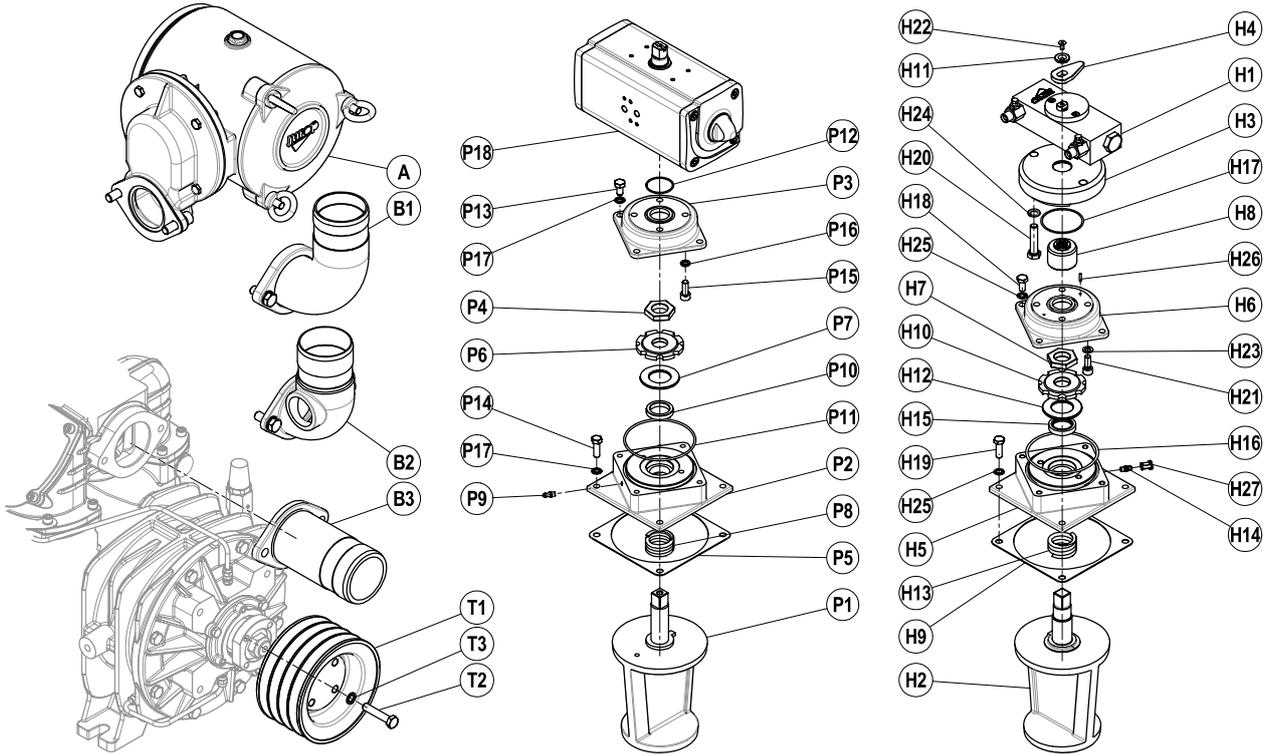


FIGURE SHOWS:
R 260 WITH SIDE OIL TANK
COD. A630909440

R 260 with side oil tank

Pos.	Code	Description	Q.ty	Pos.	Code	Description	Q.ty
1	14933006E0	AIR INJECTION VALVE 1/2"	2	51	4022200341	O-RING 4825	2
2	1521500900	ROTOR R 260	1	52	4022301001	OIL BLOCK FILTER 1/4"	1
3	1601604200	VANE	5	53	4022301004	OIL BLOCK FILTER 3/4"	2
4	1605500000	HANDLE	1	54	4023100040	BEARING 6308	2
5	16081001E0	DISTRIBUTOR	1	55	4024251500	2-WAY OIL PUMP (LEFT)	1
6	1608501700	CONVEYOR	1		4024251000	2-WAY OIL PUMP (RIGHT)	1
7	1610006600	DIRECT TRANSMISSION FLANGE	1	56	4026102702	SCREW TE 8.8 M6X12 GALV.	2
8	1610500400	FLANGE	1	57	4026102704	SCREW TE 8.8 M6X16 GALV.	4
9	16105CF2B0	AUTOMATIC LUBRICATION PUMP FLANGE	1	58	4026102806	SCREW TE 8.8 M8X20 GALV.	3
10	16105E5BB0	DIRECT TRANSMISSION FLANGE	2	59	4026102807	SCREW TE 8.8 M8X25 GALV.	3
11	16120816F0	DISTRIBUTOR BRACKET	1	60	4026102907	SCREW TE 8.8 M10X25 GALV.	16
12	16120820E0	BRACKET PLATE	2	61	4026102911	SCREW TE 8.8 M10X45 GALV.	4
13	1622002600	OIL-PUMP DRIVE PIN	1	62	4026103000	SCREW TE 8.8 M12X20 GALV.	4
14	1623100000	CONVEYOR CAP	1	63	4026121305	SCREW TCEI 8.8 M6X16 GALV.	2
15	1624042800	SPACER	4	64	4026121407	SCREW TCEI 8.8 M8X25 GALV.	16
16	162409YKBO	SPACER	1	65	4026121710	SCREW TCEI 8.8 M12X35 GALV.	2
17	1624202300	SPACER	1	66	4026135415	GRUB SCREW 14.9 M8X50 GALV.	1
18	16275008E0	MANIFOLD	1	67	4026135504	GRUB SCREW 14.9 M10X10 GALV.	1
19	16401098E0	CLAPET COVER	1	68	4026135904	GRUB SCREW 12.9 M6X10 GALV.	1
20	1642003000	DRIVE SHAFT PROTECTION	1	69	4026171213	STUD SCREW 8.8 M12X100	2
21	1642100200	REAR COVER	1	70	4026300020	COMPENSATION RING	2
22	1650004300	SMOOTH SHAFT	1	71	4026305508	NUT M12	2
	1650004700	SPLINED SHAFT 1"3/8	1	72	4026305614	NUT M24X2	1
23	1663014000	AIR INJECTION PIPE	2	73	4026308005	NUT M8	2
24	16630257E0	PIPE DISTRIBUTOR - FLANGE (LEFT)	1	74	4026350505	WASHER GROWER 8 GALV.	16
	16630262E0	PIPE DISTRIBUTOR - FLANGE (RIGHT)	1	75	4026350508	WASHER GROWER 12 GALV.	2
25	16630258E0	PIPE FLANGE (LEFT)	1	76	4026350708	WASHER GROWER 10 GALV.	4
	16630263E0	PIPE FLANGE (RIGHT)	1	77	4026350709	WASHER GROWER 12 GALV.	4
26	16630262E0	PIPE DISTRIBUTOR - FLANGE (RIGHT)	1	78	4026351504	WASHER M6 GALV.	2
	16630257E0	PIPE DISTRIBUTOR - FLANGE (LEFT)	1	79	4026351505	WASHER M8 GALV.	6
27	16630263E0	PIPE FLANGE (RIGHT)	1	80	4026351506	WASHER M10 GALV.	16
	16630258E0	PIPE FLANGE (LEFT)	1	81	4026357003	WASHER M6 GALV.	4
28	16630270E0	PIPE 2 OIL PUMP LUBRICATION (LEFT)	1	82	4026357007	WASHER M12 GALV.	2
	16630274E0	PIPE 2 OIL PUMP LUBRICATION (RIGHT)	1	83	4026414617	PIN 3X40	1
29	16630271E0	PIPE 1 OIL PUMP LUBRICATION (LEFT)	1	84	4026500018	TAB 6X10	1
	16630275E0	PIPE 1 OIL PUMP LUBRICATION (RIGHT)	1	85	4026701301	FITTING 1/2X18	2
30	16630272E0	PIPE OIL TANK (LEFT)	1	86	4026702004	FITTING 6X1/8	8
	16630276E0	PIPE OIL TANK (RIGHT)	1	87	4026706000	FITTING 90° 4X1/8	2
31	1673001000	OIL FITTING	1	88	4026706003	FITTING 90° 6X1/8	2
32	1680609700	GASKET (OIL PUMP)	1	89	4026706101	ADJUSTABLE FITTING 4-1/8	2
33	1680609800	GASKET (OIL PUMP FLANGE)	1	90	4026740011	FITTING G1/4	1
34	1680700200	GASKET (CONVEYOR CAP)	1	91	4026904503	PLUG M20X1,5	1
35	1680700400	GASKET (DIRECT TRANS. FLANGE)	1	92	4026905002	PLUG 1/4	1
36	16807020E0	GASKET (CLAPET COVER)	1	93	4026910103	VENTIL PLUG	1
37	16807021E0	DISHARGE GASKET	1	94	4027409920	ONE-WAY VALVE G1/4	1
38	16807022E0	SUCTIONGASKET	1	95	4029602701	PROTECTION CAP FOR NUT M8	1
39	1684000000	DRAIN PLUG 3/8	3				
40	1685002800	WASHER 30X8,5	1	1892006100	KIT OF GASKETS FOR R260		
41	1685100000	WASHER 14X20X1,5	1				
42	1685100200	WASHER 17X22X1,5	3				
43	1685100300	WASHER	2				
44	16875026E0	HOUSING PUMP	1				
45	1687600000	SIDE OIL TANK	1				
46	1691000000	SPRING	1				
47	18930009E0	CLAPET	1				
48	4022200030	SEAL 41X27X10	1				
49	4022200111	SEAL 72X48X15	3				
50	4022200313	O-RING 2162	1				

R 260 ACCESSORIES



Pos.	Code	Description	Q.ty	Pos.	Code	Description	Q.ty
A	18521CNGB0	KIT SUCTION UNIT WITH FILTER		H16	4022200330	O-RING 3375	1
B1	1852109000	TURNING CONVEYOR Ø76		H17	4022200374	O-RING 2212	1
B1	18521074E0	TURNING CONVEYOR Ø80		H18	4026102804	SCREW TE M8X16 GALV.	4
B2	1852108800	FIXED CONVEYOR Ø60		H19	4026102807	SCREW TE M8X25 GALV.	4
B2	1852108900	FIXED CONVEYOR Ø76		H20	4026102911	SCREW TE M10X45 GALV.	2
B2	1852108600	FIXED CONVEYOR Ø80		H21	4026121405	SCREW TCEI M8X20 GALV.	4
B3	1627100700	FIXED CONVEYOR Ø60 MIX		H22	4026155002	SCREW INOX304 TSPEI M5X10	1
B3	1627100900	FIXED CONVEYOR Ø80 MIX (+ 1680700600 GASKET Ø80)		H23	4026312B01	WASHER DA 8	4
		BELT DRIVE		H24	4026350708	WASHER M8 GALV.	2
T1	1653500900	PULLEY SPB 200X4	1	H25	4026351505	SCREW TE M8X25 GALV.	8
	1653501000	PULLEY SPB 150X4	1	H26	4026401101	PIN 3X12	2
T2	4026102910	SCREW TE M10X40 ZINC	4	H27	4029602704	PROTECTION CAP FOR GREASER	1
T3	4026350708	WASHER GROWER 10 ZINC	4	P	143028B7B0	PNEUMATIC OPERATED 4-WAY KIT	
H	14302033E0	HYDRAULIC OPERATED 4-WAY KIT		P1	160858KNB0	INSIDE VALVE	1
H1	14302031E0	HYDRAULIC ACTUATOR	1	P2	161258B4B0	SUPPORT FLANGE	1
H2	160858KNB0	INSIDE VALVE	1	P3	1640580QB0	COVER	1
H3	16100416E0	HYDRAULIC ACTUATOR FLANGE	1	P4	167007ZAB0	NUT	1
H4	16120286K0	PLATE	1	P5	1680700200	GASKET	1
H5	161258B4B0	SUPPORT FLANGE	1	P6	168409PQB0	WASHER	1
H6	1640580QB0	COVER	1	P7	168529TFB0	SPACER	1
H7	167007ZAB0	NUT	1	P8	1691000200	SPRING	1
H8	16732001E0	COUPLER	1	P9	4022100100	GREASER M6X1	1
H9	1680700200	CONVEYOR-CAP GASKET	1	P10	4022200005	SEAL 37X27X7	1
H10	168409PQB0	RING NUT	1	P11	4022200330	OR SEAL 3375	1
H11	16850007E0	WASHER M5	1	P12	4022200331	OR SEAL 2137	1
H12	168529TFB0	SPACER	1	P13	4026102804	SCREW TE M8X16	4
H13	1691000200	SPRING	1	P14	4026107110	SCREW TE M8X25	4
H14	4022100100	GREASER M6X1	1	P15	4026120403	SCREW TCEI M8X20	4
H15	4022200005	Y-SEAL 37X27X7	1	P16	4026350505	WASHER GROWER 8 GALV.	4
				P17	4026350909	WASHER M8	8
				P18	4027100477	PNEUMATIC ACTUATOR	1

Model	Issue date	Revision No.	Revision date	Filled out by	Viewed by
R	23-02-2017	05	05-02-2025	U.T.	A.T.

Jurop SpA

Via Crosera, 50
33082 Azzano Decimo, PN (ITALY)

Tel. +39 0434 636811
Fax. +39 0434 636812

<http://www.juop.it>
e-mail: info@juop.it

Juop SpA reserves the right to modify the products described in this manual without prior notice.