

ENGLISH (Translated from Italian)

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elled for outdoor use and have a sufficient conduction path should be used outdoors. For safety reasons, we recommend that, in principle, the equipment be used only with a earth-leakage circuit breaker

(max 30 mA).

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PIPING CONNECTIONS 12.2

ATTENTION

INSPECTION

CONNEXION

The MINIMUM

SUCTION HOSE

DELIVERY HOSE

AVANT-PROPOS

ATTENTION

REMARQUE

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FOREWORD

OPERATION

ATTENTION

ATTENTION

ATTENTION

AUTOMATIC

OPERATION

MANUAL

ATTENTION

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FOREWORD - Before carrying out any connection, refer to the visual indications i.e. arrow on the pump head, to identify suction and delivery. Wrong connection can cause serious pump damage.

PRELIMINARY Check that the machine has not suffered any damage during transport or storage Clean the inlet and outlet openings, removing any dust or residual pack-

ing material.

Make sure that the motor shaft turns freely. Check that the electrical specifications correspond to those shown on the identification plate.

• Make sure that the hoses and the suction tank are free of dirt and filing residue that might damage the pump and accessories. Always install a metal mesh filter in the suction hose

Before connecting the delivery hose, partially fill the pump body with oil to avoid the pump running dry during the priming phase. • When connecting pump models furnished with BSP threading (cylindr cal gas) do not use joints with a conical thread. Excessive tightening of

these could cause damage to the pump openings. nended characteristics for hoses are as follows: Minimum nominal diameter: 1' -Nominal recommended pressure: 10 bar

-Use tubing suitable for functioning under suction pressure. Minimum nominal diameter: 3/4 -Nominal recommended pressure: 30 bar

The use of hoses and/or line components that are inappropriate for use with oil or have inadequate nominal pressures can cause damage to objects or people as well as pollution. The loosening of connections (threaded connections, flanges, gas-ket seals) can likewise cause damage to objects or people as well as pollution. Check all of the connections after installation and on a regular on-going basis with adequate frequency.

INITIAL START-UP

VISCOMAT series pumps are self-priming and, therefore, able on start-up. The priming height (distance between the surface of the oil and the inlet opening) must not exceed 2,5 meters.

Check that the quantity of fluid in the suction tank is greater than the amount you wish to transfer. Make sure that the residual capacity of the delivery tank is

greater than the quantity you wish to transfer Make sure that the piping and line accessories are in good

Fluid leaks can damage objects and injure persons. Wetting the Pump. Before starting the pump, wet the inside of the pump body with oil through the inlet and outlet openings.

Never start or stop the pump by connecting or cutting out €. the power supply. - Prolonged contact with some fluids can damage the skin. The

use of goggles and gloves is recommended. The priming phase may last from several seconds to a few minutes, depending on the characteristics of the system. If this phase is excessively

prolonged, stop the pump and verify: That the pump is not running completely"dry"

• That the suction hose guarantees against air infiltration And is correctly immersed in the fluid to be drawn.

• That any filters installed are not blocked. • That the delivery hose allows for the easy evacuation of the air. That the priming height is not greater than 2,5 meters;

ning has occurred, after reattaching the delivery gun, verify that the pump is functioning within the anticipated ranges, possibly checking: That under conditions of maximum back pressure, the powe absorption of the motor stays within the values shown on the dentification plate

that the suction pressure does not exceed the limits indicated in paragraph CONSIDERATIONS REGARDING SUCTION & ELIVERY LINES

that the back pressure in the delivery line does not exceed th values indicated in paragraph CONSIDERATIONS REGARD-ING SUCTION & DELIVERY LINES.

EVERY DAY USE

- No particular preliminary operation is required for every day se of VISCOMAT pumps. Before starting the pump, make sure that the ultimate shut-off device (delivery nozel or line valve) is closed. If the delivery has no shut-off device (free delivery) make sure that it is correctly
- Irn the on-switch present on some pump models (single-phase) or the start/stop switch installed on the electrical power line. make sure that the tank is filled with a quantity of oil greater than the quantity to be supplied (running dry could damage the pump).

the outlet.

Fluid exits at high pressure from a delivery gun fed by

towards any part of the body.

pump will immediately enter by-pass mode. Running in by-pass mode with the delivery closed is only al-lowed for brief periods(2 to 3 minutes maximum).When the thermo-protector trips, turn-off the electric power and wait

Stop the pump. In certain applications it can be advantage ous to provide for the automatic starting/stopping of the pump by means of a pressure switch that s the pressure of the delivery line. The functional logic of this

the pump is stopped, the delivery gun is closed and the delivery line is under pressure. the delivery gun is then opened, with theconsequent sudden

- lowering of pressure in the delivery line. the pressure switch, at the moment that the pressure drops below
- he value "Pm"automatically starts the pump allowing delivery. during delivery the pump delivers against a back pressure that, depending on the conditions of the delivery line, could
- turn out to be higher or lower than the pressure "Pm". at the moment the delivery gun is closed, the pressure will increase

apidly and the pressure switch, at the moment in which the pres sure exceeds the value "Pa" will automatically stop the pump. The values of "Pa" and "Pm" are characteristics of the pressure switch used and are often adjustable within a certain range. For the safe and proper functioning of the pump in these

- types of applications it is absolutely indispensable to make sure that: "Pa" is sufficiently lower than the bypass pressure, to assure that the pump will stop as soon as the gun is closed and that
 - the pump will not run a long time in by-pass mode. " is several bar lower than "Pa" to avoid the pump starting when not wanted due to small pressure drops not caused by
 - opening the gun. he foot valve guarantees an effective seal, to avoid frequent
 - unwanted cycling on and off caused by its leakage. whenever the system is entirely composed of metal tubing, or at any rate, of highly rigid tubing, one should consider installing an accumulator capable of preventing small leaks (from the oot valve, for example) from causing a pressure drop sufficient to automatically start the pump.

ailure to comply with the above can damage the pump.

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MAINTENANCE

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Safety

VISCOMAT series pumps are designed and constructed to require a ninimal amount of maintenance. Before carrying out any maintenance work, disconnect the dispensing system from any electrical and hydraulic power source. During mainte nance, the use of personal protective equipment (PPE) is compulsory. In any case always bear in mind the following basic recommendations for a good functioning of the pump All maintenance must be performed by qualified personnel. Tampering can lead to performance degradation, danger to persons and/or prop-

erty and may result in the warranty being voided. ONCE A WEEK - On a weekly basis, check that the tubing joints have not loosened, to avoid any leakage. ONCE A MONTH: - On a monthly basis, check the pump body and keep it clean of any

> - On a monthly basis check and clean the filters placed at the pump inlet On a monthly basis, check that the electric power supply cables are in good condition.

NOISE LEVEL 16

rmal operating conditions, noise emissions of all models do not exceed 75 dB at a distance of 1 metre from the electric pump.

PROBLEMES ET SOLUTIONS 17

r any problems contact the authorised dealer nearest to you.		
OBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
IE MOTOR IS NOT IRNING	Lack of electric power	Check the electrical connections and the safety systems.
	Rotor jammed	Check for possible damage or obstruction of the rotating com- ponents.
	The motor protecting thermals witch has tripped	Wait until the motor cools, verify that it starts again, look for the cause of overheating
	Motor problems	Contact the Service Department
IE MOTOR TURNS OWLY WHEN ARTING	Low voltage in the electric power line	Bring the voltage back within the anticipated limits
	Excessive oil viscosity	Verify the oil temperature and warm it to reduce the excessive viscosity
DW OR NO FLOW ITE	Low level in the suction tank	Refill the tank
	Foot valve blocked	Clean and/or replace the valve
	Filter clogged	Clean the filter
	Excessive suction pressure	Lower the pump with respect to the level of the tank or increase the cross-section of the piping
	High loss of head in the delivery circuit (working with the by-pass open)	Use shorter piping or of greater diameter
	By-pass valve blocked	Dismantle the valve, clean and/or replace it
	Air entering the pump or the suc- tion piping	Check the seals of the connec- tions
	A narrowing in the suction piping	Use piping suitable for working under suction pressure
	Low rotation speed	Check the voltage at the pump. Adjust the voltage and/or use cables of greater cross-section
	The suction piping is resting on the bottom of the tank	Raise the piping
	Excessive oil viscosity	Verify the oil temperature and warm it to reduce the excessive viscosity
CREASED PUMP DISE	Cavitation occurring	Reduce suction pressure
	Irregular functioning of the by- pass	Dispense until the air is purged from the by-pass system
	Presence of air in the fluid	Verity the suction connections
AKAGE FROM THE IMP BODY	Seal damaged	Check and replace the seal

DEMOLITION AND DISPOSAL 18

If the system needs to be disposed, the parts which make it up must be delivered to companies that specialize in the recycling and disposal of industrial waste and, in particular: he packaging consists of biodegradable cardboard which can be deliv

ered to companies for normal recycling of cellulose. Metal parts, whether paint-finished or in stainless steel, can be consigned to scrap metal collectors.

These must be disposed of by companies that specialize in the disposal tric and electronic of electronic components, in accordance with the indications of directive 2012/19/EU (see text of directive below).

European Directive 2012/19/EU requires that all equipment marked with this symbol on the product and/or packaging not be disposed of together tion regarding the the tion tion the the the tion tion-differentiated urban waste. The symbol indicates that this prod-uct must not be disposed of together with normal household waste. It is the responsibility of the owner to dispose of the the responsibility of the owner to dispose of these products as well as other electric or electronic equipment by means of the specific refuse collection structures indicated by the government or the local governing authorities.

> Disposing of RAEE equipment as household wastes is strictly forbidden. Such wastes must be disposed of separately. Any hazardous substances in the electrical and electronic appliances and/or the misuse of such appliances can have potentially serious conse quences for the environment and human health.

> n case of the unlawful disposal of said wastes, fines will be applicable as defined by the laws in force. Other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial



EN. This document has been drawn upwith the greatest attention t precision and accuracy of all data herein contained. Nevertheless, PIU:

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BULLETIN MOO59 F ENDE _ OO





waste.

Disposing of pack ina materials Metal Parts Disposal of elec-¥7

Foreword

clients residing within the

European Unior

parts disposa



Fluid Handling



ositioned and appropriately attached to the delivery tank.

lever start the pump by simply inserting the plug in

Open the delivery valve or activate the delivery gun, gripping

a VISCOMAT pump. Never point the outlet of the gun Close the delivery gun or the line valve to stop delivery. The

for the motor to cool.

type of installation is as follows:



