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2 MACHINE AND MANUFACTURER IDENTIFICATION



AVAILABLE MODELS	- VISCOMAT 70 - VISCOMAT 90
MANUFACTURER	PIUSI S.p.A. Via Pacinotti 16/A z.1. Rangavino - 46029 Suzzara - Mantova - Italy

3 FACSIMILE COPY OF EU DECLARATION OF CONFORMITY

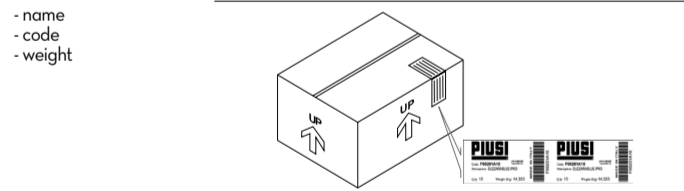
The undersigned PIUSI S.p.A. hereby states under its own responsibility that the equipment described below: **DESCRIPTION: Pump for lubricant oil transfer Model: VISCOMAT 70 - VISCOMAT 90** Serial number: refer to Lot Number shown on CE plate affixed to product Year of manufacture: refer to the year of production shown on the CE plate affixed to the product complies with the following legislation:
- Electromagnetic compatibility
The technical file is at the disposal of the competent authority following motivated request at PIUSI S.p.A. or following request sent to the e-mail address: doc.tec@pisi.com. THE ORIGINAL DECLARATION OF CONFORMITY IS PROVIDED SEPARATELY WITH THE PRODUCT

4 MACHINE DESCRIPTION

PUMP Self-priming, volumetric, rotating electric vane pump equipped with by-pass valve.
MOTOR Asynchronous motor, single-phase or three-phase, 2 or 4 pole, closed type (Protection class IP55 according to regulation EN 60034-5-86), self-ventilating, flange-mounted directly to the pump body.

4.1 HANDLING AND TRANSPORT

Foreword Due to the limited weight and dimensions of the pumps, special lifting equipment is not required to handle them. The pumps are carefully packed before dispatch. Check the packing when receiving the material and store in a dry place.
PACKAGING The pump is packaged as packed suitably for shipment. On the packaging a label shows the following product information:



MODEL	WEIGHT (Kg)	PACKAGING DIMENSION (mm)
VISCOMAT 70	14.1	355 x 185 x 285
VISCOMAT 70 T	14.1	350 x 200 x 280
VISCOMAT 90	14.1	350 x 200 x 280

5 GENERAL WARNINGS

Warnings To ensure operator safety and to protect the dispensing system from potential damage, workers must be fully acquainted with this instruction manual before attempting to operate the dispensing system.

Symbols used in the manual The following symbols will be used throughout the manual to highlight safety information and precautions of particular importance:
ATTENTION This symbol indicates safe working practices for operators and/or potentially exposed persons.
WARNING This symbol indicates that there is risk of damage to the equipment and/or its components.
NOTE This symbol indicates useful information.

Manual preservation This manual should be complete and legible throughout. It should remain available to end users and specialist installation and maintenance technicians for consultation at any time.

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6 SAFETY INSTRUCTIONS

ATTENTION You must avoid any contact between the electrical power supply and the fluid that needs to be FILTERED.

Maintenance checks before inst control Before any checks or maintenance work are carried out, disconnect the power source.

FIRE AND EXPLOSION To help prevent fire and explosion. Use equipment only in well ventilated area.

ELECTRIC SHOCK This device must be grounded. Improper grounding setup or usage of the system can cause electric shock. Turn off and disconnect power cord before servicing equipment. Connect only to a grounded electrical outlets.

Electrocution or death Do not operate the unit when fatigued or under the influence of drugs or alcohol. Do not leave the work area while equipment is energized or under pressure. Turn off all equipment when equipment is not in use. Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards. Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not kink or over bend hoses or use hoses to pull equipment. Keep children and animals away from work area. Comply with all applicable safety regulations.

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Burn Hazard Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns do not touch hot fluid or equipment.

Toxic Fluid or Fumes Hazard Read MSDS's to know the specific hazards of the fluids you are using. Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines. Prolonged contact with the treated product may cause skin irritation: always wear protective gloves during dispensing.

Equipment Misuse Do not operate the unit when fatigued or under the influence of drugs or alcohol. Do not leave the work area while equipment is energized or under pressure. Turn off all equipment when equipment is not in use. Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards. Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not kink or over bend hoses or use hoses to pull equipment. Keep children and animals away from work area. Comply with all applicable safety regulations.

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10 OPERATING CONDITIONS

10.1 ENVIRONMENTAL CONDITIONS The power absorbed by the pump depends on the functioning point and the viscosity of the oil being pumped. The data for MAXIMUM CURRENT provided in the Table refer to pumps functioning at the point of maximum compression Pmax, with oils of a viscosity equal to approximately 500 cSt.

TEMPERATURE The temperature limits shown apply to the pump components and must be respected, otherwise, there is a risk of damage or malfunction. It is understood, nevertheless, that for a given oil, the real functioning temperature range also depends on the variability of the viscosity of the oil itself with the temperature. Specifically:

RELATIVE HUMIDITY The minimum temperature allowed (+10°C) could cause the viscosity of some oils to greatly exceed the maximum allowed, with the consequence that the static torque required during the starting of the pump would be excessive, risking overload and damage to the pump.

ATTENTION The maximum temperature allowed (+60°C) could, on the other hand, cause the viscosity of some oils to drop well below the minimum allowed, causing a degradation in performance with obvious reductions in flow rate as the back pressure increases.

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10.2 ELECTRICAL POWER SUPPLY

ATTENTION Depending on the model, the pump must be fed by three-phase or single-phase alternating current whose nominal values are those indicated in the Table of paragraph ELECTRICAL SPECIFICATIONS. The maximum acceptable variations from the electrical parameters are: Voltage: +/- 5% of the nominal value Frequency: +/- 2% of the nominal value

ATTENTION Power from lines with values outside the indicated limits can damage the electrical components.

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12.2 PIPING CONNECTIONS

FOREWORD Before carrying out any connection, refer to the visual indications i.e. arrow on the pump head to identify suction and delivery.

ATTENTION Wrong connection can cause serious pump damage.

PRELIMINARY INSPECTION Check that the machine has not suffered any damage during transport or storage. Clean the inlet and outlet openings, removing any dust or residual packing material. Make sure that the motor shaft turns freely. Check that the electrical specifications correspond to those shown on the identification plate.

CONNECTION Make sure that the hoses and the suction tank are free of dirt and filth. 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.

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