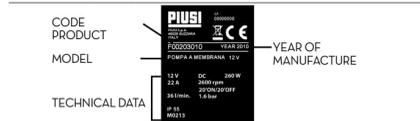


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2 MACHINE AND MANUFACTURER IDENTIFICATION



AVAILABLE MODELS: 12/24V DC
MANUFACTURER: PIUSI S.p.A. Via Pacinotti 16/A - Z.I. Rangovino 46029 Suzzara (MN) Italy

3 DECLARATION OF CONFORMITY

The undersigned: PIUSI S.p.A. Via Pacinotti 16/A - z.i. Rangovino 46029 Suzzara (MN) Italy
Hereby states under its own responsibility, that the equipment described below:

Description: Dispenser Pump for the transfer of Ad-Blue® - AUS32 - WATER - Antifreeze Model: Diaphragm pump
The documentation 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@piusi.com

Suzzara, 20/04/2016 Otto Varini legal representative

4 MACHINE DESCRIPTION

PUMP MOTOR: Five-chamber positive-displacement diaphragm pump
Brush motor, DC, low tension with intermittent cycle, closed type in protection class IP55 according to CEI-EN 60034-5, directly fanged 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.
STORAGE: Store in a covered and dry place. Store the unit away from dirt and vibration.
PACKAGING: The pump is equipped comes packed suitably for shipment.

Table with 3 columns: MODEL, WEIGHT (Kg), PACKAGING DIMENSION(mm). Rows for Versione 12V and Versione 24V.

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: ATTENTION, WARNING, NOTE, Manual preservation, Reproduction rights.

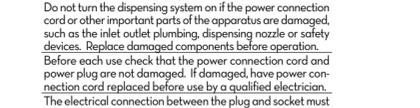
This manual belongs to Piusi S.p.A., which is the proprietor of all rights indicated by applicable laws, including, by way of example, laws on copyrights. All the rights deriving from such laws are reserved to Piusi S.p.A.; the reproduction, including partial, of this manual, its publication, change, transcription and notification to the public, transmission, including using remote communication media, placing at disposal of the public, distribution, marketing in any form, translation and/or processing, loan and any other activity reserved by the law to Piusi S.p.A.

6 SAFETY INSTRUCTIONS

ATTENTION: You must avoid any contact between the electrical power supply and the fluid that needs to be FILTERED.
Maintenance work: Before any checks or maintenance work are carried out, disconnect the power source.
FIRE AND EXPLOSION: Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline.

9 TECHNICAL DATA

Table with 4 columns: Functioning Point, Flow Rate, Voltage (V), Absorption (A). Rows A, B, C, D.



10 ELECTRICAL DATA

Table with 4 columns: PUMP MODEL, POWER SUPPLY, CURRENT, Max (*) (A). Rows for 12V and 24V versions.

11 OPERATING CONDITIONS

11.1 ENVIRONMENTAL CONDITIONS: TEMPERATURE: min. +23 °F / max. +104 °F min. -5 °C / max. +40 °C
RELATIVE HUMIDITY: max. 90%
ATTENTION: The temperature limits shown apply to the pump components and must be respected to avoid possible damage or malfunction.

11.2 ELECTRICAL POWER SUPPLY

NOTE: N.B. THE PUMP SHOULD BE POWERED BY A SAFE SOURCE. BATTERY OR POWER SUPPLY 12/24V WITH SAFETY TRANSFORMER.
ATTENTION: Power supply from lines with values that do not fall within the indicated limits could cause damage to the electrical components and reduction of working performance.

11.3 DUTY CYCLE

NOTE: The pumps have been designed for intermittent use and a 20-minute duty cycle under conditions of maximum back pressure.
ATTENTION: Functioning under by-pass conditions is only allowed for short periods of time (max. 3 minutes).

11.4 PERMITTED AND NON-PERMITTED FLUIDS

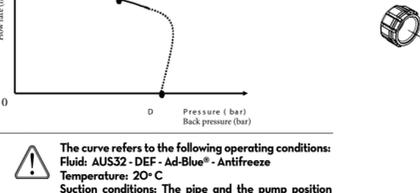
- FLUIDS PERMITTED: - AUS32 (DEF, AD-Blue®), - WATER, - ANTIFREEZE
FLUIDS NOT PERMITTED AND RELATED DANGERS: - DIESEL FUEL, - PETROL, - INFLAMMABLE LIQUIDS, - CORROSIVE CHEMICAL PRODUCTS, - SOLVENTS, - LIQUIDS WITH VISCOSITY >20 cst.

12 INSTALLATION

ATTENTION: The pump must never be operated before the delivery and suction lines have been connected.
PRELIMINARY INSPECTION: Verify that all components are present. Request any missing parts from the manufacturer.

12.1 POSITIONING, CONFIGURATIONS AND ACCESSORIES

NOTE: In the case of installation in the open air, proceed to protect the pump by providing a protection roof.
ATTENTION: THE MOTORS ARE NOT OF THE ANTI-EXPLOSIVE-TYPE. DO NOT install them where inflammable vapours could be present.
ATTENTION: DO NOT INVERT FUSES TO AVOID ANY MOTOR DAMAGE OR MALFUNCTION.



12.2 NOTES ON SUCTION AND DELIVERY LINES

DELIVERY EFFECTS ON FLOW RATE: Length and diameter of pipe, flow rate of dispensed liquid, accessories fitted, can create back pressures above those allowed.
HOW TO REDUCE EFFECTS ON FLOW RATE CHARACTERISTICS OF DELIVERY PIPES: The delivery pipe must have the following technical characteristics: - recommended minimum nominal diameter: 3/4" - recommended nominal pressure: 10 bar

13 CONNECTIONS

13.1 ELECTRICAL CONNECTIONS: GENERAL WARNING: Comply with the following (not exhaustive) instructions to ensure a proper electrical connection.
1 Before installation and maintenance make sure that power supply to the electric lines has been turned off.

13.2 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.

14 INITIAL START-UP

FOREWORD: Check that the quantity of fluid in the suction tank is greater than the amount you wish to transfer.
ATTENTION: Do not run the pump dry for more than 20 minutes. This can cause serious damage to its components.
NOTE: During the priming phase, the pump must discharge all the air that is initially present from the delivery line.

15 EVERY DAY USE

USE PROCEDURE: 1 If flexible pipes are used, attach the ends of the piping to the tanks. 2 Before starting the pump make sure that the delivery valve is closed (dispensing nozzle or line valve).
ATTENTION: The by-pass valve allows functioning with delivery closed only for short periods (max. 3 minutes). To avoid damaging the pump, after use, make sure the pump is off.

16 MAINTENANCE

Safety instructions: The dispensing system was designed and built to require a minimal amount of maintenance.
Authorised maintenance personnel: All maintenance must be performed by qualified personnel.
Measures to be taken: Whenever there is risk of frost, empty the circuit and the pump, taking care to place the pump in an environment where the temperature is no lower than 0°C/32°F.

17 NOISE LEVEL

In normal operating conditions, noise emissions of all models do not exceed 70 dB at a distance of 1 metre from the electric pump.

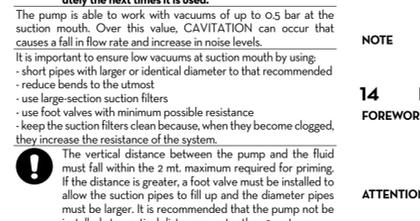
18 PROBLEMS AND SOLUTIONS

Table with 3 columns: PROBLEM, POSSIBLE CAUSE, CORRECTIVE ACTION. Rows for Motor not turning, Motor turns slowly, Low or no flow rate, Increased pump noise, Leakage from pump body, Pump does not prime.

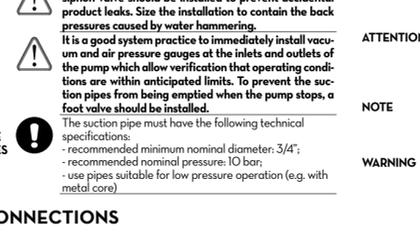
19 DESTRUCTION AND DISPOSAL

Foreword: 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: The packaging consists of biodegradable cardboard which can be delivered to companies for normal recycling of cellulose.

20 EXPLODED VIEWS



21 OVERALL DIMENSIONS



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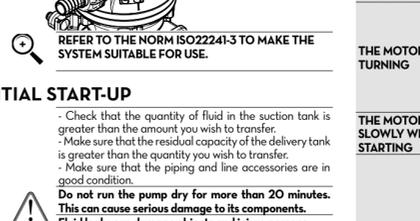
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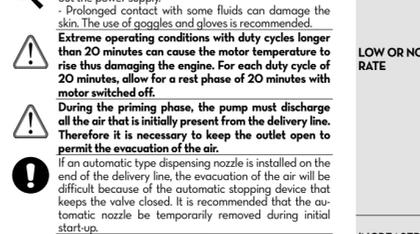
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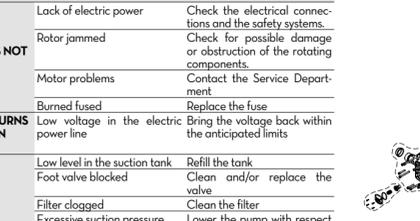
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