ENGLISH (Translated from Italian)

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A DECLARATION OF CONFORMITY

The undersigned:
PIUSI S.p.A/Via Pacinotti c.m. z.i.Rangavino
46029 Suzzara - Mantova - Italy

HEREBY STATES
under its own responsibility, that the equipment described below:
Description: **METER**
Model: **K400**
Serial number: refer to Lot Number shown on CE plate affixed to productYear of manufacture: refer to the year of production shown on the CE plate affixed to the productis in conformity with the legal provisions indicated in the directives :
- Electromagnetic Compatibility Directive 2004/108/EC

The documentation is at the disposal of the competent authority following motivated request at Piusi S.p.A. or following request sent to the email address: doc_tec@piusi.comThe person authorised to compile the technical file and draw up the declaration is Otto Varini as legal representative.

Suzzara, 01/01/2010

Otto Varini
legal representative.

B GENERAL WARNINGS

Important precautions — To ensure operator safety and to protect the pump from potential damage, workers must be fully acquainted with this instruction manual before performing any operation.

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 — his 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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ANY REPRODUCTION, EVEN PARTIAL, IS FORBIDDEN.

C SAFETY INSTRUCTIONS

C1 SAFETY WARNINGS

Mains - preliminary checks before installation Maintenance control — ***ATTENTION***
You must avoid any contact between the electrical power supply and the fluid that needs to be FILTERED.

Before any checks or maintenance work are carried out, disconnect the power source.

C2 FIRST AID RULES

Contact with the product — In the event of problems developing following EYE/SKIN CONTACT, INHALATION or INGESTION of the treated product, please refer to the SAFETY DATA SHEET of the fluid handled.

NOTE — Please refer to the safety data sheet for the product

SMOKING PROHIBITED — When operating the dispensing system and in particular during refuelling, do not smoke and do not use open flame.

C3 GENERAL SAFETY RULES

Essential protective equipment characteristics — Wear protective equipment that is: suited to the operations that need to be performed; resistant to cleaning products.

Personal protective equipment that must be worn — Wear the following personal protective equipment during handling and installation:
- safety shoes;
- close-fitting clothing;
- protective gloves;
- safety goggles;

Protective equipment — instruction manual

C4 PACKAGING

FOREWORD — K400 COMES PACKED IN A CARDBOARD BOX WITH A LABEL INDICATING THE FOLLOWING DATA:

1 - contents of the package
2 - weight of the contents
3 - description of the product

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C5 PACKAGE CONTENTS/PRE-INSPECTION

FOREWORD — To open the packaging, use a pair of scissors or a cutter, being careful not to damage the dispensing system or its components.

NOTE — ***In the event that one or more of the components described below are missing from inside the package, please contact Piusi Inc technical support.***

WARNING — ***Check that the data on the plate correspond to the desired specifications. In the event of any anomaly, contact the supplier immediately, indicating the nature of the defects. Do not use equipment which you suspect might not be safe.***

D BECOMING AQUAINTED WITH K400

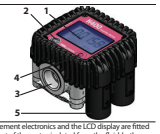
FOREWORD — METER is an electronic digital meter featuring an oval-gear measurement system, designed for easy and precise measuring of oils, diesel, rapsoil and antifreeze.

FUNCTIONING PRINCIPLE — The fluid, by flowing through the appliance, rotates the gears which, during their rotation, transfer, "volume units" of fluid. The exact measurement of the dispensed fluid is done by counting the number of rotations made by the gears and consequently the number of transferred "volume units". The magnetic coupling, between the magnets installed in the gears and a magnetic switch outside the measurement chamber, ensures measurement chamber sealing and ensures transmission of the pulses generated by gear rotation to the electronic board microprocessor.

OPERATIONAL MODE — In the dispensing mode (Normal Mode), the partial and the total amounts are shown in two different registers of the LCD.
The METER features a non-volatile memory for storing the dispensing data, even in the event of a complete power break for long periods.

K400 components

1	LCD display
2	RESET button
3	Measurement chamber
4	CAL button
5	Battery housing



The measurement electronics and the LCD display are fitted in the top part of the meter, isolated from the flow path measurement chamber and sealed from the outside by means of a cover

D1 LCD DISPLAY (ONLY METER VERSION)

FOREWORD — The "LCD" of the METER features two numerical registers and various indications displayed to the user only when the applicable function is required.

1	Partial register (5 figures with moving comma FROM 0.1 to 99999) indicating the volume dispensed since the reset button was last pressed	6	Indication of type of total, (TOTAL / Reset TOTAL);
2	Indication of battery charge	7	Indication of unit of measurement of Totals: L=Litres Gal=Gallons
3	Indication of calibration mode	8	Indication of Flow Rate mode
4	Totals register (6 figures with moving comma FROM 0.1 to 999999), that can indicate two types of Total: 4.1. General Total that cannot be reset (TOTAL) 4.2 Resettable total (Reset TOTAL)	9	Indication of unit of measurement of Partial: Qts=Quarts L=Litres Pts=Pints Gal=Gallons
5	Indication of total multiplication factor (x10 / x100)		

Measurement Chamber — The measurement chamber is located in the lower part of the instrument. It features a threaded inlet and outlet. The cover on the bottom part provides access to the measurement mechanism by our cleaning operations. Inside the measurement chamber are the oval gears which, on running, generate electrical pulses which are processed by the microprocessor-controlled electronic board. By applying a suitable calibration factor (meaning a "weight" associated with each pulse), the microprocessor translates the pulses generated by the "fluid volume" rotation expressed in the set units of measurement, displayed on the partial and total registers of the LCD. All the meters are factory set with a calibration factor called FACTORY K FACTOR equal to 1,000. For best meter performance - adapting this to the intrinsic characteristics of the fluid to be measured - the instrument can be "calibrated". It is possible to return to factory calibration at any time.

Measurement Chamber — The METER is powered by two standard type 1.5 V batteries (size 1N). The battery housing is closed by a threaded water-tight cap that can be easily removed for quick battery change.

D2 USERS BUTTONS

FOREWORD — The METER features two buttons (RESET and CAL) which individually perform two main functions and, together, other secondary functions.

MAIN FUNCTIONS PERFORMED — - for the RESET key, resetting the partial register and Reset Total
- for the CAL key, entering instrument calibration mode

SECONDARY FUNCTIONS — Used together, the two keys permit entering configuration mode where the desired unit of measurement can be set.

LEGEND — ***CALIBRATE MEANS PERFORMING ACTIONS ON THE METER KEYS. BELOW IS THE LEGEND OF THE SYMBOLS USED TO DESCRIBE THE ACTIONS TO BE PERFORMED***

SHORT PRESSURE OF CAL KEY — ***LONG PRESSURE OF CAL KEY*** — ***SHORT PRESSURE OF RESET KEY*** — ***LONG PRESSURE OF RESET KEY***

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E INSTALLATION

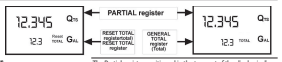
FOREWORD — The METER features a ½ inch inlet and outlet, threaded and perpendicular, and has been designed to be installed in any position, both as fixed in-line installation and as moving installation on a dispensing nozzle.

ATTENTION — ***Make sure the threaded connections do not interfere with the inside of the measurement chamber causing the gears to seize.***
METER does not have a fixed direction of flow and both inlets can be used as inlet and outlet
Make sure a filter with adequate filtering capacity is always fitted either at meter inlet or at the entrance of the line on which the meter is fitted. If solid particles enter the measurement chamber, the gears could seize.
For installations on system, position K400 so that the battery housing can be easily reached.
The rubber protection is an integral part of the product. Be sure of its presence and its good conditions

F DAILY USE

FOREWORD — The only operations that need to be done for daily use are partial and/or resettable total register resetting. The user should use only the dispensing system of K400. Occasionally the meter may need to be configured or calibrated. To do so, please refer to the relevant chapters.

Below are the two typical normal operation displays. One display page shows the partial and reset total registers. The other shows the partial and general total. Switchover from resettable total to general total display is automatic and tied to phases and times that are in factory set and cannot be changed.



* The Partial register positioned in the top part of the display indicates the quantity dispensed since the RESET key was last pressed.
The RESET Total register, positioned in the lower part of the display, indicates the quantity dispensed since the last RESET Total reset(s). The RESET Total cannot be reset until the Partial has been reset, while vice versa, the Partial can always be reset without resetting the RESET Total. The unit of measurement of the two Totals can be the same as the Partial or else different according to the factory or user settings.

* The General TOTAL register (Total) can never be reset by the user. It continues to rise for the entire operating life of the meter.

* The register of the two totals (Reset Total and Total) share the same area and digits of the display. For this reason, the two totals will never be visible at the same time, but will always be displayed alternately.

* The General Total (Total) is shown during Meter standby

* The Reset Total is shown:
- At the end of a Partial reset for a certain time (a few seconds)
- During the entire dispensing stage
- For a few seconds after the end of dispensing, Once this short time has expired, Meter switches to standby and lower register display switches to General Total

NOTA — ***6 digits are available for Totals, plus two icons x 10 / x100. The increment sequence is the following: 0.0 -> 99999.9 -> 999999 -> 10000 x 10 -> 999999 x 10 -> 100000 x 100 -> 999999 x 100***

F1 DISPENSING IN NORMAL MODE

FOREWORD — Normal mode is the standard dispensing. While the count is made, the partial and resettable total are displayed at the same time (reset total).

WARNING — Should one of the keys be accidentally pressed during dispensing, this will have no effect.

STAND BY — A few seconds after dispensing has ended, on the lower register, the display switches from resettable total to general total: the word reset above the word total disappears, and the reset total is replaced by the general total.
This situation is called standby and remains stable until the user operates the K400 again.

F1.1 PARTIAL RESET (NORMAL MODE)

The partial register can be reset by pressing the reset key when the meter is in standby, meaning when the display screen shows the word "TOTAL"

After pressing the reset key, during reset, the display screen first of all shows all the lit up digits and then all the digits that are not lit up.

At the end of the process, a display page is first of all shown with the reset partial and the reset total

and, after a few moments, the reset total is replaced by the non resettableTotal.

F1.2 RESETTING THE RESET TOTAL

The reset total resetting operation can only be performed after resetting the partial register. The reset total can in fact be reset by pressing the reset key at length while the display screen shows reset total as on the following display page:

Schematically, the steps to be taken are:

1 Wait for the display to show normal standby display page (with total only displayed)
2 Press the reset key quickly
3 The meter starts to reset the partial
4 While the display page showing the reset total is displayed Press the reset key again for at least 1 second

5 The display screen again shows all the segments of the display followed by all the switched-off segments and finally shows the display page where the reset Reset Total is shown.

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G CALIBRATION

FOREWORD — METER is supplied with a factory calibration that ensures precise measuring in most operating conditions. Nevertheless, when operating close to extreme conditions, such as for instance:
-with fluids close to acceptable range extremes (such as low-viscosity antifreeze or high-viscosity oils for gearboxes) ;
in extreme flow rate conditions (close to minimum or maximum acceptable values)
on-the-spot calibration may be required to suit the real conditions in which the meter is required to operate.
When operating close to extreme use or flow rate conditions (close to minimum or maximum acceptable values), an on-the-spot calibration may be required to suit the real conditions in which the K400 is required to operate.

G1 DEFINITIONS

CALIBRATION FACTOR OR "K FACTOR" — Multiplication factor applied by the system to the electrical pulses received, to transform these into measured fluid units.

FACTORY K FACTOR — Factory-set default factor. It is equal to 1,000. This calibration factor ensures utmost precision in the following operating conditions:
Fluid — ***water/urea solution or liquid food products***
Temperature: — ***20°C***
Flow rate: — ***10 - 30 ltr/min***
Even after any changes have been made by the user, the factory k factor can be restored by means of a simple procedure.

USER K FACTOR: — Customized calibration factor, meaning modified by calibration.

G2 CALIBRATION MODE

Why calibrate?
1 Display the currently used calibration factor:
2 Return to factory calibration (Factory K Factor) after a previous calibration by the user
3 Change the calibration factor using one of the two previously indicated procedures

FOREWORD — Two procedures are available for changing the Calibration Factor:
1 In-Field Calibration, performed by means of a dispensing operation
2 Direct Calibration, performed by directly changing the calibration factor

In calibration mode, the partial and total dispensed quantities indicated on the display screen take on different meanings according to the calibration procedure phase.
In calibration mode, the K400 cannot be used for normal dispensing operations.
In "Calibration" mode, the totals are not increased

ATTENTION — ***The K400 features a non-volatile memory that keeps the data concerning calibration and total dispensed quantity stored for an indefinite time, even in the case of a long power break; after changing the batteries, calibration need not be repeated.***

G2.1 DISPLAY OF CURRENT CALIBRATION FACTOR AND RESTORING FACTORY FACTOR.

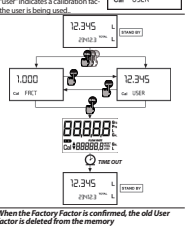
By pressing the CAL key while the appliance is in Standby, the display page appears showing the current calibration factor used. If no calibration has ever been performed, or the factory setting has been restored after previous calibrations, the following display page will appear. The word "Fact" abbreviation for "factory" shows that the factory calibration factor is being used

1.000 Cal FACT

If, on the other hand, calibrations have been made by the user, the display page will appear showing the currently used calibration factor (in our example 0.998) . The word "user" indicates a calibration factor set by the user is being used .

0.998 Cal USER

The flow chart alongside shows the switchover logic from one display page to another
In this condition, the Reset key permits switching from User factor to Factory factor.
To confirm the choice of calibration factor, quickly press CAL while "User" or "Fact" are displayed.
After the restart cycle, the K400 uses the calibration factor that has just been confirmed



ATTENTION — ***When the Factory Factor is confirmed, the old User factor is deleted from the memory***

G2.2 IN FIELD CALIBRATION

FOREWORD — This procedure calls for the fluid to be dispensed into a graduated sample container in real operating conditions (flow rate, viscosity, etc.) requiring maximum precision.

ATTENTION — ***For correct K400 calibration, it is most important to:***

1 When the Factory Factor is confirmed, the old User factor is deleted from the memory
2 use a precise Sample Container with a capacity of not less than 5 litres, featuring an accurate graduated indicator.
3 ensure calibration dispensing is done at a constant flow rate equivalent to that of normal use, until the container is full;
4 Not reduce the flow rate to reach the graduated area of the container during the final dispensing stage (the correct method during the final stages of sample container filling consists in making short top-ups at normal operation flow rate) ;
5 after dispensing, wait a few minutes to make sure any air bubbles are eliminated from the sample container; only read the Real value at the end of this stage, during which the level in the container could drop.
6 Carefully follow the procedure indicated below.

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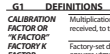
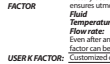
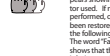
G2.2.1 IN-FIELD CALIBRATION PROCEDURE

ACTION		DISPLAY
1	**NONE** Meter in Standby	12.345 L 13456 TOTAL L
2	**LONG CAL key keying** The Meter enters calibration mode, shows <<CAL>> and displays the calibration factor in use instead of partial. The words "Fact" and "USER" indicate which of the two factors (factory or user) is currently in use. Important: This factor is that which the instrument also uses for field calibration measurement operations	1.000 Cal FACT (USER) L
3	**LONG RESET key keying** The Meter shows "CAL" and the partial at zero. The Meter is ready to perform in field calibration.	0.000 Cal FIELD L
4	**DISPENSING INTO SAMPLE CONTAINER** Without pressing any key, start dispensing into the sample container  Dispensing can be interrupted and started again at will. Continue dispensing until the level of the fluid in the sample container has reached the graduated area. There is no need to reach a preset quantity.  Indicated value / Real value	9.800 Cal FIELD L
5	**SHORT RESET key keying** The Meter is informed that the calibration dispensing operation is finished. Make sure dispensing is correctly finished before performing this operation. To calibrate the Meter, the value indicated by the partial totaliser (example 9.800) must be forced to the real value marked on the graduated sample container. In the bottom left part of the display an arrow appears (upwards and downwards), that shows the direction (increase or decrease) of the value change displayed when the following operations 6 or 7 are performed.	9.800 Cal FIELD L
6	**SHORT RESET key keying** The arrow changes direction. The operation can be repeated to alternate the direction of the arrow.	9.800 Cal FIELD L
7	**SHORT/LONG CAL key keying** The indicated value changes in the direction indicated by the arrow - one unit for every short CAL key keying - continually if the CAL key is kept pressed. The speed increase rises by keeping the key pressed. If the desired value is exceeded, repeat the operations from point (6).	9.860 Cal FIELD L
8	**LONG RESET key keying** The Meter is informed that the calibration procedure is finished. Before performing this operation, make sure the INDICATED value is the same as the REAL value  The Meter calculates the new USER K FACTOR ; this calculation could require a few seconds, depending on the correction to be made. ***ATTENTION: If this operation is performed after action (5), without changing the indicated value, the USER K FACTOR would be the same as the FACTORY K FACTOR, thus it is ignored.***	- - - - - Cal EFID L
9	**NO OPERATION** At the end of the calculation, the new USER K FACTOR is shown for a few seconds, after which the restart cycle is repeated to finally achieve standby condition. ***IMPORTANT: From now on, the indicated factor will become the calibration factor used by the Meter and will continue to remain such even after a battery change***	1.015 Cal EFID L
10	NO OPERATION The Meter stores the new work calibration factor and is ready to begin dispensing, using the USER K FACTOR that has just been calculated..	0.000 Cal 13456 TOTAL L

G2.3 DIRECT MODIFICATION OF K FACTOR

If normal Meter operation shows a mean percentage error, this can be corrected by applying to the currently used calibration factor a correction of the same percentage. In this case, the percentage correction of the USER K FACTOR must be calculated by the operator in the following way

$$\text{New cal. Factor} = \text{Old Cal Factor} \times \left(\frac{100 + E\%}{100}\right)$$

Example:
Error percentage found: E% - 0.9 %
CURRENT calibration factor: 1.000
New USER K FACTOR: 1.000 * [| 100 – (-0.9)| /100] = 1.000 * (100 + 0.9/100) = 1.009

If the Meter indicates less than the real dispensed value (negative error) the new calibration factor must be higher than the old one as shown in the example. The opposite applies if the Meter shows more than the real dispensed value (positive error).

ACTION		DISPLAY
1	**NONE** METER in Standby.	12.345 L 13456 TOTAL L
2	**LONG CAL KEY KEYING** Meter enters calibration mode, shows "CAL" and displays the calibration factor being used instead of the partial. The words "Fact" and "User" indicate which of the two factors (factory or user) is currently being used.	1.000 Cal FACT (USER) L
3	**LONG RESET KEY KEYING** The Meter shows "CAL" and the zero partial total. Meter is ready to operate in field calibration by dispensing – see previous paragraph.	1.000 Cal FIELD L
4	**LONG RESET KEY KEYING** We now go on to Direct change of the calibration factor: the word "Direct" appears together with the Currently Used calibration factor. In the bottom left part of the display, an arrow appears (upwards or downwards) defining the direction (increase or decrease) of change of the displayed value when subsequent operations 5 or 6 are performed.	1.000 Cal DIRECT L
5	**SHORT RESET KEY KEYING** Changes the direction of the arrow. The operation can be repeated to alternate the direction of the arrow.	1.000 Cal DIRECT L
6	**SHORT/LONG CAL KEY KEYING** The indicated value changes in the direction indicated by the arrow - one unit for every short CAL key keying - continually if the CAL key is kept pressed. The speed increase rises by keeping the key pressed. If the desired value is exceeded, repeat the operations from point (5).	1.003 Cal DIRECT L
7	**LONG RESET KEYING** The Meter is informed that the calibration procedure is finished. Before performing this operation, make sure the INDICATED value is that required.	- - - - - Cal EFID L
8	**NO OPERATION** At the end of the calculation, the new USER K FACTOR is shown for a few seconds, after which the restart cycle is repeated to finally achieve standby condition. ***IMPORTANT: From now on, the indicated factor will become the calibration factor used by the Meter and will continue to remain such even after a battery change***	1.003 Cal EFID L
9	**NO OPERATION** The Meter stores the new work calibration factor and is ready to begin dispensing, using the USER K FACTOR that has just been changed.	0.000 Cal 13456 TOTAL L

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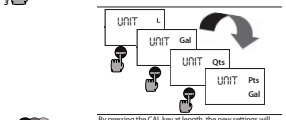
H METER CONFIGURATION

The METER feature a menu with which the user can select the main measurement unit, Quarts (Qts), Pints (Pts), Litres (Lit), Gallons (Gal);
The combination of the unit of measurement of the Partial register and that of the Totals is predefined according to the following table:

Combination no.	Unit of Measurement Partial Register	Unit of Measurement Totals Register
1	Litres (L)	Litres (L)
2	Gallons (Gal)	Gallons (Gal)
3	Quarts (Qts)	Gallons (Gal)
4	Pints (Pts)	Gallons (Gal)

To choose between the 4 available combinations:

1 Wait for the METER to go to Standby
2 Then press the CAL and RESET keys together. Keep these pressed until the word "UNIT" appears on the screen together with the unit of measurement set at that time (in this example Litres / Litres)
3 Every short press of the RESET key, the various combinations of the units of measurements are scrolled as shown below:



4 By pressing the CAL key at length, the new settings will be stored, the METER will pass through the start cycle and will then be ready to dispense in the set units.

ATTENTION — ***The Reset Total and Total registers will be automatically changed to the new unit of measurement.***
NO new calibration is required after changing the Unit of Measurement.

I MAINTENANCE

I1 CHANGE BATTERY

FOREWORD — The METER has been designed to require a minimum amount of maintenance. The only maintenance jobs required are:
- Battery change – necessary when the batteries have run down
- Cleaning the measurement chamber. This may be necessary due to the particular nature of the dispensed fluids or due to the presence of solid particles following bad filtering

BATTERY REPLACEMENT WARNING — Use 2x1.5 V alkaline batteries size AAA

K400 should be installed in a position allowing the batteries to be replaced without removing it from the system.

K400 features two low-battery alarm levels:

1 When the battery charge falls below the first level on the LCD, the fixed battery symbol appears. In this condition, K400 continues to operate correctly, but the fixed icon warns the user that it is ADVISABLE to change the batteries.

2 If K400 operation continues without changing the batteries, the second battery alarm level will be reached which will prevent operation. In this condition the battery icon starts to flash and is the only one to remain visible on the LCD.

o change the batteries, with reference to the exploded diagram positions, proceed as follows

1	Press RESET to update all the totals
2	Loosen the 4 fixing screws of the lower cover
3	Remove the old batteries
4	Place the new batteries in the same position of the old ones, being sure that the positive pole is positioned as shown on the rubber protection (pos. 7).
5	close the cover again, by positioning the rubber protection as a gasket
6	K400 will switch on automatically and normal operation can be resumed

The ***METER*** will display the same Reset Total, the same Total and the same Partial indicated before the batteries were changed.
After changing the batteries, the meter does not need calibrating again.

ATTENTION — ***Do not discard the old batteries in the environment. Refer to local disposal regulations.***

I2 CLEANING

FOREWORD — The METER measurement chamber can be cleaned without removing the instrument from the line or from the dispensing nozzle on which it is fitted.

ATTENTION — ***Always make sure the liquid has been drained from the meter before cleaning.***

CLEANING — To clean the chamber, proceed as follows (with reference to the spare parts list positions)

1	Loosen the four cover retention screws (pos. 15)
2	Remove the cover (pos. 14) and the seal (pos. 13)
3	Remove the oval gears.
4	Clean where necessary. For this operation, use a brush or painted object such as a small screwdriver.
5	Be careful not to damage the body or the gears
6	To reassemble the instrument, perform the operations in the opposite sequence

ATTENTION — ***Close the fixing screws on the cover with the tightening couple 8-9µm***
Only one of the two gears features magnets. This must be fitted in the position marked "MAGNET" (see drawing). Once the gear has been fitted, the magnets must be visible before closing the cover.
The gears with magnets are to be placed with the magnets on the bottom (see drawing)

WARNING — ***Fit the second gear (without magnet) with axis greater than 90° compared to the first gear, and with the holes visible from the cover side***
Make sure the gears are turning freely before closing the cover.

L MALFUNCTIONS

Problem	Possible cause	Remedial Action
LCD: no indication	Bad battery contact	Check battery contacts
Not enough measurement precision	Wrong K FACTOR	With reference to paragraph H, check the K FACTOR
	The meter works below minimum acceptable flow rate.	Increase the flow rate until an acceptable flow rate range has been achieved
Reduced or zero flow rate	Gears blocked	Clean the measurement chamber
The meter does not count, but the flow rate is correct	Incorrect installation of gears after cleaning	Repeat the reassembly procedure
	Possible electronic card problems	Contact your dealer

ENGLISH (Translated from Italian)

K400

ELECTRONIC METER

MANUALE D'USO, MANUTENZIONE E CALIBRAZIONE
USE, MAINTENANCE AND CALIBRATION MANUAL

IT
EN

Bulletin M0253B ITEN _ 00

M DISPOSAL

Foreward — 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:

Disposing of packing materials — The packaging consists of biodegradable cardboard which can be delivered to companies for normal recycling of cellulose.

Metal Parts Disposal — Metal parts, whether paint-finished or in stainless steel, can be consigned to scrap metal collectors.

Disposal of electric and electronic components — These must be disposed of by companies that specialize in the disposal of electronic components, in accordance with the indications of directive 2002/96/CE (see text of directive below).

Information regarding the environment for clients resulting within the European Union — European Directive 2002/96/EC requires that all equipment marked with this symbol on the product and/or packaging not be disposed of together with non-differentiated urban waste. The symbol indicates that this product must not be disposed of together with normal waste. It is 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.

Miscellaneous parts disposal — Other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial waste.

N TECHNICAL DATA

Measurement system	Oval gears
Resolution (nominal)	0,005 lit/pulse
Flow Rate (Range)	1 – 30 (Litres/minute)
Operating pressure (Max)	70 (Bar) 145 (psi)
Bursting pressure (Min)	200 (Bar)
Storage temperature (Range)	-20 ÷ + 70 (°C)
Storage humidity (Max)	95 (% RU)
Operating temperature (Range)	-10 ÷ + 50 (°C)
Flow resistance (at 15l/min with oil SAE10W at 20°C)	0.35 bar
Permissible Viscosity (Range)	5 ÷ 5000 mPas
Accuracy (from 5 to 25 l/min)	±1% after calibration within 10÷90 (litres/min) 2,65÷23,8 (gallons/min) range
Reproducibility (Typical)	±0,1 (%)
Screen	Liquid crystals LCD. Featuring: - 5 figure partial - 6 figure Reset Total plus x10 / x100 - 6 figure non reset Total plus x10 / x100
Power Supply	2x1.5 V alkaline batteries size AAA
Battery life	18 ÷ 36 months
Weight	0.5 Kg (included batteries)
Protection	IP65
BULB (pulser)	Max current: 100 mA Max Voltage: 28V Max Load: 3V

PIUSI

PIUSI S.p.A.
Suzzara (MN) Italy

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