

INDEX

Table with 2 columns: Letter (A-F) and Content (GENERAL WARNINGS, SAFETY INSTRUCTIONS, etc.)

A 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.

B SAFETY INSTRUCTIONS

B.1 SAFETY WARNINGS

Mains - preliminary checks before installation: WARNING EQUIPMENT MISUSE HAZARD You must avoid any contact between the electrical power supply and the fluid that needs to be dispensed.

B.2 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 handle.

B.3 WARNINGS

The following warnings are for the setup, use, grounding, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks.

Warning section with 'FIRE AND EXPLOSION' hazard symbol and text: Use equipment only in well ventilated area. Eliminate all ignition sources, such as cigarettes and portable electric lamps.

EQUIPMENT MISUSE: Misuse can cause death or serious injury. Do not operate the unit when fatigued or under the influence of drugs or alcohol.

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Personal Protective Equipment section with icons for eye protection, gloves, and clothing, and text: Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns.

B.4 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. WARNING: EQUIPMENT MISUSE HAZARD Check that the data on the plate correspond to the desired specifications.

C BECOMING ACQUAINTED WITH THE DEF TURBINE METER

FOREWORD: Electronic digital meter featuring a turbine measurement system, designed for precise measuring of DEF and water METER - with LCD display and calibration buttons

C.1 COMPATIBLE LIQUIDS

Turbine measurement system: The turbine is placed inside a hole through the body of the meter, fitted with M-M threaded inlet and outlet. The supplied F-F bushing enables several combinations of threads.

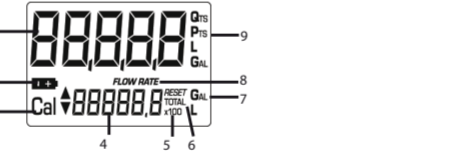
P.N. 127663: Water Aus 32 (D.E.F., Ad-Blue)

- Main components: K24 Meter
1 - LCD display
2 - RESET key
3 - CAL key
4 - F-F bushing



C.2 DISPLAY LCD

Table with 5 columns: Item number, Description, and Unit/Value. Includes items like Partial register, battery charge, calibration mode, Totals register, and multiplication factor.



C.3 DISPLAY POSITIONING

FOREWORD: The square shape of the meter body allows the display to be rotated in its housing, thus ensuring great versatility in positioning. This allows easy display readings in any position.

NOTICE: When reattaching the meter display make sure not to pinch the red and black battery cables between the electronic board and the meter housing.



C.4 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

Diagram showing button functions: SHORT PRES-SURE OF CAL KEY, LONG PRES-SURE OF CAL KEY, SHORT PRES-SURE OF RESET KEY, LONG PRES-SURE OF RESET KEY.

D OPERATING MODES

OPERATING MODES: The user can choose between two different operating modes: The meter features a non-volatile memory for storing the dispensing data, even in the event of a complete power break for long periods.

E INSTALLATION

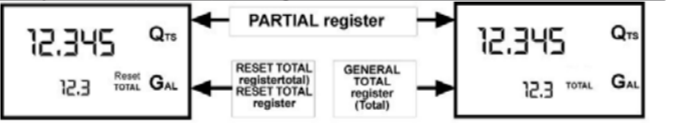
FOREWORD: The meter features a threaded, inlet and outlet (1" BSP male and female that can be combined together). It has been designed to be easily installed in any position: fixed in-line or mobile on a dispensing nozzle.

NOTICE: An F/F coupling, complete with its gasket, is supplied for installations on male couplings. Always screw the side with gasket on the meter. It is up to the installer to use another gasket on the other side of the coupling.

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 the meter.

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.



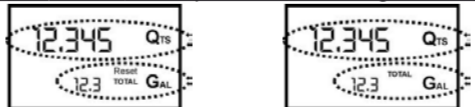
NOTE: 6 digits are available for Totals, plus two icons x 10 / x 100. The increment sequence is the following: 0.0 -> 99999.9 -> 999999 -> 100000 x 10 -> 999999 x 10 -> 100000 x 100 -> 999999 x 100

F.1 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).

NOTICE: 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 meter again.



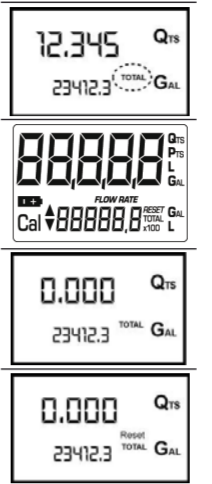
F.1.1 PARTIAL RESET (NORMAL MODE)

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.

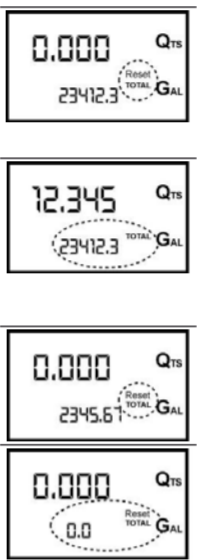
At the end of the process, a display page is first of all shown with the reset partial and the reset total

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



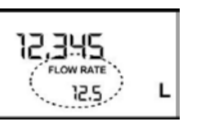
F.1.2 RESETTING THE RESET TOTAL

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)



F.2 DISPENSING WITH FLOW RATE MODE DISPLAY

It is possible to dispense fluids, displaying at the same time: 1 the dispensed partial 2 the Flow Rate in [Partial Unit / minute] as shown on the following display page: Procedure for entering this mode: 1 wait for the Remote Display to go to Standby, meaning the display screen shows Total only



The flow rate is updated every 0.7 seconds. Consequently, the display could be relatively unstable at lower flow rates. The higher the flow rate, the more stable the displayed value.

NOTE: The flow rate is measured with reference to the unit of measurement of the Partial. For this reason, in case of the unit of measurement of the Partial and Total being different, as in the example shown below, it should be remembered that the indicated flow rate relates to the unit of measurement of the partial. In the example shown, the flow rate is expressed in Qts/min.



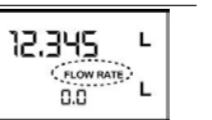
The word "Gal" remaining alongside the flow rate refers to the register of the Totals (Reset or NON Reset) which are again displayed when exiting from the flow rate reading mode.

To return to "Normal" mode, press the CAL key again. If one of the two keys RESET or CAL is accidentally pressed during the count, this will have no effect.

NOTE: Even though in this mode they are not displayed, both the Reset Total and the General Total (Total) increase. Their value can be checked after dispensing has terminated, returning to "Normal" mode, by quickly pressing CAL.

F.2.1 PARTIAL RESET (FLOW RATE MODE)

To reset the Partial Register, finish dispensing and wait for the Remote Display to show a Flow Rate of 0.0 as indicated in the illustration then quickly press RESET



G.1 DEFINITIONS

CALIBRATION FACTOR OR "K FACTOR" FACTORY K FACTOR: Multiplication factor applied by the system to the electrical pulses received, to transform these into measured fluid unit. 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 Temperature: 20°C Flow rate: 10 - 30 ltr/min

G.2 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

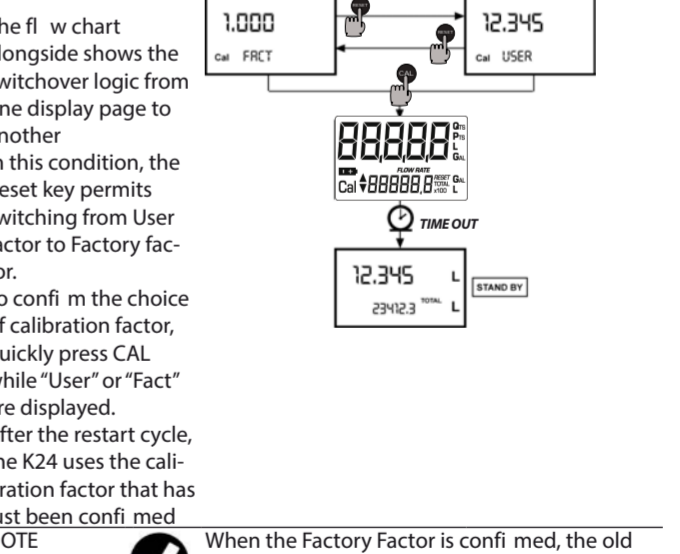
FOREWORD: Two procedures are available for changing the Calibration Factor: 1 In-Field Calibration, performed by means of a dispensing operation 2 Direct Calibration, performed by directly changing the calibration factor

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 meter cannot be used for normal dispensing operations. In "Calibration" mode, the totals are not increased

NOTE: The meter 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.

G.2.1 DISPLAY OF CURRENT CALIBRATION FACTOR AND RESTORING FACTORY FACTOR.

Diagram showing the process of displaying and restoring the calibration factor. It includes images of the meter display showing '1.000 Cal FRCT' and '0.998 Cal USER'.



NOTE: When the Factory Factor is confirmed, the old User factor is deleted from the memory

G CALIBRATION

When operating close to extreme use or flow rate conditions (close to minimum or maximum acceptable values), an in-field calibration may be required to suit the real conditions in which the meter is required to operate.



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ELECTRONIC TURBINE METER FOR DIESEL EXHAUST FLUID (DEF) (ISO 22241)

NOT APPROVED FOR USE IN EXPLOSIVE ATMOSPHERES OR HAZARDOUS LOCATIONS

MODEL 127663 MAX WPR 1.0 kPa (10 bar) (145 psi)



Important Safety Instructions: Read all warnings and instructions in this manual. Save these instructions



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