Pro-Tech TOOLS

# Fuel nozzle with LCD digital fuel and oil flow meter



## Instructions for use

**Translation of the original manual**

**Technical specifications**

The meter displays four units of measurement: L, Gal, Dts, Pts
Model: BZL-A11
Power supply: 2x AAA
Max. pressure: 3 bar
Flow range: 0–60 l/min Accuracy:
±0.2%
Resolution: 0.01 l
Medium: Diesel, Oil, Petrol Max.
medium temperature: 40°C
Connection: 1" thread
Protection rating: IP44

**Usage**

The nozzle switches off automatically after 40 seconds of inactivity. Press any button to switch the nozzle back on.
Normal mode is the standard dispensing mode. In this mode, the subtotal and the resettable total (RESET TOTAL) are displayed simultaneously whilst units are being counted. If one of the buttons is pressed accidentally whilst units are being counted, this will not affect the counter reading.
A few seconds after dispensing, the total appears in the lower register in place of the clearable amount. The word RESET in the word TOTAL disappears and the total amount is replaced by the total count. This state is called STANDBY and continues until you use the gun again.
The subtotal is reset by pressing the RESET button when the device is in standby mode, i.e. when the word 'TOTAL' is shown on the display. Pressing the RESET button triggers a reset, during which all highlighted digits are displayed on the screen, followed by all digits that are not highlighted. Once the process is complete, the display shows the reset total and the clearable total. After a short while, the clearable total is replaced by the non-clearable total (TOTAL).
The sum can only be reset after the subtotal has been reset. The total reset can be performed by holding down the RESET button when RESET TOTAL appears on the display. The procedure is as follows:
- Wait until standby mode appears on the display (only the total sum – TOTAL – will be visible).
- Briefly press the RESET button.
- The device will start resetting the subtotal.
- When the total reset value (RESET TOTAL) is displayed, press and hold the RESET button for at least 1 second.
- The display will show: all fields, fields off and a page showing the total sum (RESET TOTAL). It is possible to skip
the current display:
- current dispensed quantity,
- flow rate (subtotal in units per minute) To
enter this mode:
- wait until the device switches to standby mode, i.e. only the total (TOTAL) is shown on the display
- briefly press the 'CAL' button,
- start dispensing.
The flow rate is updated every 0.7 seconds. The display may therefore be unstable at lower flow rates. The higher the flow rate, the more stable the display.
To reset the subtotal, wait until the counter displays a flow rate of 0.0.
The calibration factor is a multiplier used by the system to convert received electrical pulses into units of liquid measurement. The FACTORY K FACTOR is the factor set at the factory. It is 1,000. This factor ensures maximum accuracy under the following conditions:
Liquid: diesel,
Temperature: 20 ℃
Flow rate: 10–120 l/min
When operating under extreme conditions, e.g. with fluids whose parameters are close to the maximum permissible value (e.g. diesel at low temperatures) or with extreme flow rates (close to the minimum or maximum permissible value), it may be necessary to perform on-site calibration to adjust the nozzle to the operating conditions.
The nozzle allows for quick and accurate electronic calibration by adjusting the calibration factor (K-factor):
The calibration factor can be changed in two ways:
1. Calibration by metering.
2. Direct calibration, performed by changing the calibration factor K.
You can enter calibration mode by pressing and holding the "CAL" button.

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