Pro-Tech TOOLS

Flow meter, fuel and oil flow counter



Instructions for use

Translation of the original manual

WARNING!!! Please read the user manual before using the meter.

BASIC INFORMATION:

The meter uses a mechanical measurement system based on a rotating disc. The meter is designed to measure the flow of diesel fuel, heating oil, etc. The meter must not be used to measure the flow of explosive or corrosive liquids.

TECHNICAL SPECIFICATIONS:

Model: BL-B10 Max.
pressure: 3 bar
Flow range: 20–80 l/min
Accuracy: ±1%
Medium: Diesel, Oil, Petrol Max.
medium temperature: 40°C
Connection: 1"

APPLICATION:

The meter can be used in gravity-fed systems and in systems with flow forced by manual or electric means
pumps, provided that a "bypass" (emergency bypass of the counter) is used. Before starting operation, reset the reading on the sub-counter by turning knob no. 20 – see the installation diagram. Resetting is carried out by turning the knob clockwise. The total counter reading cannot be reset.

We do not recommend using the meter in locations exposed to direct sunlight, where the temperature may exceed the maximum permitted temperature (+50°C).
To ensure long and trouble-free operation of the counter, use a filter upstream of the counter.

INSTALLATION:

The meter should be installed where:
- the maximum pressure of the measured liquid is less than 3 bar.
- the liquid is filtered (a filter will be installed upstream of the meter).
- The measured liquid does not contain any air particles that could potentially be drawn in by
the suction system. Arrows indicating the direction of flow of the measured liquid are
embossed on the opposite side of the meter.
If the direction of flow is such that the counters are upside down, the user can rotate the counter cover as shown in the figure (Fig. 1). To do this, first unscrew the 4 screws shown in the assembly drawing – item 6. To prevent the meter from operating under excessively high pressure, it is recommended to install a pressure regulator set to a maximum pressure of 3.5 bar downstream of the pump but upstream of the meter. In gravity-fed systems, bear in mind that for the meter to function correctly, a minimum level difference of 1 m must be maintained between the tank outlet and the meter.

SETTING (calibration):

The meter is factory-calibrated to a pressure of 1.5 bar when measuring diesel fuel flow. The pressure and type of fluid being pumped are the two
basic parameters for calibrating the meter. If one or both of the above parameters differ from the factory calibration (1.5 bar, diesel), the meter must be recalibrated before the relevant measurement is carried out.

CALIBRATION INSTRUCTIONS:

1) unscrew screw A (Fig. 2),
2) stop the flow by closing the outlet valve or the valve on the nozzle,
3) reset the totaliser,
4) If you wish to calibrate the meter accurately, fill a container whose volume is known in advance. The minimum volume of the container should not be less than 20 litres. After filling the container, if the volume displayed on the meter is lower than the actual volume, unscrew screw A
(see Fig. 2) and then turn screw B clockwise. To begin with, we recommend turning it half a turn and checking the effect of the above operation. If the gauge shows a volume that is too high compared to the actual volume, screw B must be turned anti-clockwise. Repeat the operation until the volume shown on the sub-counter corresponds to the actual volume.

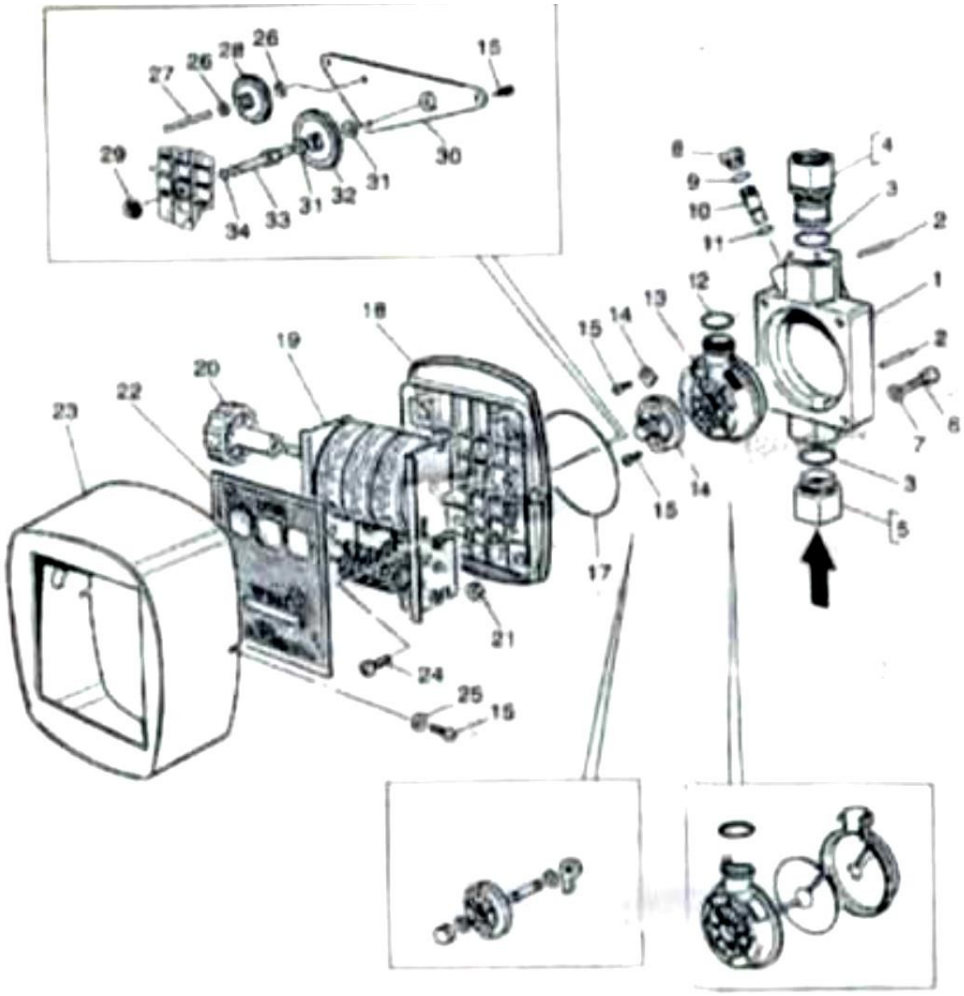

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Fig. 1

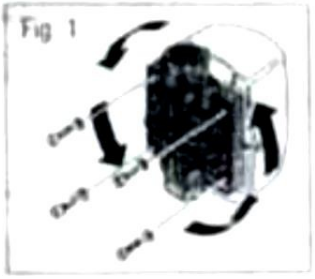
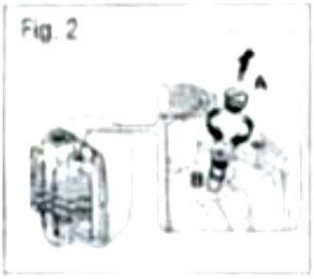


Fig. 2


A
B