

## Flow meter, fuel and oil flow counter



Pro-Tech  
shop

**Instructions for use**  
**Translation of the original instructions**

**WARNING!!!** Read the operating instructions before using the counter.

**BASIC INFORMATION:**

In the counter, a mechanical measurement takes place that uses a rotating disk. The counter is designed to measure the flow of diesel fuel, fuel oil, etc. The counter cannot be used to measure the flow of explosive or corrosive liquids.

**TECHNICAL DATA:**

Mechanism - rotating disc Flow

range - 20-80 l/min

Working pressure range - 0,1-3,5 bar

Ambient temperature range in which the counter can operate - 10, + 50°C

Flow resistance measured at a flow rate of 80 l/min of diesel fuel - 0.3 bar Accuracy

of measurement after calibration +- 1%

Measurement range on sub-counter (greater) 999 L.

Measurement range on total counter (greater) 999999 L

Minimum indication - 0.1 L

Pipe diameter - 1" x 1" Weight -

1.5 kg

**USES:**

The counter can be used in gravity systems and in systems with flow forced by manual or electric pumps, provided that "bypass" (emergency bridging counters). Before starting operation, reset the reading on the sub-counter by turning knob No. 20 - see assembly drawing. Zeroing is done by turning the knob clockwise. The total counter reading cannot be reset.

It is not recommended to use the counter in places exposed to direct sunlight, where the temperature may exceed the maximum permissible temperature (+50°C).

To ensure long and trouble-free operation of the counter, use a filter in front of the counter.

**INSTALLATION:**

The counter should be installed where:

- max. pressure of the measured liquid is less than 3.5 bar,
- the liquid is filtered (a filter will be installed in front of the counter),
- the measured liquid does not contain air particles potentially sucked in by the suction system.

On the opposite side of the counter are stamped arrows indicating the direction of flow of the liquid being measured.

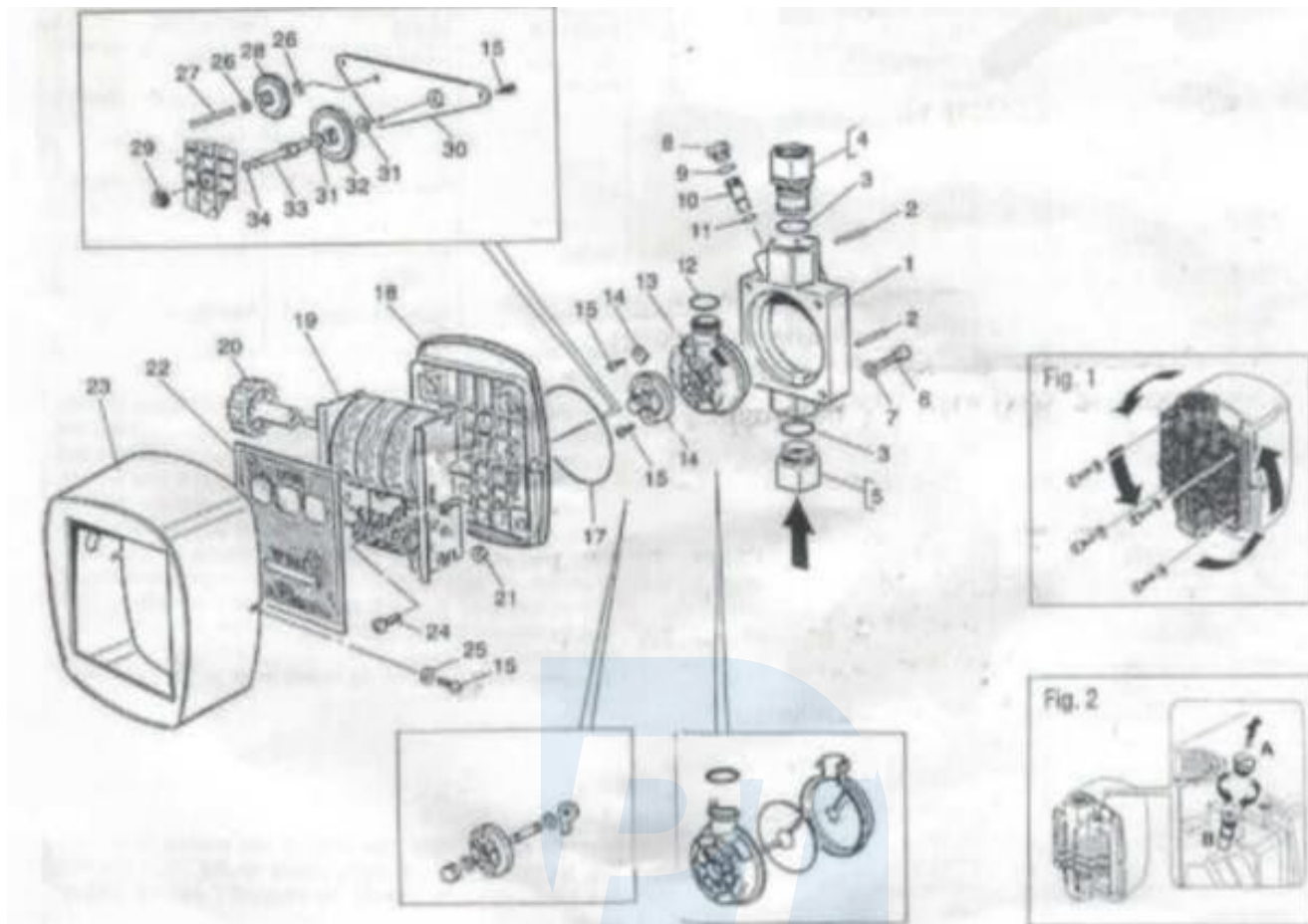
If the flow direction is such that the counters are turned upside down, the user has the option of turning the counter cover as shown (Fig. 1). To do the above, first unscrew the 4 screws shown on the assembly drawing - pol. 6. To prevent the counter from working with too high pressure, it is recommended to install after the pump, but before the counter, a pressure regulator set to a max. pressure of 3.5 bar. In gravity systems, it must be remembered that for the proper functioning of the counter it is necessary to maintain a minimum level difference between the outlet of the tank and the counter of 1 m.

#### **SETUP (calibration):**

The counter is factory calibrated to a pressure of 1.5 bar when measuring diesel fuel flow. The pressure and the type of liquid pumped are the two basic parameters for calibrating the counter. If one or both of the above parameters differ from the factory set calibration (1.5 bar, diesel fuel), the counter must be recalibrated before making the corresponding measurement.

#### **CALIBRATION INSTRUCTIONS:**

- 1) unscrew screw A (Fig. 2),
- 2) stop the flow by closing the discharge valve or by closing the valve at the gun,
- 3) reset the sub-counter,
- 4) if you want to calibrate the counter accurately, fill a container whose volume you know in advance. The minimum volume of the container should not be less than 20 litres. After filling the container, if the volume is displayed on the counter is smaller than it actually is, unscrew screw A (see Fig. 2) and then turn screw B clockwise. At the beginning, we recommend to make half a turn and check the effect of the above operation. If the gauge shows too large a volume compared to the actual volume, it is necessary to Turn screw B counterclockwise. Repeat the operations until the indicated volume on the sub-counter corresponds to the actual volume.



### Warranty conditions

In accordance with Act No. 136/2002 Coll., the product purchased by you is guaranteed for a period of 24 months from the date of sale. In the case of purchase of goods used for commercial or business activity, the warranty period is 12 months. The warranty is only provided if the products are used in accordance with the operating instructions and method of use.

All parts subject to natural wear and tear, overloading, use of the product for purposes other than those for which it is intended and defects caused by transport or improper (non-professional) handling are excluded from the warranty. We consider improper handling to be an example where the operating instructions and the generally binding regulations for handling the product have not been observed. Similarly, an attempt at unprofessional repair beyond the recommended maintenance is also assessed.

The warranty applies exclusively to defects caused by defects in materials, manufacturing assembly or processing technology.

The right to invoke the guarantee shall be extinguished:

- 1) the product has not been used in accordance with the operating instructions
- 2) any intervention has been made in the design of the machine without the prior written consent of the manufacturer
- 3) the product has been used in other conditions or for purposes other than those for which it is intended

- 4) a part of the product has been replaced by a non-original part
- 5) damage to the product or excessive wear and tear is caused by inadequate maintenance
- 6) damage caused by external mechanical, thermal or chemical influences
- 7) the defects were caused by improper storage or handling of the product
- 8) the product has been used (for the product type) in an aggressive environment e.g. dusty, humid
- 9) the product has been used in excess of the permissible load

The warranty does not cover items that can be expected to wear due to their normal function (e.g. wear on carbons, spark plug, etc.)

Use only recommended accessories and original spare parts to operate the products.

Claims should be made immediately upon discovery of the defect with the dealer who sold you the product and enquire about repair options at an authorised repairer. If the defect you are claiming is not covered by the warranty, you will be invoiced for the work and costs associated with the inspection and assembly and disassembly components.

When making claims, submit a properly completed warranty card or other proof of purchase bearing the date of sale.

Hand in the product for repair in a clean condition, properly cleaned, free of dust or dirt. Send the original accessories with the product for an accurate diagnosis of the fault.

When sending by transport service, pour out the unconsumed fuel and oil from the product. Pack the product properly, preferably in the original packaging, so as not to damage it. Damage caused by inadequate packaging cannot be accepted as a warranty defect!

Only use fuels and oils of the appropriate classification in the engines, or fuels and oils recommended by the branded dealer. Damage caused by the use of unsuitable fuels and oils will not be covered under warranty.