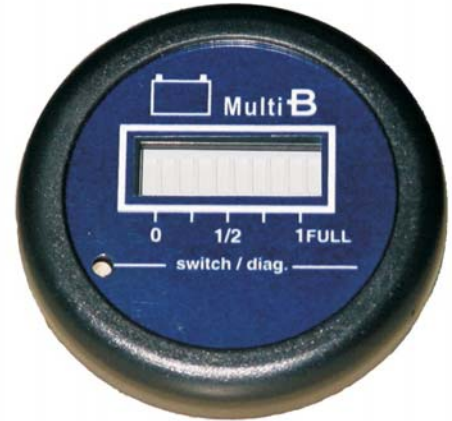


Multi-B battery gauge indicator is a microprocessor controlled device that can be operated at different voltages. The voltage selection is through a trimmer command on the rear of the Multi-B. The selected voltage is confirmed during the turn ON initialization procedure of the device and if wrong (> than the battery voltage) it will be signaled through a diagnostic led. The diagnostic led on the front of the device changes the visualization colour from green to red when discharge is reached (20%).

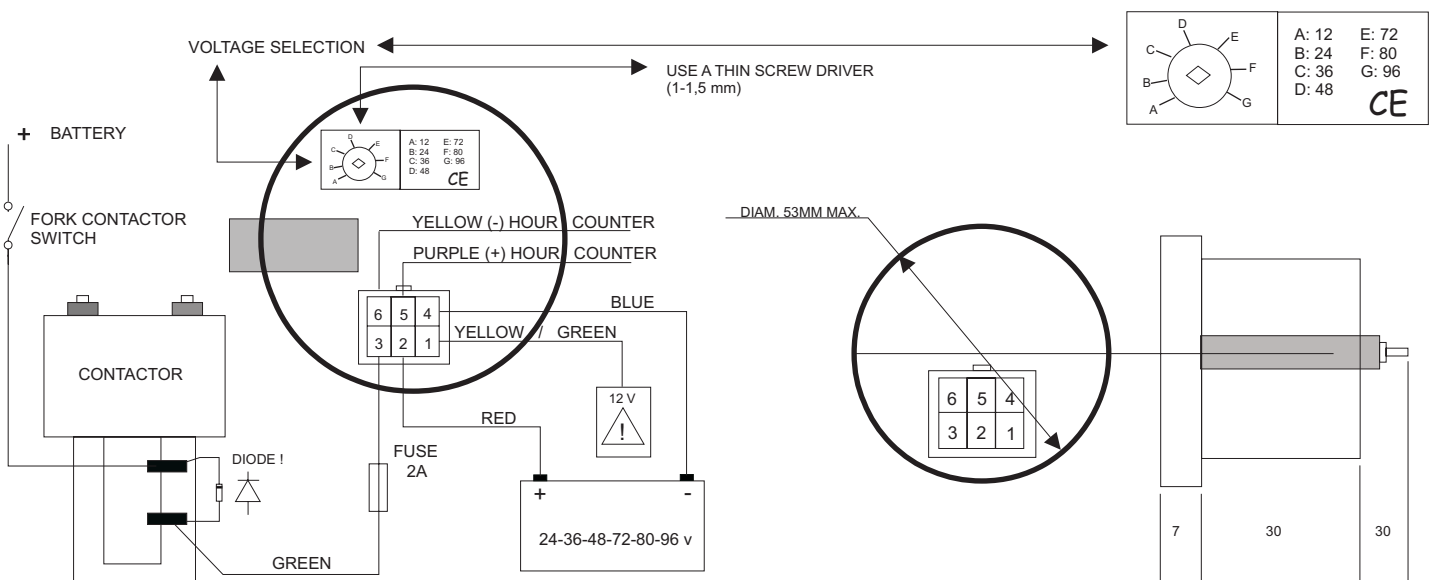
The internal MOSFET for Fork lockout can drive up to 1,5 Ampere max. and opens the external circuit when discharge is reached. During operation the scale of the Multi-B indicates the average discharge level while the diagnostic led, when flashing is signaling that the instantaneous battery voltage is very low (<1,60 Volt/cell).

Mounting is through a round hole with a diameter 52mm.



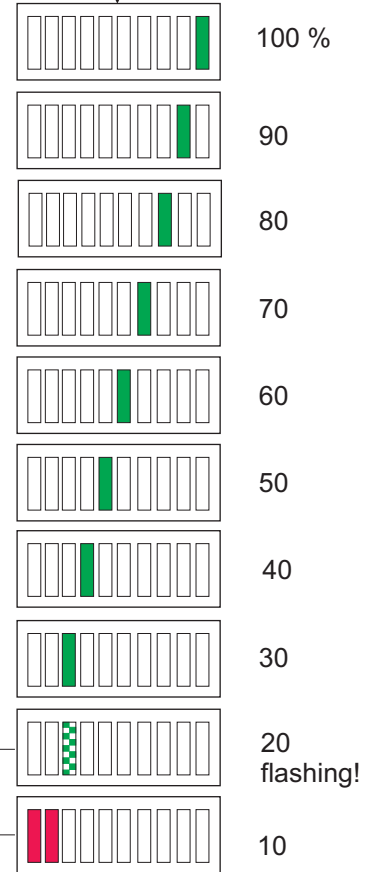
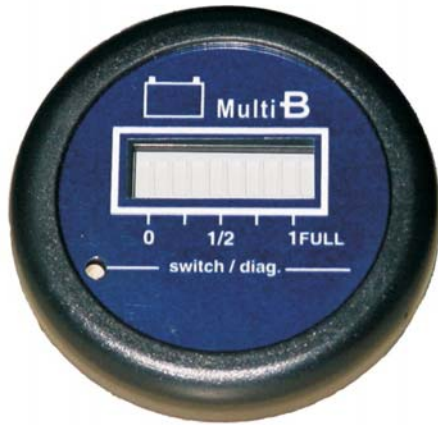
Technical Features:

- Microprocessor controlled device
- Max. Input current under all normal working conditions: 25 mA (max.!).
- Max. Current driven from the fork switch: 1,5 Ampere continuous (max.!).
- Discharge indication step: 10%
- Set voltages: 12 - (use pin 1, red-green wire !) 24-36-48-72-80-96 Volt (for voltages 24...96 use only Pin. 2, red wire)
- **Important:** do not apply a voltage > 20 Volt on pin. 1 (red-green wire !), damage will happen
- Max. allowable voltage on pin. 3 for Fork lock: the battery nominal voltage;
- **Important:** always mount a diode on the Fork contactor coil in order to avoid voltage surges on pin. 3.
- Connection to the Multi-B: MOLEX Minifit 6 poles female
- Protected for supply reversal between negative and positiv
- Working ambient: -20 C + 50 C
- Memory holds latest discharge status at turn OFF



Electrical Wiring

Mechanical Outlines



DIAGNOSTIC MESSAGES	
FLASHES LED	DESCRIPTION
Green fix Led off Red fix	battery charge > 20%, fork lock is off (circuit is closed) battery charge = 20%, fork lock is ON (circuit is open) battery charge = 10%, fork lock is ON (circuit is open)
Green 2 flashes Red 2 flashes	the battery voltage is < 1,68V/cel +/- 0,02V it is a low voltage indication that signals battery voltage is low and The reasons could be: A) de Multi-B has been set to a higher voltage than the real battery Voltage (ex. Bat. = 24V, Multi-B set to 36V!) B) during operation the battery voltage goes down to values < 1,68V/cel (20,2 Volt for a 24V nominal battery) Note: the signal stays active for about 5 seconds after the signaling of The low voltage status.

Fork Lock Active (open circuit)

Fork Lock Active (open circuit)

VOLTAGE SETUP:

At turn ON it is possible to read out the set nominal voltage on the Multi-B just looking after the following initialization operation:

- 1) turn ON: all the 10 led's of the indicator are sequentially lit ON
- 2) one of the led's is turned ON indicating (see drawing below) the code of the set voltage
- 3) the red led of battery empty (10%), is turned ON and the fork lock is tested: OFF -> ON -> OFF
- 4) the indicator displays the actual discharge level kept in memory by former operation on the battery.

