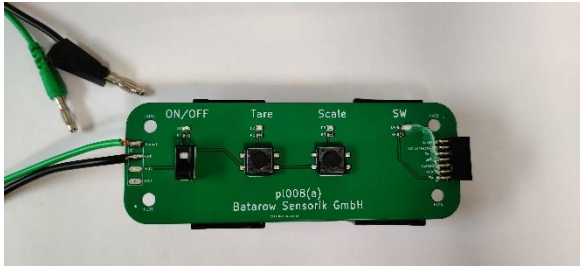


Operating instructions auxiliary circuit board pl008(a) for loadpins with GSV-13i

The auxiliary circuit board pl008(a) is used to check and configure force measuring bolts from Batarow Sensorik GmbH with an integrated measuring amplifier. The tare and scale connections of the loadpin can be specifically controlled via the integrated buttons. During testing, the power measuring pin is supplied with power via two 9 V blocks integrated in the auxiliary circuit board.

1. Scope of delivery:

Auxiliary board pl008(a)



Adapter cable for force measuring bolts



2. Auxiliary board connection

2.1 Connection of the auxiliary board to a measuring device (not included).

The auxiliary circuit board is connected to a measuring device (multimeter) as follows:

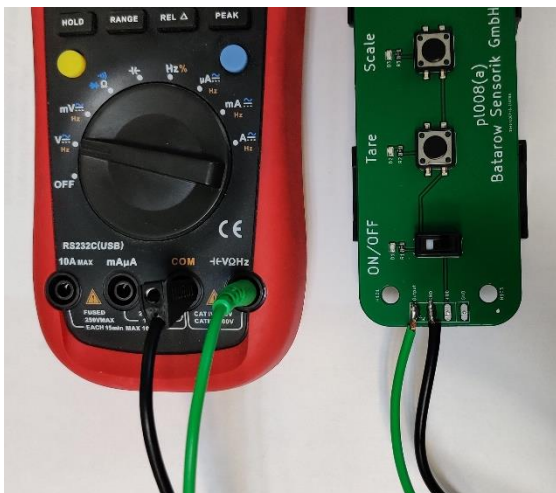
- Black wire (GND) to the COM socket of the meter
- Green line (output) to desired measuring socket for voltage or current measurement

Danger:

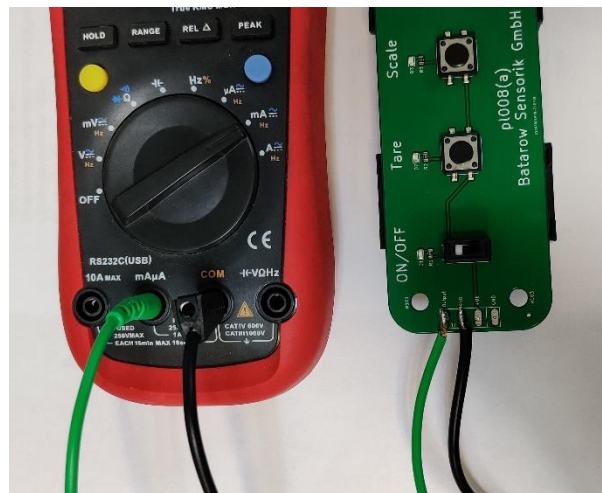
Before connecting and disconnecting the measuring device, the slider on the auxiliary circuit board must always be set to the lower position (OFF).

Always ensure that the correct measuring range is set.

Voltage measurement connection



Connection current measurement



Connection of the auxiliary board to the adapter cable

The auxiliary circuit board is connected to the adapter cable suitable for the respective loadpin. The pin assignment of the loadpin can vary depending on the pin type. The different pin assignments are converted to the pin assignment required for the auxiliary board using the appropriate adapter cable. To select the required adapter cable, the electronic version of the loadpin must first be determined. This is part of the order number (MBXXXX-XX-**IXX**-X or MBXXXX-XX-**UXX**-X) engraved on the head cover of the bolt. Using this electronics variant, the associated connection assignment can be determined from the data sheet supplied with each loadpin. This can be found on the third page of the data sheet to the right of the corresponding electronics variant and is labeled WCXX.

Danger:

If the designation of the adapter cable and that on the data sheet do not match, a corresponding adapter cable must be ordered from Batarow Sensorik GmbH.

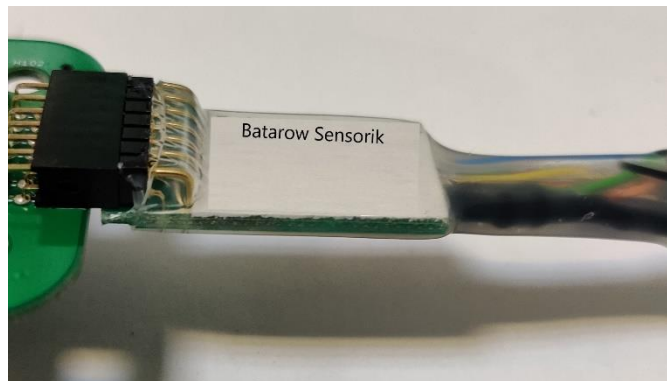
Always make sure that the labeling of the adapter cable points to the labeled side of the auxiliary circuit board (see image).

Before connecting and disconnecting the adapter cable, the slider on the auxiliary circuit board must always be in the down (OFF) position.

Connection adapter cable



Orientation of the connector



2.3 Connection of the adapter cable to the force measuring bolt

The adapter cable can now be connected to the measuring bolt.

Danger:

Before connecting and disconnecting the adapter cable, the slider on the auxiliary circuit board must always be in the down (OFF) position.



2.4 Overall Structure

Please check the overall structure before switching on the power supply.

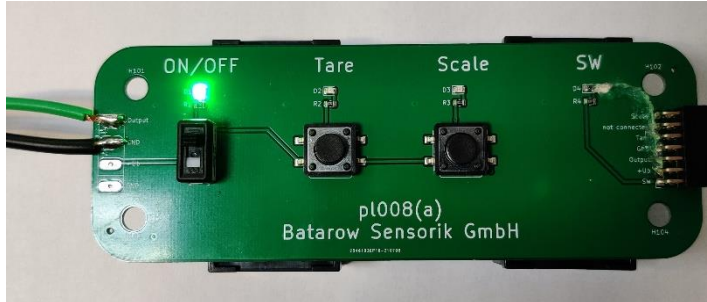


3. Auxiliary board control

The auxiliary circuit board has three operating elements, the switching status of which is displayed visually via an LED.

Slide switch (ON/OFF):

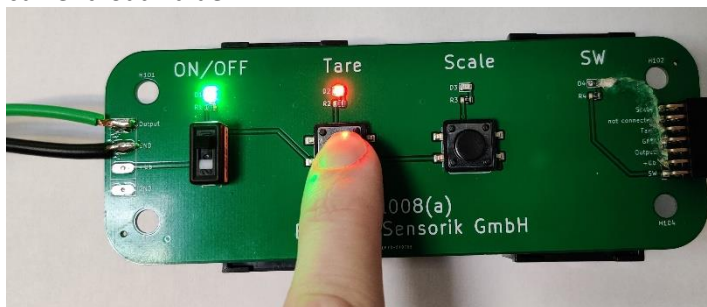
The slide switch turns the power supply to the loadpin on and off.
When the power supply is switched on, the LED lights up green.



Left button (tare):

The left button controls the TARE output of the loadpin.
When the TARE output is activated, the LED lights up red.

When the button is pressed during normal operation of the loadpin, the zero point is set to the current load value.

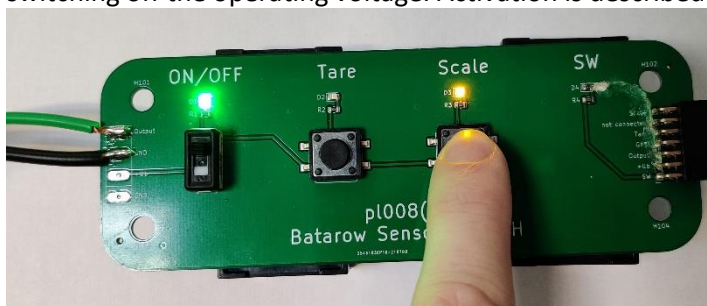


Button Right (Scale):

The right button controls the SCALE output of the loadpin.

When the SCALE output is activated, the LED lights up yellow.

When the button is pressed during normal operation of the loadpin, the final value of the measuring range is set to the current load value. The scaling function is automatically deactivated after switching off the operating voltage. Activation is described under 4.1.



4. Functions of the GSV13-i measuring amplifier

The GSV-13i measuring amplifier has automatic functions for setting the output signal to zero (tare function) and for setting the scaling (scale function) of the output signal. These functions are triggered by pressing the "Tare" or "Scale" button on circuit board pl008(a) for at least two seconds.

To protect against incorrect operation or accidental triggering, the scale Function disabled at the factory. In addition, the tare function is only available 30 s after the Turn on available. The scale function is only available temporarily until the next switch-on process.

Through a programming process

- the tare function can be permanently deactivated,
- the tare and scale functions are activated temporarily,
- the tare function can be permanently activated.
- Temporarily means here: until the next switch-on process.

The programming process takes place through a time sequence of levels on tare and scale instead, in a time window between 10 s after switching on and a maximum of 30 s after switching on.

Danger:

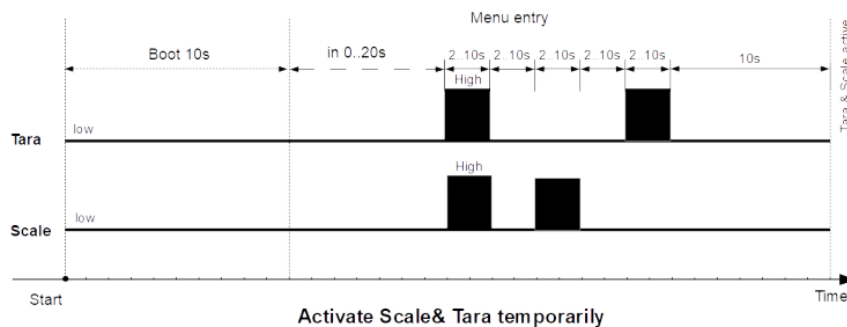
The tare function is only available 30 s after switching on.

The scale function is always deactivated after switching on. It is available 30 s after activation.

4.1 Unlocking the functions

The scale function is always deactivated after switching on. It must be unlocked as follows:

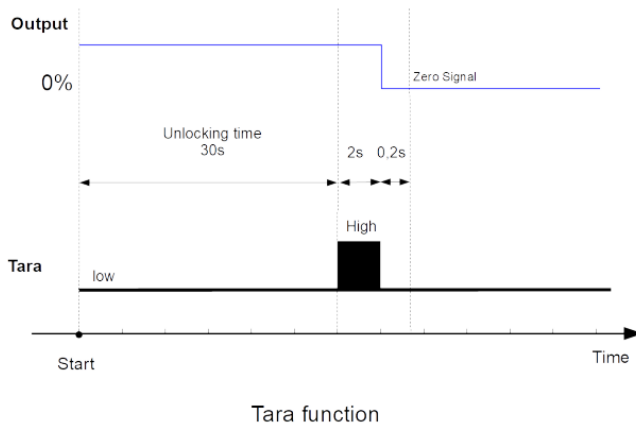
1. Switch on the auxiliary board
2. Wait 10-30 seconds
3. Simultaneously press the tare and scale buttons on the auxiliary circuit board for 2-10 seconds
4. Wait 2-10 seconds
5. Press the scale button for 2-10 seconds
6. Wait 2-10 seconds
7. Press the tare button for 2-10 seconds
8. Wait 10 seconds



4.2 Tara Function

The tare function is triggered as follows:

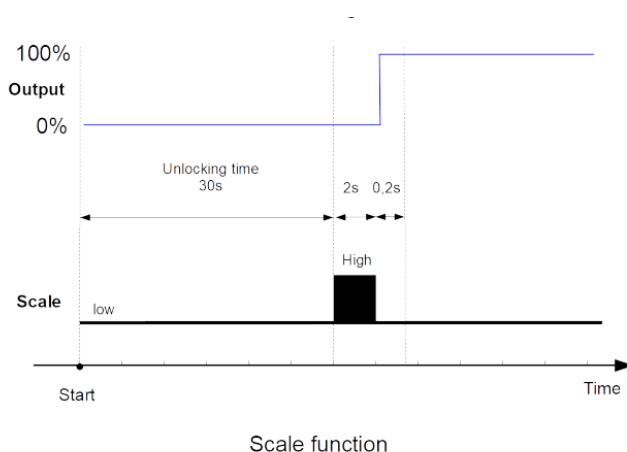
1. Establish the load condition to be tared (unloaded)
2. Power on the auxiliary board
3. Wait 30 seconds
4. Press the tare button for 2 seconds



4.3 Scale-Function

The Scale function is triggered as follows:

1. Activation of the scale function according to 4.1
 2. Wait 30 seconds
 3. Establish the load condition to be scaled (apply nominal load)
 4. Press the scale button for 2 seconds
- After switching off the auxiliary circuit board, the scale function is blocked again



Only basic setting options are explained in these operating instructions. A more detailed description of all setting options can be found under the following link:

https://www.me-systeme.de/produkte/elektronik/gsv-13/ba-gsv13_en.pdf