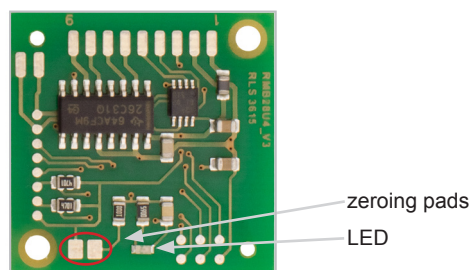


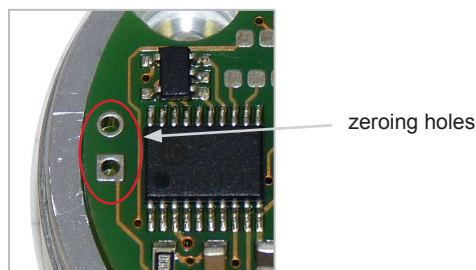
# Zero position setting procedure

The output angle position data can be zeroed at any angle with resolution of 0.0879°. The relative output position is the difference between absolute position and data in the zero register.

The value in the zero register can be changed by writing a desired value with the TWI interface or with using a “Zero” input pin. With low to high transition of a signal on “Zero” pin the current absolute value is stored into the zero register. When zeroing the relative position, the chip must not be in power-save mode as the EEPROM is not accessible in this state.



RMB28U zeroing example



RMC35U zeroing example

The zeroing pads can be shorted to set the zero position of the encoder. If the zeroing is successful, the LED flashes red.

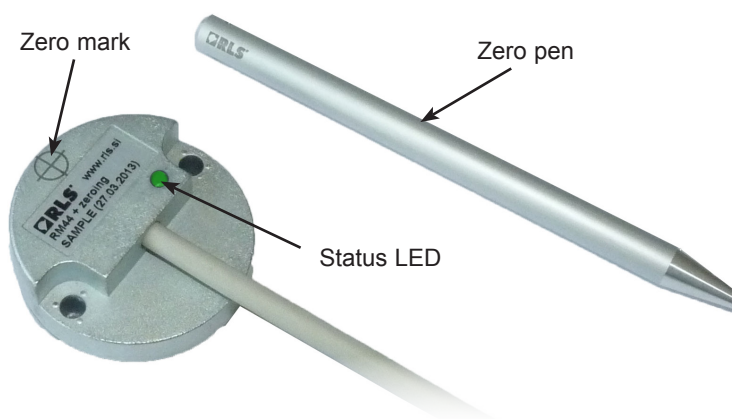
The zeroing holes can be shorted to set the zero position of the encoder.

## External zeroing

**The RM44 encoder-sensor base unit is designed for integration onto electric motors or other devices for shaft position and velocity measurement.**

The RM44 with external zeroing is designed for setting the encoder zero position by using zero pen. It is designed for power supply voltage of 5 V only.

For electrical characteristics and dimensional drawings please refer to RM44 data sheet (RM44D01).



### 1. Install the magnetic actuator and RM44 encoder.

Please refer to RM44 data sheet (RM44D01) for more information.

### 2. Set the mechanical zero position.

### 3. Use the zero pen to set the encoder zero position (see image):

- 3.1 Touch the Zero mark with the apex of the Zero pen - the status LED goes off.
- 3.2 Hold the Zero pen for 3 seconds.
- 3.3 The new Zero position is set when status LED goes RED.



## Status indicator LED

| LED      | Status               |
|----------|----------------------|
| Green    | Normal operation     |
| Red      | Zero position        |
| No light | Presence of Zero pen |