

Manual - Hall Sensor

Hall sensors from MMB are available in 2 versions

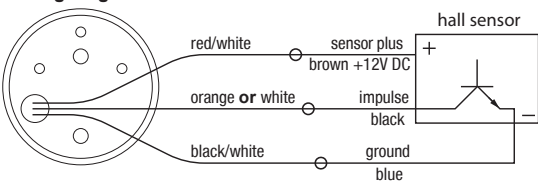
- stainless steel M12x1
- plastic coated with mounting hole

Hall sensors are active sensors and detect ferromagnetic elements (no stainless steel, no aluminium) with a switching distance of 1.5-2mm.

The switching distance must be increased to 8-10mm by using neodym magnets Ø5x3mm or Ø8x4mm. **Attention: Note the polarity of the magnets. Sensor and magnets must attract each other!**

Original Hall gear sensors (n-shifting) with 3 connecting cables can normally be used. In Harley Davidson® models from approx. 1996 and Buell® models from approx. 1999 there is already a Hall sensor installed which is suitable for our tachometers **if it works with 12V**. The sensor is located at the gear box and recognizes the teeth of a gearwheel of the main shaft. **Only Premium-Line instruments work with 5V sensors!**

Wiring diagram:

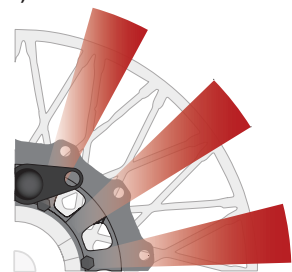


Mounting options:

Hall sensors can be used very variably.

⚠ Target (screws, webs, teeth, magnets, etc.) must be spread evenly over 360° !

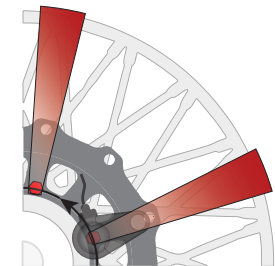
A) Brake disc webs:



„holes“ and „webs“ are evenly spread and webs are same size

B) Brake disc mounting screws

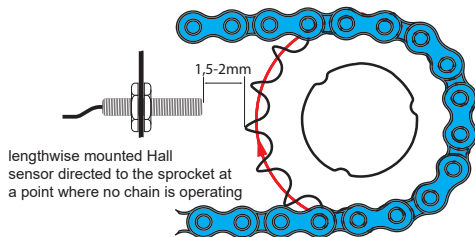
⚠ Screws must be raised at least 2mm above the brake disc



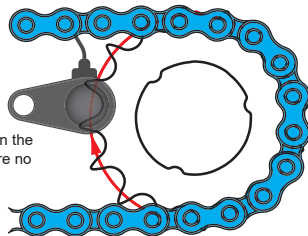
Hexagon bolts are evenly spread

⚠ if you use allen screws please note that the sensor also detects the „holes“ in the middle of the screw heads. We recommend replacing allen screws by hexagonal screws. Alternatively, align the sensors to the upper or lower border.

C) Pinion/ sprocket



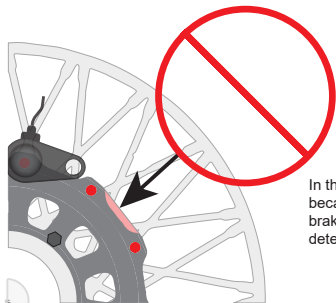
lengthwise mounted Hall sensor directed to the sprocket at a point where no chain is operating



transverse Hall sensor in the sprocket at a point where no chain is operating distance 1.5 - 2 mm

D) Holes in the brake disc

Holes can also be used if there are no further gaps or holes on the radius that would lead to false signals.



In this case holes can not be used because the curved edge of the brake disc protrudes into the detection area of the sensor.

When mounted on the rear wheel, the sensor cable can be extended. We recommend laying the cable at a minimum distance of 20cm from the ignition coil or shielding it to avoid interference signals!

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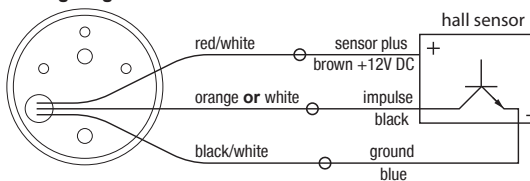
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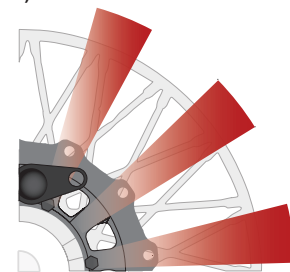


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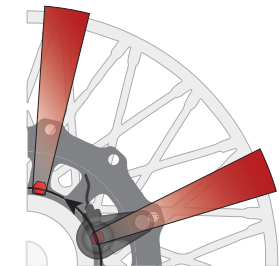
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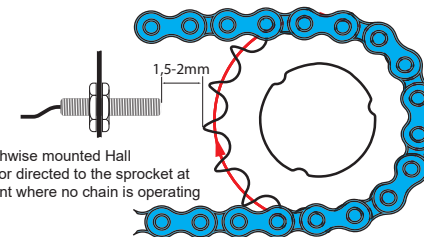
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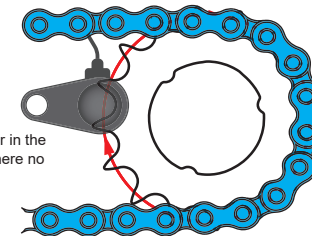
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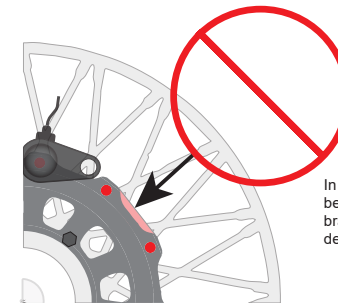
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