

AiM Infotech

Front wheel speed sensor for kart

Release 1.02



1

Introduction

AiM devices can measure the kart front wheel speed using a non-contact sensor that needs a magnetic metallic trigger to pass in front of it. The sensor kit includes a metal plate with a magnetic cylinder and a metallic bracket the sensor is welded to.

This sensor part number is: **X05SNVK301**

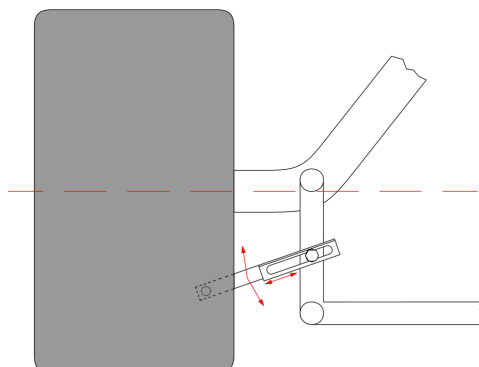
Warning: this sensor can only be used with MyChron5 through MyChron Expansion (part number **X08MYEXUCS**)

2

Installation notes

- Install the magnetic plate on the front wheel rim;
- install the bracket on the steering arm; if the steering arm is solid make a hole in it with a 6mm drill bit;
- when mounting the bracket ensure that the sensitive part passes in front of the cylinder at a 3-5 mm distance;
- firmly fix the bracket to the steering arm to avoid sensor movements due to the strong vibrations of the kart front wheel;
- ensure the bracket does not get in contact with the metallic plate when steering;

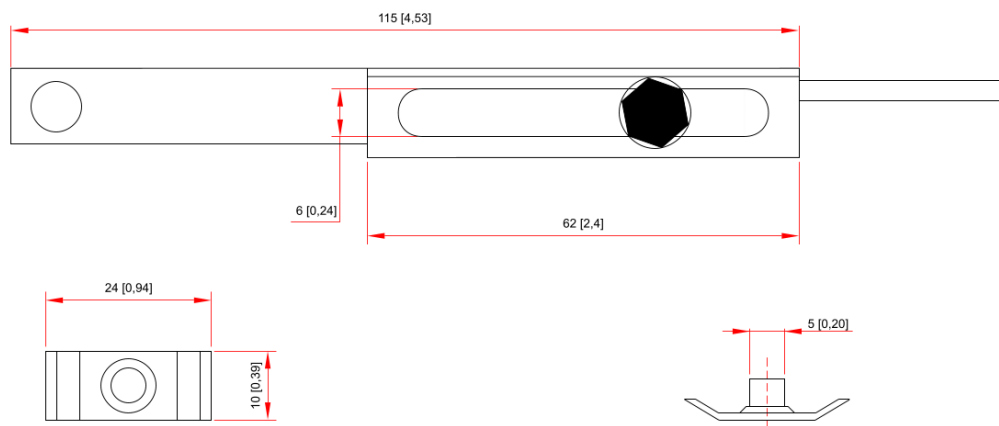
The image below shows the sensor correctly installed.



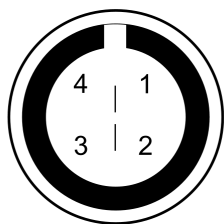
3

Dimensions, pinout and technical characteristics

The images here below shows the sensors and the metallic plate dimensions in mm [inches].



The sensor is cabled with a 4 pins Binder 712 male connector. The image below shows the connector from solder termination view on the left and the connection table on the right.



Binder connector pin	Function
1	Speed
2	GND
3	V battery
4	n.c.

The sensor **electrical characteristics** are:

- Sensing distance: From 3 to 5 mm
- Number of pulses for wheel revolution 1

4

Extension cables

The sensor comes with a 1700 mm cable. Standard length optional extension cables from 0,5m to 3m are available but also specific length extension cables are available on request.

The part number of the product changes according to its length.

Extension cable for connection with:

- MyChron Expansion

Part number:

V02552620 – cable length: 500mm

V02552630 – cable length: 1000mm

V02552640 – cable length: 1500mm

V02552650 – cable length: 2000mm

V02552660 – cable length: 3000mm

