



Specifications	
Supply voltage	10 - 30 V
Supply current	200 mA
Output voltage	0 - 12 V
Sensing distance	2.5 mm
Switching frequency	2.5 kHz
LED indicator	Present
Operating temperature	-25 to 70 °C
Protection	IP67
Material	Nickel-plated brass
Weight	45 g

Output	
No metal present	Open
Metal present	Drive 12 V

Wiring	
Supply voltage	Brown (pin 3)
Ground	Blue (pin 1)
Output voltage	Black (pin 2)

For wheel speed applications you can use the following formulas to calculate maximum speed (**V [mph]**) versus spoke teeth (**N**) for a given tire diameter (**D [inches]**)

$$N[\text{teeth}] = \frac{445 \times D[\text{inches}]}{S[\text{mph}]}$$

$$S[\text{mph}] = \frac{445 \times D[\text{inches}]}{N[\text{teeth}]}$$