RaceGrade

M MHALL 437-V2

Document Number		RG_SPEC-0064	
Title		Hall Effect Sensor	
Revision	**Date**	**Prepared By**	**Change History**
1	02/21/2017	Chris Moritz	Initial Release
2	05/30/2017	Chris Moritz	Torque Spec Added
3	8/16/2017	Hannah Westbrook	Updated Pinout and Drawing

Introduction

The M MHALL 437 is a Hall Effect sensor. It outputs a 0v - supply voltage square wave and should be triggered on the south pole of a magnet-a ferrous tooth will not work. These sensors are suitable for either measuring wheel speed or as engine speed/synchronization sensors. Part number M MHALL MAG or M MHALL MAG ASB are recommended as targets.

Specifications

Input Voltage	+4.5 to +24 VDC
Air Gap	0.030" to 0.060"
Speed Range	0-15 kHz
Output Signal	Open Collector NPN, 4.7KΩ pull up
Output Voltage	400mV to V_{in}
Output Current	50mA continuous
Operating Temp	-20°C to +140°C
Install Torque	11 to 15 ft-lb

Wiring Information