

GM 9000 Series:

Competition Rated DC Brush Gearhead Motor, 19.7:1 ratio

GM9234E765-R1

This is a performance modified version of the GEARS-IDS™ standard gear head motor.

The (standard) 15.1 volt armature has been replaced with a 9.5 volt armature. Operating this armature at 12 volts yields an RPM increase of 25% over the stock motor. Output Shaft RPM at 12 volts is 300+ RPM.

Competitive robotics and engineering applications place maximum stress on engineering products. The standard 175 oz-in. gear set has been replaced with a gear set with a 500 oz-in continuous torque rating.

Specifications

- Factory Installed EMI filter to reduce radio and control interference.
- 19.7:1 ratio
- 153 oz-in/ 9.5 in-lbs/ 0.8 ft-lbs Continuous Torque (100% duty cycle)
- 250 oz-in/ 15.62 in-lbs/ 1.3 ft-lbs (50% duty cycle)
- 500 oz-in Stall Torque (Note: Peak torque is provided for the purpose of performance calculations only. Operation near, or at, a stalled condition will result in motor and/or Gearhead damage).
- 300 rpm @ 12V No load speed
- Torque Constant (Kt) = 2.04 oz-in / amp
- Back EMF Constant (Ke) = 1.51 v/krpm
- Stall Current 17 Amperes
- Gearbox Efficiency 73%
- Resistance (R) = 0.56 ohms
- Inductance = 0.39 mH
- Rated voltage: 9.55 V.
- Encoder: None
- Length (motor + gearbox) = 3.625"
- Length (motor + gearbox + shaft) = 4.25"
- Unit supplied with bronze sleeve bearing output shaft
- Weight: 496.5 grams/ 17.5 oz.

