

GPN9LR

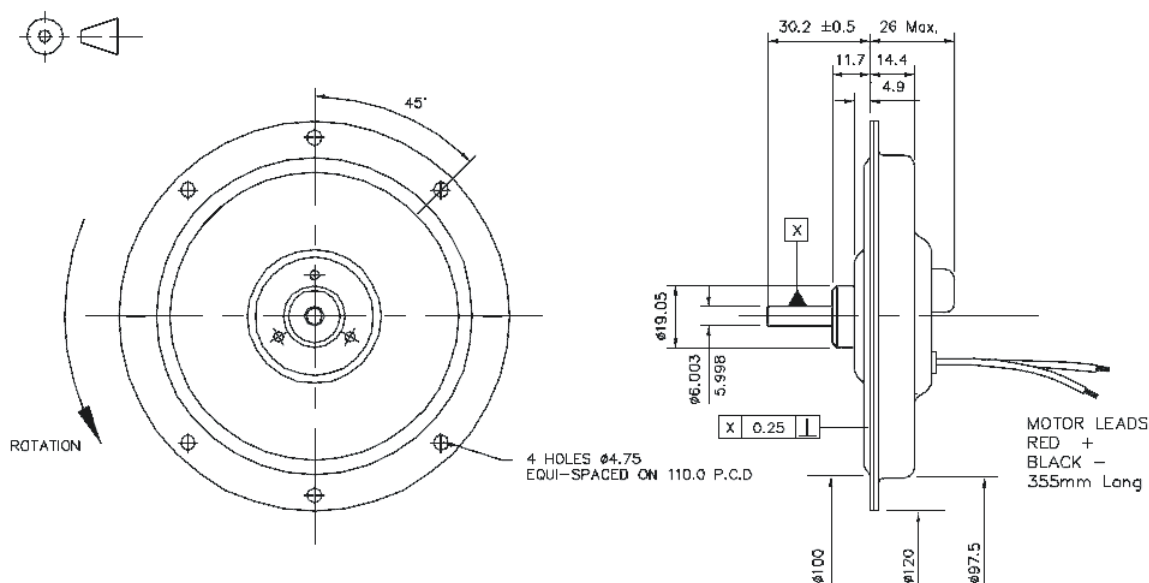
Peak Torque **250 Ncm**
 Cont. Torque **25 Ncm**
 Cont. Power **75 Watts**
 Speed **<1 to 6000 rpm**



The Printed Motor Works GPN9LR is a totally enclosed dc motor in an ultra slim pancake profile designed specifically for low voltage and battery applications. This pancake motor can provide cost effective servo capability at lower voltages, compared with the standard GP series. This version utilises 'rare earth' magnets which give higher power to weight and size ratio compared with the 'M' version.

Motor Constants	Symbol	Unit	Value
Voltage	Ke	V/krpm	2.5
Torque	Kt	Ncm/Amp	2.4
Damping	Kd	Ncm/1000rpm	0.30
Friction	Tf	Ncm	1.2
Terminal Resistance	I	Ohm	0.42

Motor Ratings	Unit	Value
Voltage	Volts	12.0
Current	Amps	11.4
Torque	Ncm	25.0
Speed	RPM	2887
Power	Watts	75



Sample design modifications

Shaft

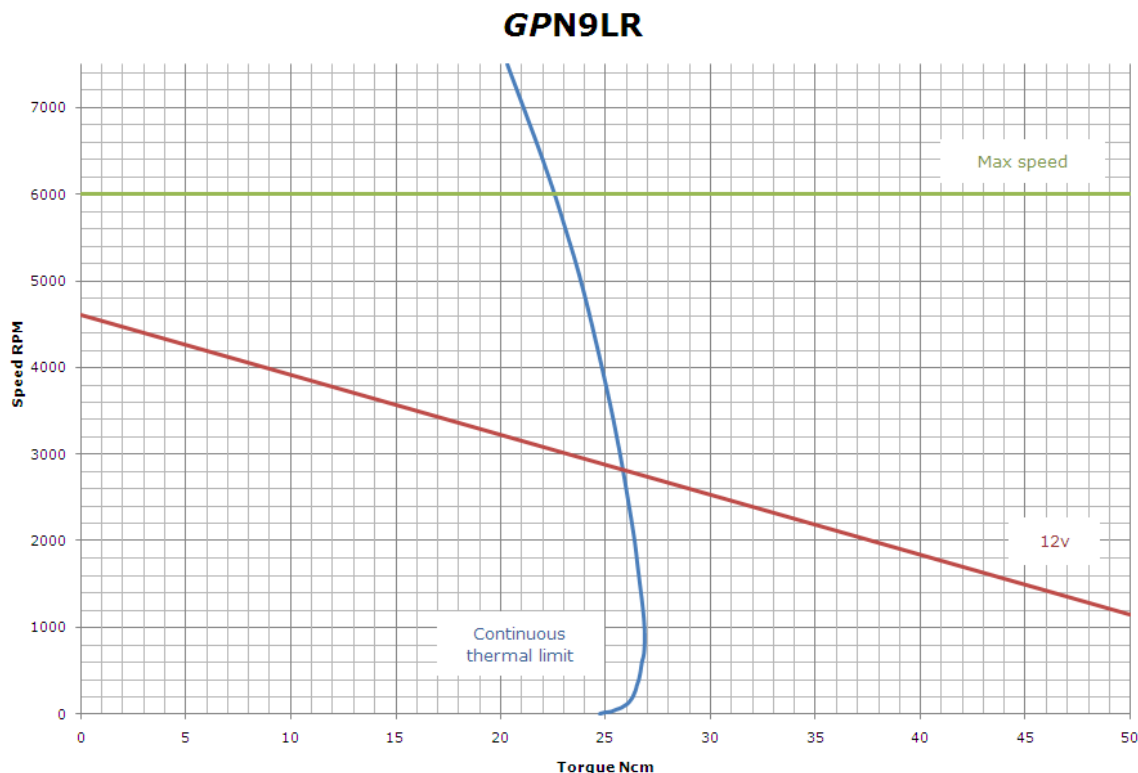
Round shaft
 Extra flats
 Length variants
 Cut gear
 Other modifications

Brushes

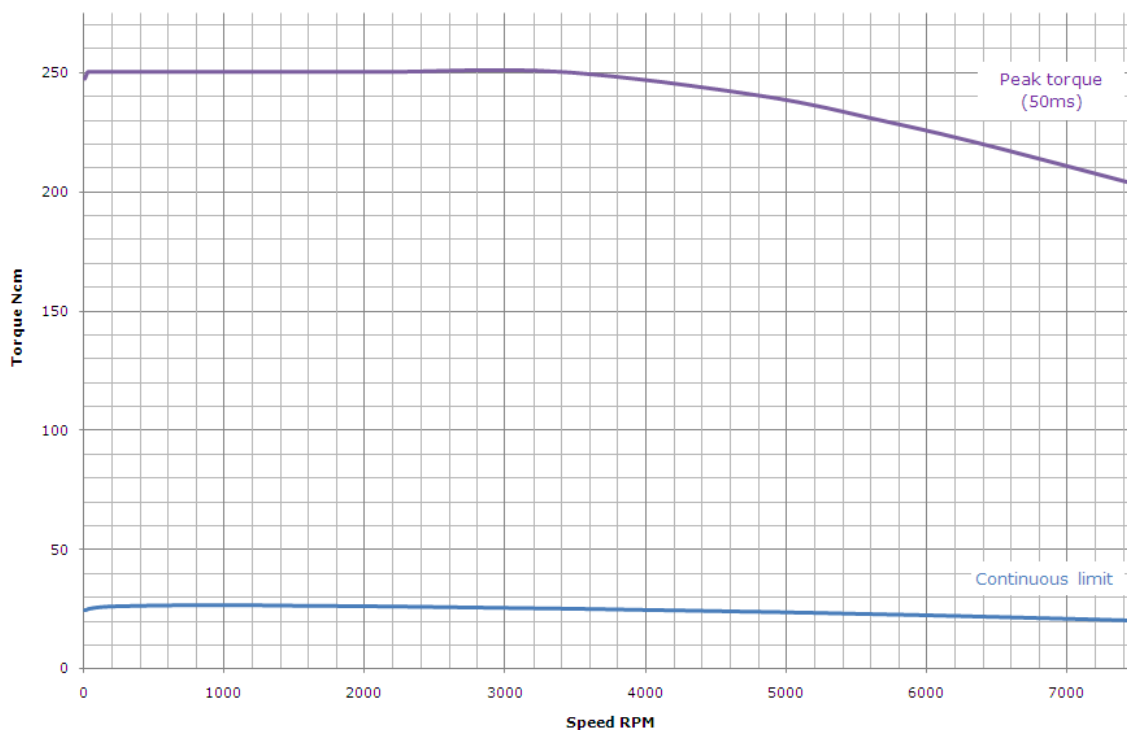
Long life for continuous duty applications
 Low resistance brushes for servo applications
 High altitude
 Vacuum

Extra

EMC suppression
 Long leads
 Connectors
 Tri-rated cable
 Use in low ambient temperatures



Peak torque speed curve



NOTE: The angle of the Torque/Speed curve remains the same for higher and lower voltages. The speed varies proportionally from zero rpm relative to the voltage supplied. The stated voltage is an example, not a predefined maximum or minimum. Due to ongoing product improvement data in this datasheet maybe subject to change without notice.