

GPN12LR

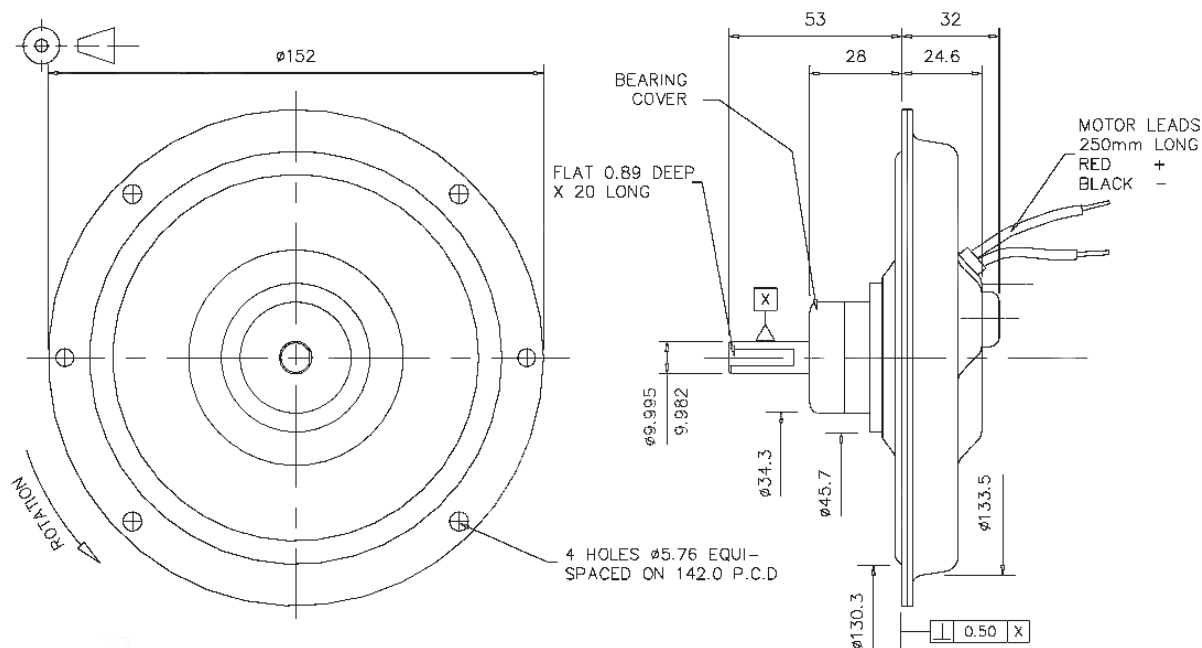
Peak Torque **480 Ncm**
 Cont. Torque **48 Ncm**
 Cont. Power **190 Watts**
 Speed **<1 to 6000 rpm**



The Printed Motor Works GPN12LR 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	5.0
Torque	Kt	Ncm/Amp	4.8
Damping	Kd	Ncm/1000rpm	0.70
Friction	Tf	Ncm	2.0
Terminal Resistance	I	Ohm	0.45

Motor Ratings	Unit	Value
Voltage	Volts	24.0
Current	Amps	11.0
Torque	Ncm	48.0
Speed	RPM	3810
Power	Watts	190



Sample design modifications

Shaft

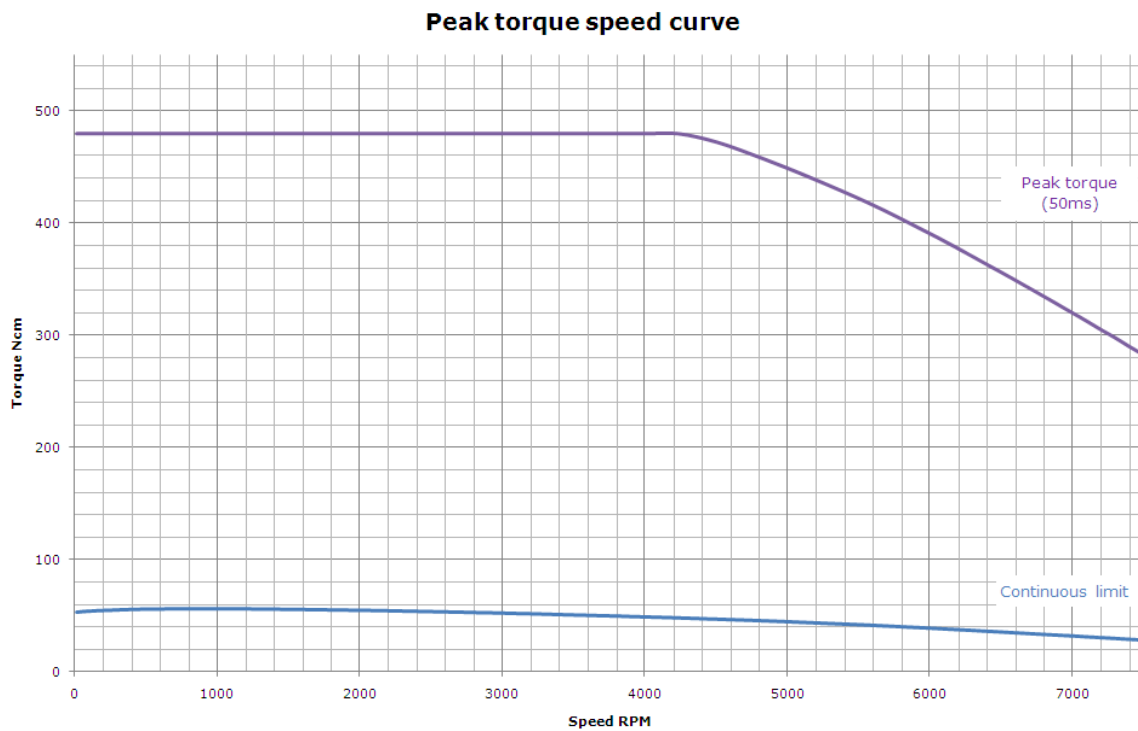
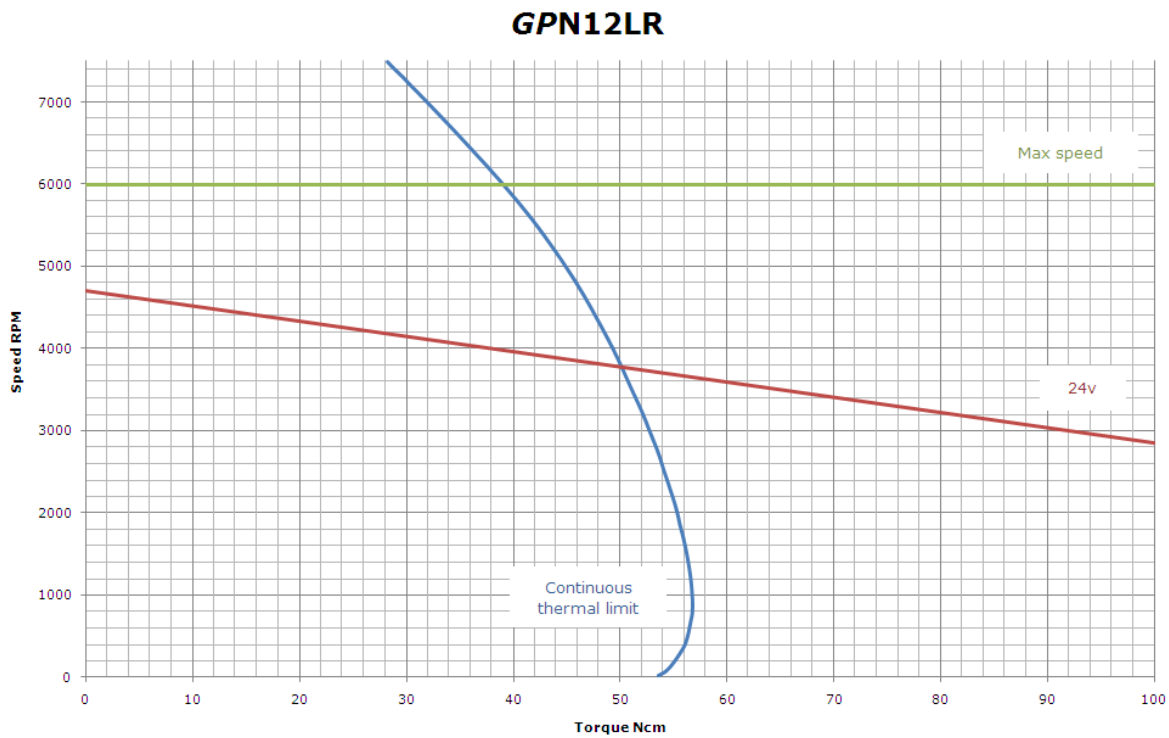
- Round shaft
- Extra flats
- Length variants
- Cut gear
- Other modifications

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



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.