

iMR 100

48V, Incremental encoder, With Brake



Order number:
2L057B030NXXXF-RT03

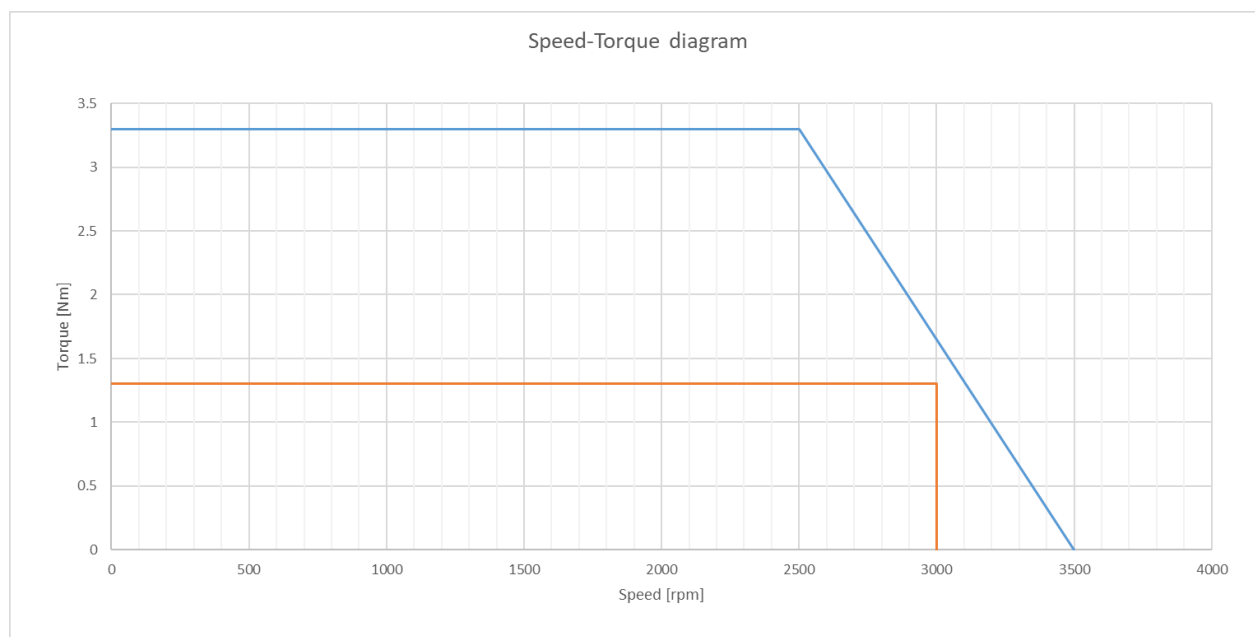
Characteristic	Unit	Value
Wheel Diameter	mm	156
Gearbox Type		Planetary Helical
Gearbox Ratio		10:1
Rated Voltage	V _{DC}	48

Specification	Detail
Wheel Material	PU-Rad: 78°±3° Shore A
Brake	2Nm
Thermal Protection	KTY-84

Motor specs

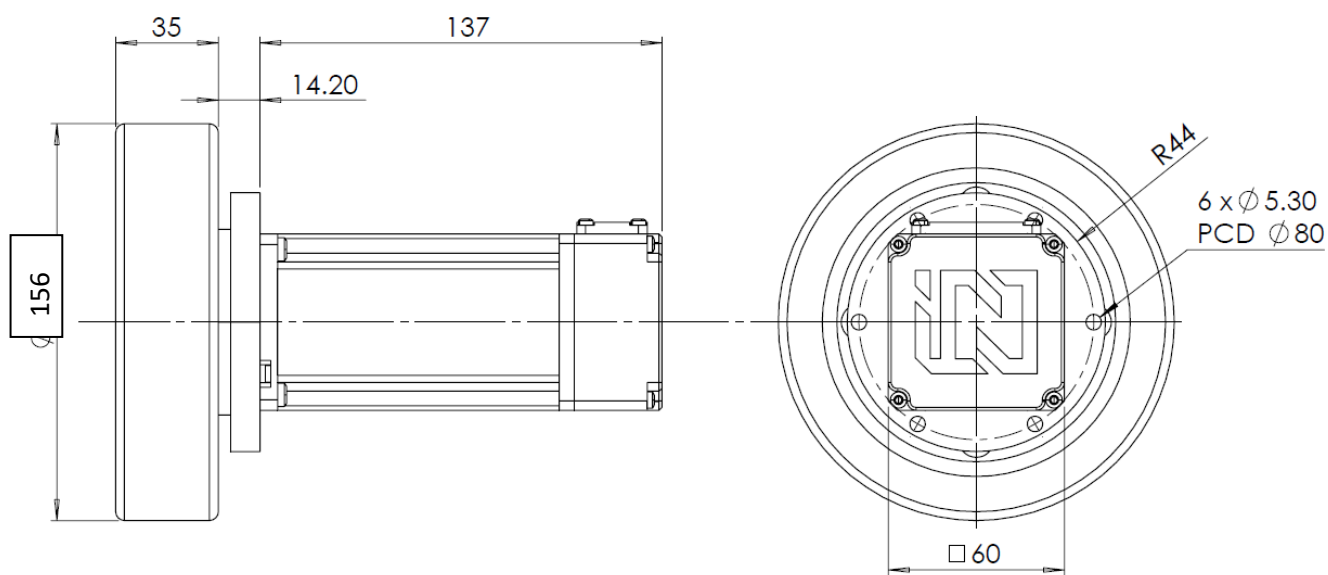
Characteristic	Abbr.	Unit	Value
Motor technology			SPM
No of poles			10
Rated Voltage	U _{mot}	V _{rms}	48
S1 Rated speed	n _n	rpm	3000
Maximum speed	n _{max}	rpm	3300
Rated power	P _n	W	400
Stall torque	M ₀	Nm	1.3
S1 Rated torque	M _n	Nm	1.3
Peak torque	M _{max}	Nm	3.3
Stall current	I ₀	A _{rms}	10
S1 Rated current	I _n	A _{rms}	10
Peak current	I _{max}	A _{rms}	22

Characteristic	Abbr.	Unit	Value
Torque constant (hot)	kt _{hot}	Nm/A _{rms}	0.14
Torque constant (cold)	kt _{cold}	Nm/A _{rms}	0.12
Voltage constant	ke	V/krpm	8.6
Winding resistance	R _{p-p}	Ω	0.27
Winding inductance	L _{p-p}	mH	0.58
Max ambient operating temperature			40°C
Insulation class			F – 155°C





Dimensions





Feedback specifications

Characteristic	Value
Manufacturer	iNetic
Type	incremental encoder with Commutation signals
Resolution	4096 ppr
Hysteresis	0.18°
Accuracy	±0.5°
Supply voltage	5 V _{DC}
Current Consumption	13 mA to 50 mA

Connector guide

No connectors, Cable leads only

Power:

Phase	Cable
U	Black, AWG14
V	Blue, AWG14
W	White, AWG14

Cable length: 0.5 m

Thermistor:

Black and white AWG26 cables

Signal - Feedback

Signal	Colour
U	Black
V	Violet
W	Grey/Pink
A+	Pink
A-	Grey
B+	Green
B-	Yellow
Z+	White
Z-	Brown
V _{dd} (+5 V)	Red
GND	Blue

Cable length: 0.5 m

NOTE: 1) The data provided in this datasheet is for guidance only and does not form part of any contract. 2) Motor, drive, gearbox and brake should undergo application testing to validate performance.

iN Motion is part of iNetic www.inetic.com

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