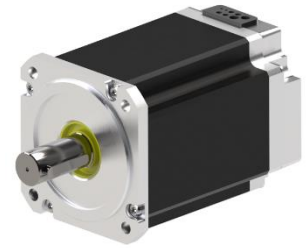


iNX 90

Double Encoder, No Drive

Order number:
2L085X021NXXXD

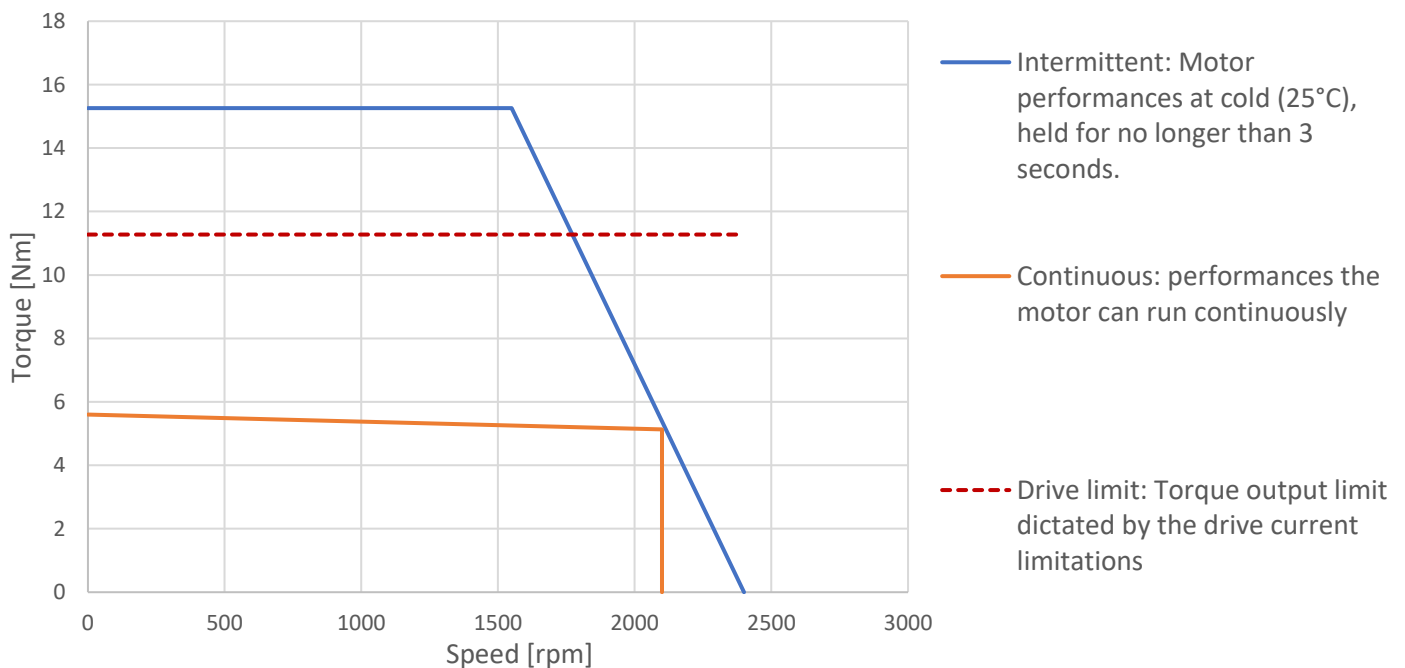


MOTOR SPECIFICATIONS

Characteristic	Abbr.	Unit	Value
Motor technology			SPM
No of poles			10
Rated Voltage	U_{mot}	V_{rms}	48
S1 Rated speed	n_n	rpm	2100
Maximum speed	n_{max}	rpm	2400
Rated power	P_n	W	1130
Stall torque	M_0	Nm	5.6
S1 Rated torque	M_n	Nm	5.1
Peak torque	M_{max}	Nm	15.26
Stall current	I_0	A_{rms}	31.9
S1 Rated current	I_n	A_{rms}	27.3
Peak current	I_{max}	A_{rms}	87

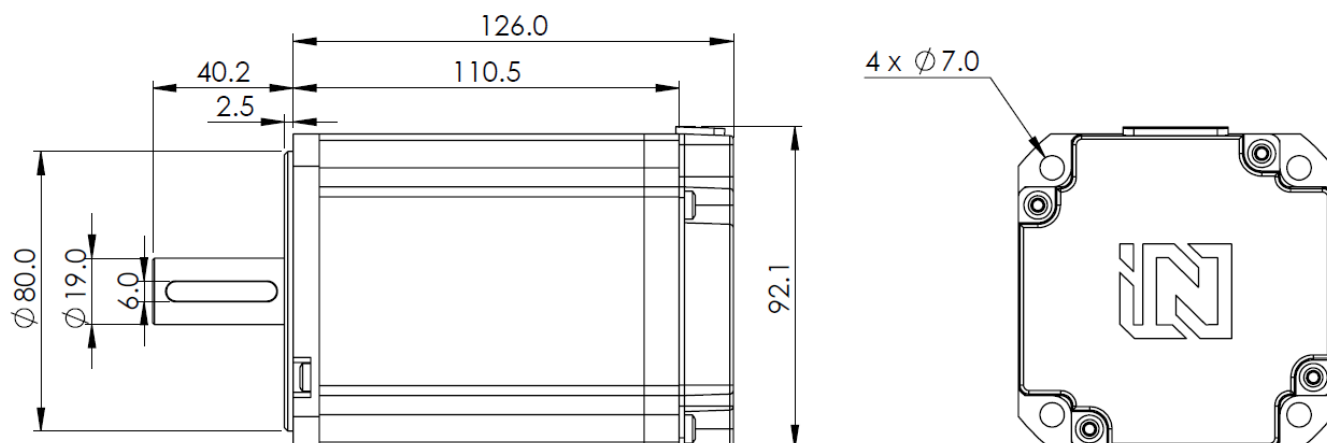
Characteristic	Abbr.	Unit	Value
Torque constant (hot)	kt_{hot}	Nm/ A_{rms}	0.19
Torque constant (cold)	kt_{cold}	Nm/ A_{rms}	0.21
Voltage constant	ke	V/krpm	13.6
Winding resistance	R_{p-p}	Ω	0.07
Winding inductance	L_{p-p}	mH	0.22
Max ambient operating temperature			40°C
Insulation class			F – 155°C
Thermal Protection			KTY-84

Motor Speed-Torque diagram - 48VDC





DIMENSIONS



FEEDBACK SPECIFICATIONS

Characteristic	Value
Manufacturer	Renishaw RLS
Type	Double incremental encoder with Commutation signals
Resolution	12 bit; 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 1

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

Signal - Feedback 2

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

Cable length: 0.3 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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