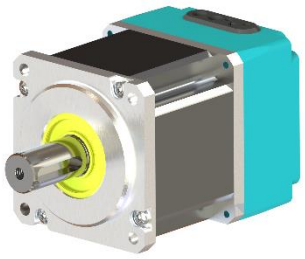
# iNX 60

Double encoder, No Brake

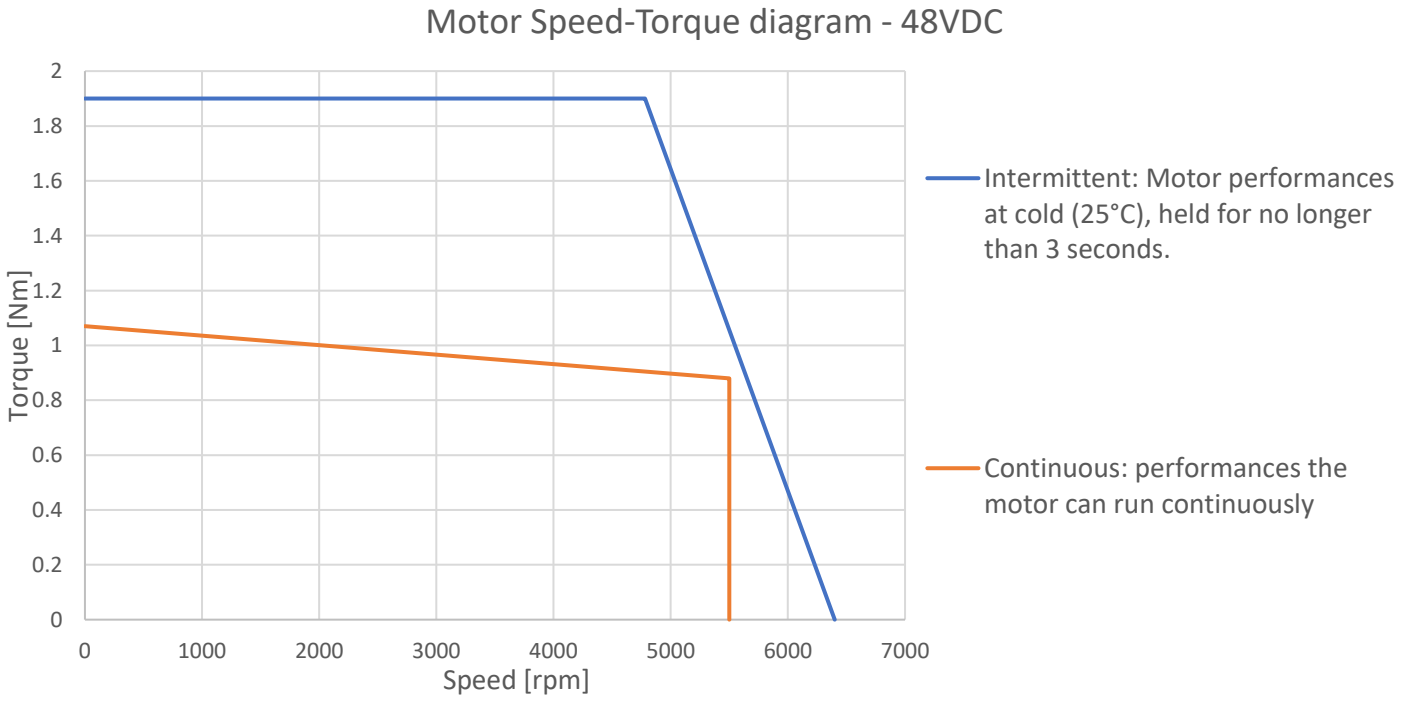


Order number:
1L057X055NXXXD

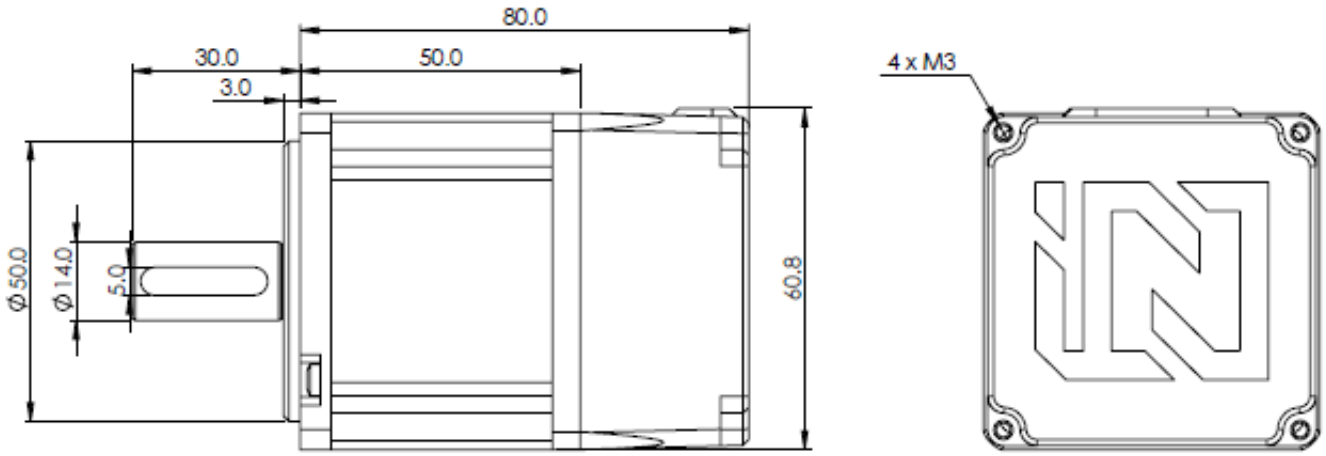
## MOTOR SPECIFICATIONS

| Characteristic | Abbr. | Unit | Value |
|---|---|---|---|
| Motor technology | | | SPM |
| No of poles | | | 10 |
| Rated Voltage | $U_{mot}$ | $V_{rms}$ | 48 |
| S1 Rated speed | $n_n$ | rpm | 5500 |
| Maximum speed | $n_{max}$ | rpm | 6400 |
| Rated power | $P_n$ | W | 507 |
| Stall torque | $M_0$ | Nm | 1.07 |
| S1 Rated torque | $M_n$ | Nm | 0.88 |
| Peak torque | $M_{max}$ | Nm | 1.9 |
| Stall current | $I_0$ | $A_{rms}$ | 17 |
| S1 Rated current | $I_n$ | $A_{rms}$ | 15 |
| Peak current | $I_{max}$ | $A_{rms}$ | 27 |

| Characteristic | Abbr. | Unit | Value |
|---|---|---|---|
| Torque constant (hot) | $kt_{hot}$ | $Nm/A_{rms}$ | 0.059 |
| Torque constant (cold) | $kt_{cold}$ | $Nm/A_{rms}$ | 0.070 |
| Voltage constant | ke | V/krpm | 4.9 |
| Winding resistance | $R_{p-p}$ | Ω | 0.21 |
| Winding inductance | $L_{p-p}$ | mH | 0.33 |
| Max ambient operating temperature | | | 40°C |
| Insulation class | | | F – 155°C |



## 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 |

Cable length: 0.3 m

Signal - Feedback 2

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