

NMS Series Datasheet



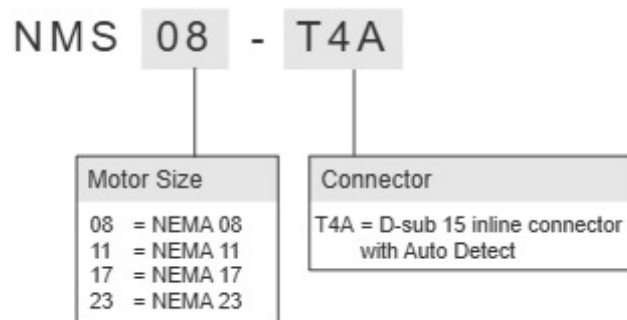
- NEMA size 08 to 23 stepper motors offer a range of size and torque
- Up to 3000 rpm speed and 1.8 N-m torque
- HS02 home sensor and magnet included
- Designed for use with an X-MCC Series stepper motor controller or any 2-phase stepper motor controller
- With AutoDetect, the X-MCC controller configures its settings automatically for the connected peripheral

NMS Series Overview

These NEMA stepper motors are designed to connect directly to our X-MCC using a single cable. Set-up is easy with AutoDetect. Once connected, the X-MCC controller will automatically detect and configure the motor. A detachable home sensor (HS02) and magnet are included.

For more information visit: <https://www.zaber.com/products/stepper-motors/NMS>

NMS Series Part Numbering & Options



NMS Series Drawings

- [NMS08.png \(Drawing for the NMS08\)](#)
- [NMS11.png \(Drawing for the NMS11\)](#)
- [NMS17.png \(Drawing for the NMS17\)](#)
- [NMS23.png \(Drawing for the NMS23\)](#)

NMS Series Specifications

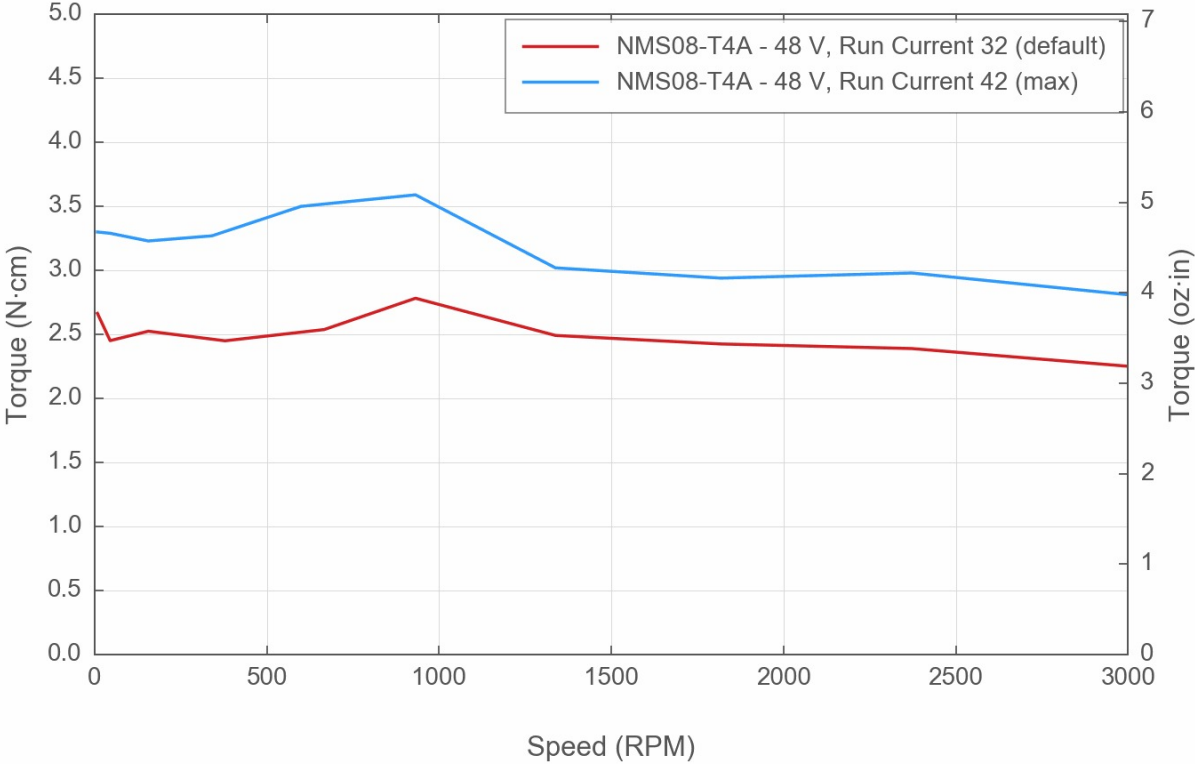
Microstep Size (Default Resolution)	0.028125° (490.866 μrad)
Built-in Controller	No
Recommended Controller	MCC (48 V) Recommended
AutoDetect	Yes
Maximum Speed	18000°/s (3000 rpm)
Minimum Speed	0.017172°/s (299.703 μrad/s)
Speed Resolution	0.017172°/s (299.703 μrad/s)
Motor Steps Per Rev	200
Motor Type	Stepper (2 phase)
Motor Connection	D-sub 15
Limit or Home Sensing	Magnetic home sensor
Operating Temperature Range	0 to 50 °C
CE Compliant	Yes
Vacuum Compatible	No

Part Number	Maximum Torque	Motor Rated Current	Motor Winding Resistance	Inductance
NMS08-T4A	3.5 N-cm (5.0 oz-in)	600 mA/phase	6.5 ohms/phase	3.5 mH/phase
NMS11-T4A	17 N-cm (24.1 oz-in)	1500 mA/phase	2.05 ohms/phase	1 mH/phase
NMS17-T4A	58 N-cm (82.1 oz-in)	2300 mA/phase	1 ohms/phase	2.2 mH/phase
NMS23-T4A	180 N-cm (254.9 oz-in)	3000 mA/phase	0.53 ohms/phase	2 mH/phase

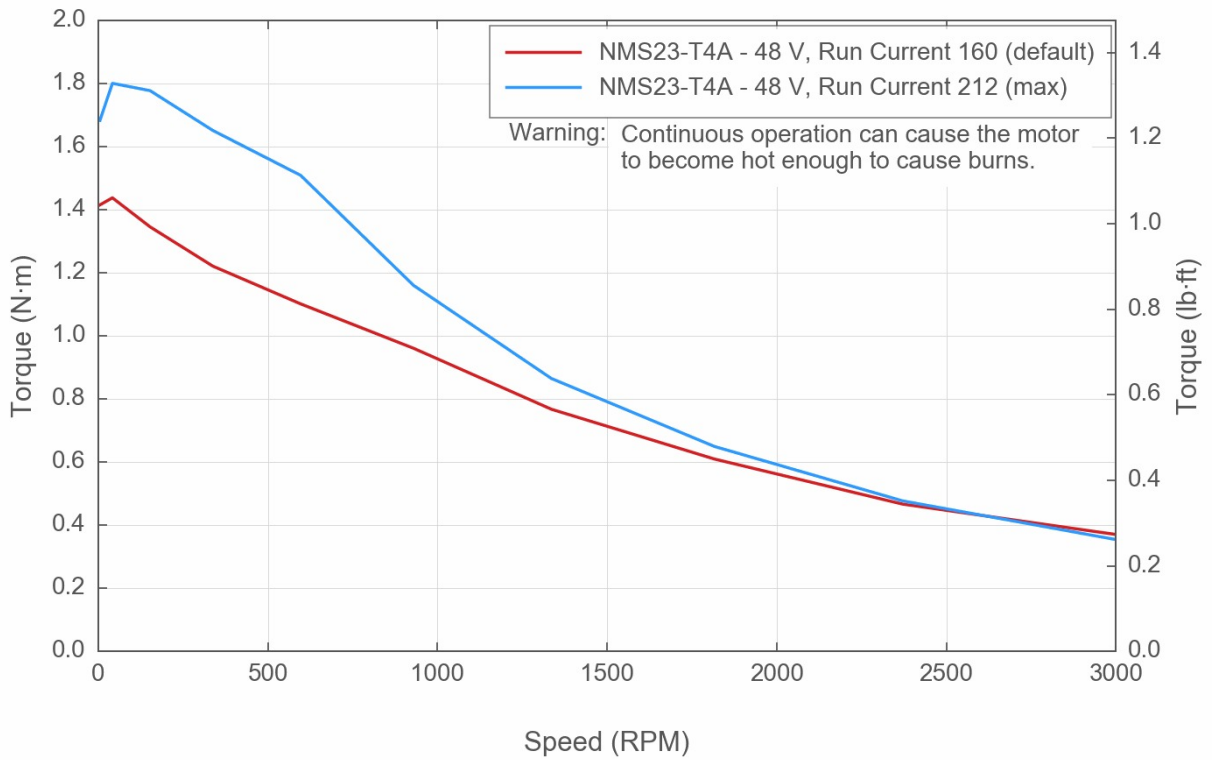
Part Number	Motor Frame Size	Weight
NMS08-T4A	NEMA 8	0.07 kg (0.154 lb)
NMS11-T4A	NEMA 11	0.21 kg (0.463 lb)
NMS17-T4A	NEMA 17	0.36 kg (0.794 lb)
NMS23-T4A	NEMA 23	1.01 kg (2.227 lb)

NMS Series Charts

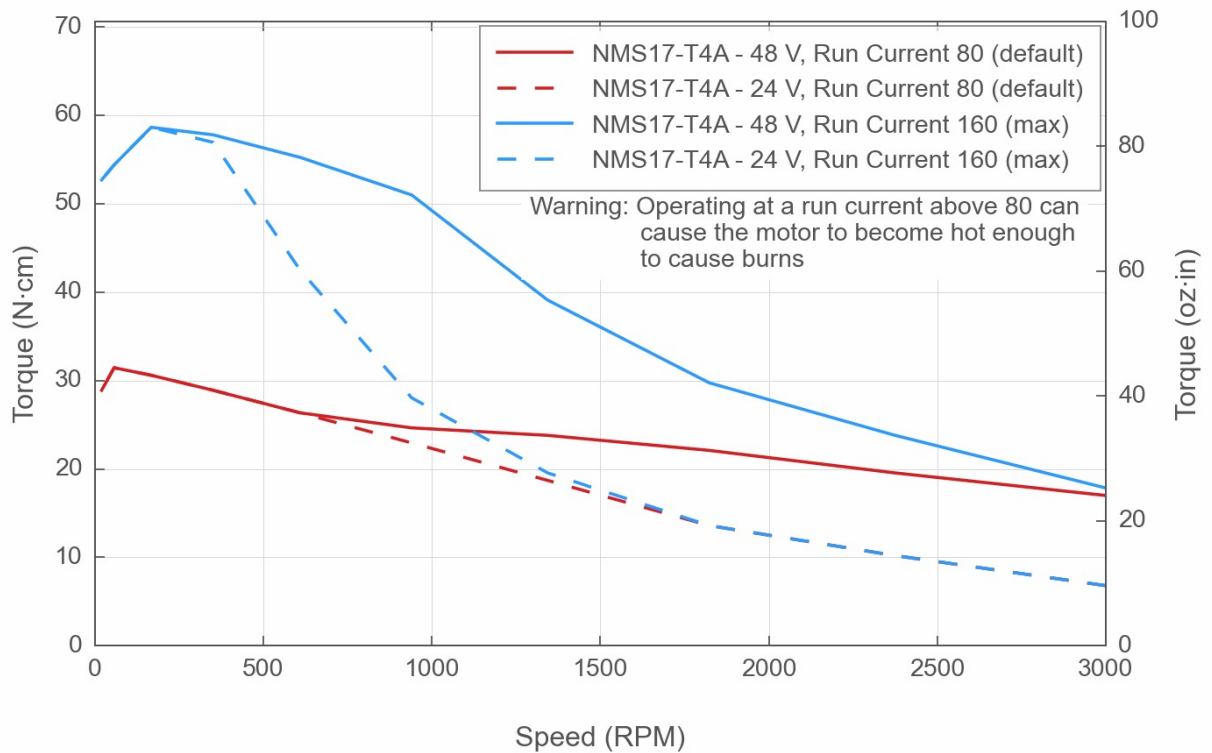
Torque Speed Performance



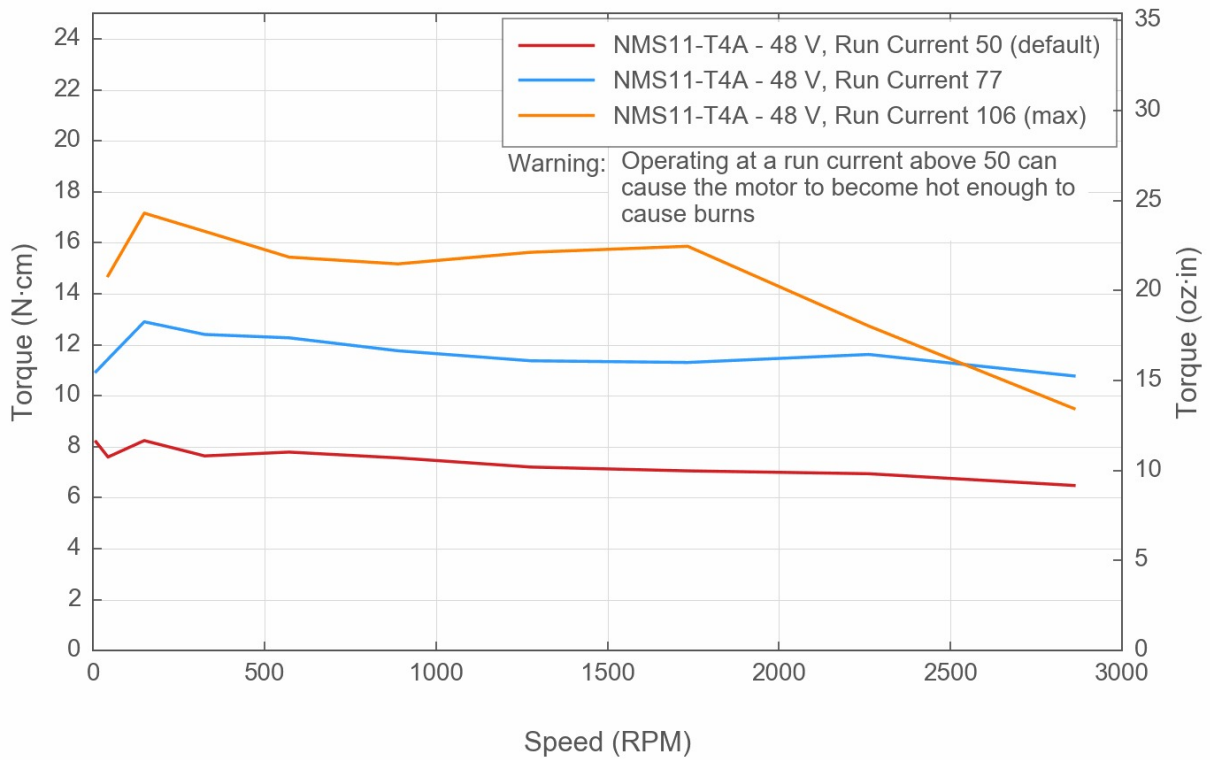
Torque Speed Performance



Torque Speed Performance



Torque Speed Performance



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