

NEMA 17 (42 mm) Non-captive Hybrid Linear Stepper Motor

TSL-42LN Series

The TSL-42LN Series combines a 42 mm hybrid stepper motor with a non-captive lead screw configuration. The lead screw passes through the motor and translates linearly while the motor body remains fixed. Standard configurations provide multiple screw leads, screw lengths and motor body options for compact industrial motion-control applications.

Series Highlights

Frame Size	42 x 42 mm
Motor Length Options	34 / 42 mm
Screw Diameter	8 mm
Screw Lead Options	2 / 4 / 8 mm
Holding Torque Range	270 - 500 mNm
Rated Current Range	1.33 - 1.68 A
Rated Thrust Range	100 - 295 N



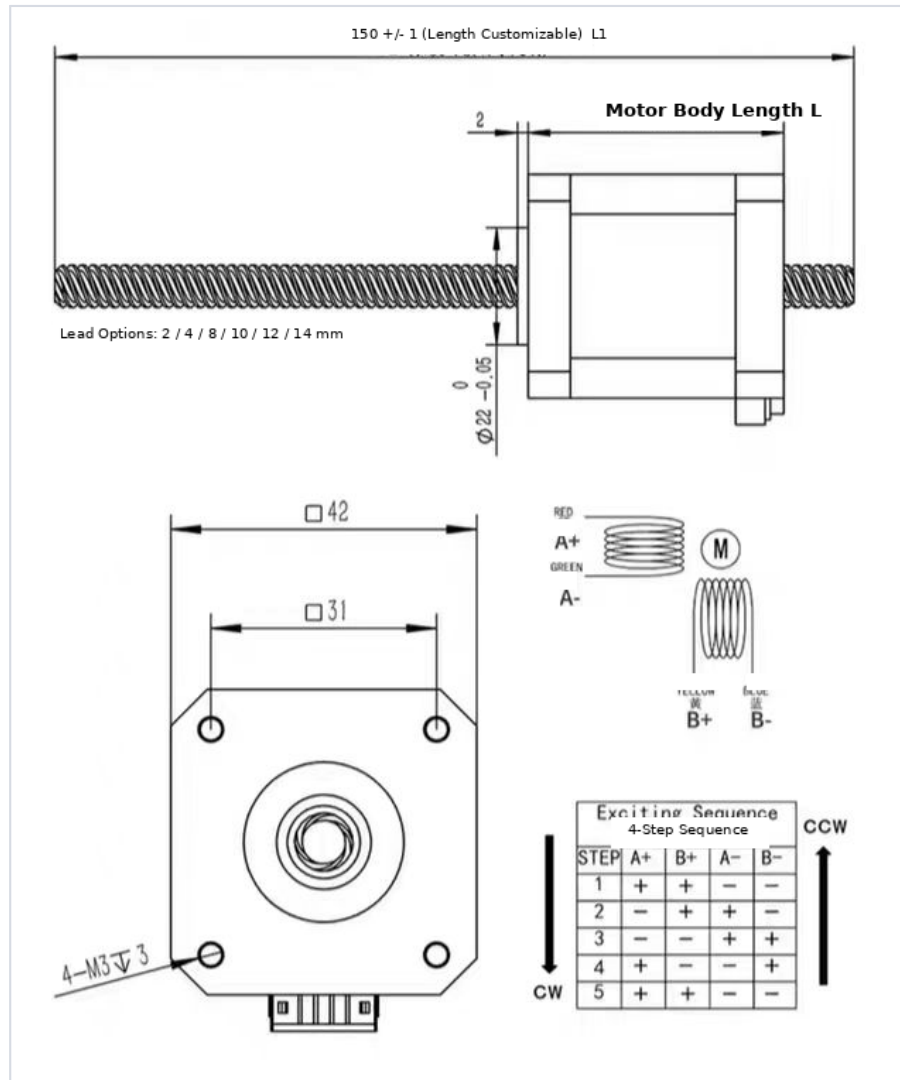
Non-captive Linear Stepper Motor

Performance Parameters

Motor Model	Holding Torque	Rated Current	Motor Length	Screw Length	Screw Diameter	Screw Lead	Rated Thrust	Horizontal Max. Load	Vertical Max. Load
	mNm	A	mm	mm	mm	mm	N	kg	kg
TSL-42LN3413T8C2-250	270	1.33	34	250	8	2	200	10	4
TSL-42LN3413T8C8-250	270	1.33	34	250	8	8	100	6	2.5
TSL-42LN3413T8C4-300	270	1.33	34	300	8	4	140	8	3.5
TSL-42LN3413T8C8-300	270	1.33	34	300	8	8	100	6	2.5
TSL-42LN4816T8C4-155	500	1.68	42	155	8	4	295	17	8.5

Performance parameters are for reference only and can be customized according to customer requirements.

Mechanical Dimensions



Drawing Notes

- L = motor body length.
- $L1$ = screw length.
- Nominal frame size: 42 x 42 mm.
- Lead screw diameter: 8 mm.
- Mounting holes: 4-M3, minimum depth 3 mm.
- Wiring: Red A+, Green A-, Yellow B+, Blue B-.

Customization Options

The drawing is for reference only. Ball-screw versions, encoder options, and integrated encoder-and-driver solutions are available according to customer requirements.