

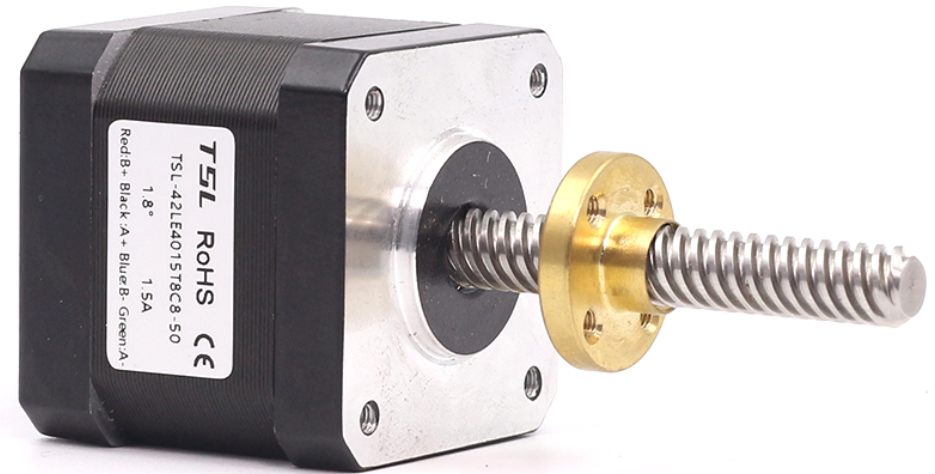
# NEMA 17 (42 mm) External Nut Hybrid Linear Stepper Motor

## TSL-42LE Series

The TSL-42LE Series combines a 42 mm hybrid stepper motor with an external-nut linear screw mechanism. Standard configurations cover multiple motor lengths, screw leads and screw lengths to support different thrust, speed and travel requirements.

### Series Highlights

Frame Size	42.2 x 42.2 mm
Motor Length Options	34.5 / 38 / 40 / 48 mm
Screw Diameter	8 mm
Screw Lead Options	1 / 2 / 4 / 8 / 12 mm
Holding Torque Range	320 - 550 mNm
Rated Current Range	1.0 - 2.0 A
Rated Thrust Range	100 - 490 N



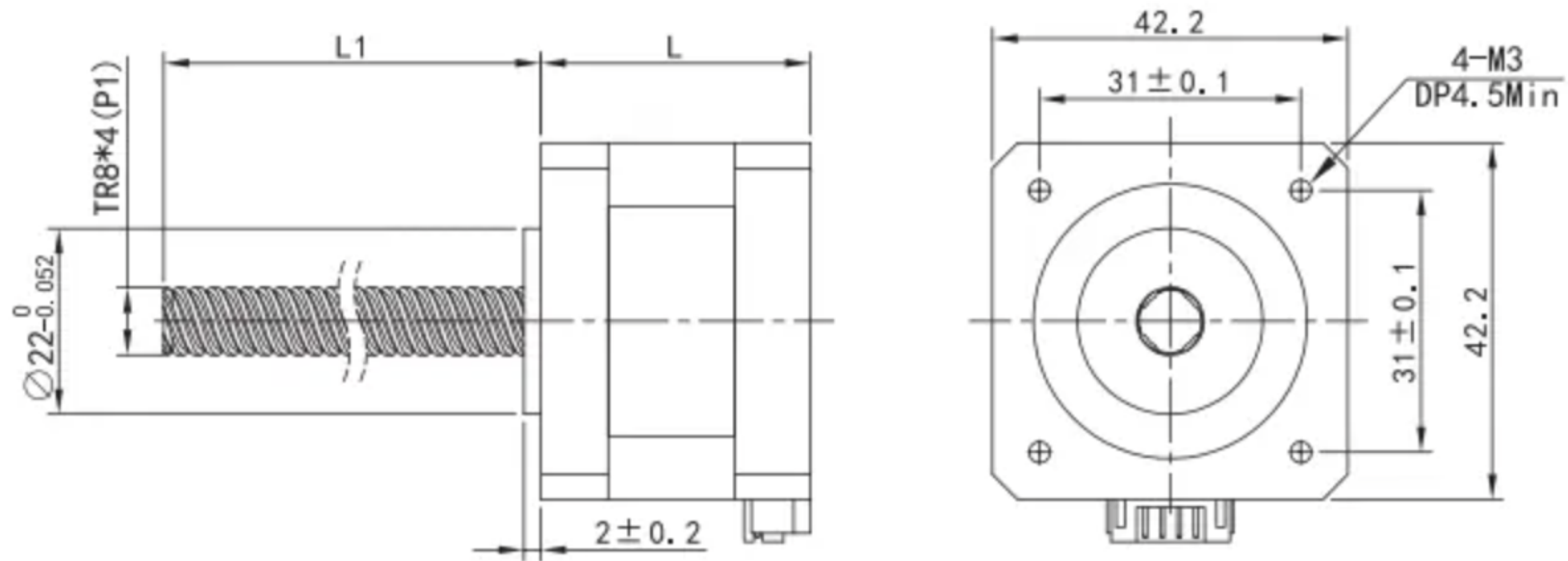
External Nut Linear Stepper Motor

## Performance Parameters

Motor Model	Holding Torque mNm	Rated Current A	Motor Length mm	Screw Length mm	Screw Diameter mm	Screw Lead mm	Rated Thrust N	Horizontal Max. Load kg	Vertical Max. Load kg
TSL-42LE3410T8C8-192	380	1	34.5	192	8	8	120	12.0	4.0
TSL-42LE3810T8C2-210	320	1	38	210	8	2	210	18.0	10.0
TSL-42LE4015T8C2-180	380	1.5	40	180	8	2	380	28.0	13.0
TSL-42LE4015T8C2-350	380	1.5	40	350	8	2	380	28.0	13.0
TSL-42LE4015T8C4-350	380	1.5	40	350	8	4	270	20.0	10.0
TSL-42LE4015T8C8-350	380	1.5	40	350	8	8	140	16.0	6.0
TSL-42LE4015T8C12-459	380	1.5	40	459	8	12	100	12.0	4.0
TSL-42LE4815T8C2-100	520	1.5	48	100	8	2	420	33.0	15.0
TSL-42LE4815T8C8-360	520	1.5	48	360	8	8	230	22.0	8.0
TSL-42LE4820T8C1-200	550	2	48	200	8	1	490	38.0	20.0

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: 42.2 x 42.2 mm.
- Mounting holes: 4-M3, minimum depth 4.5 mm.

### Customization Options

The drawing is for reference only. The lead screw can be replaced with a ball screw, and encoder or integrated encoder-and-driver options can be supplied according to customer requirements.