

Stepper Motor NEMA 17

This document describes mechanical and electrical specifications for PBC Linear stepper motors; including standard, hollow, and extended shaft variations.

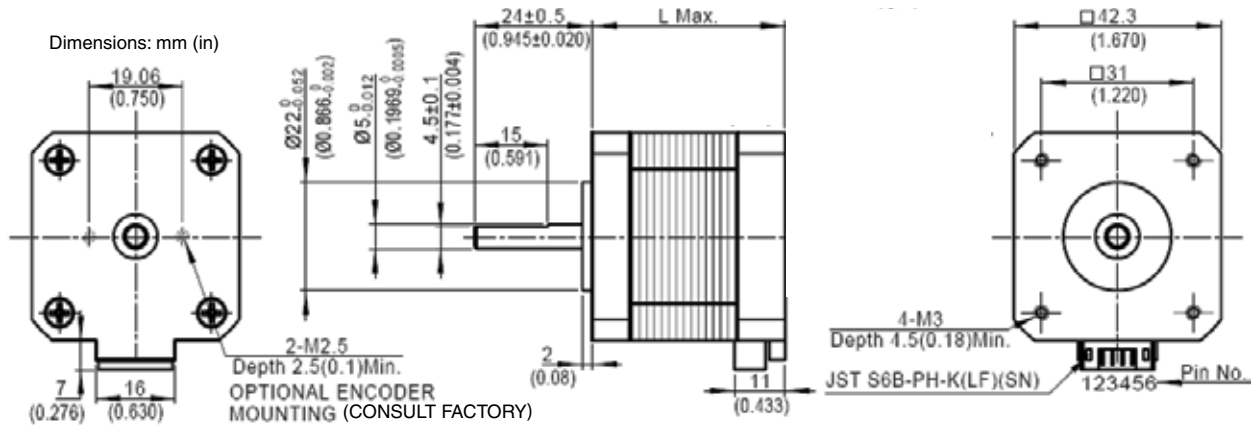


| | |
|-----------------------|---|
| Phases | 2 |
| Steps/Revolution | 200 |
| Step Accuracy | ±5% |
| Shaft Load | 20,000 Hours at 1000 RPM |
| Axial | 25 N (5.6 lbs.) Push 65 N (15 lbs.) Pull |
| Radial | 29 N (6.5 lbs.) At Flat Center |
| IP Rating | 40 |
| Approvals | RoHS |
| Operating Temp | -20° C to +40° C |
| Insulation Class | B, 130° C |
| Insulation Resistance | 100 MegOhms |

Standard shaft motor shown.

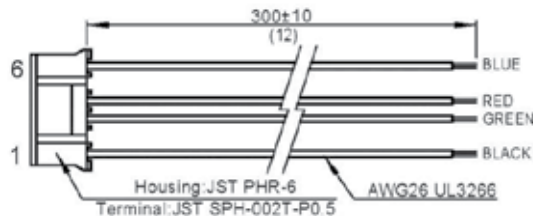
| Description | Length | Mounted Rated Current | Mounted Holding Torque | | Winding Ohms mH | | Detent Torque | | Rotor Inertia | | Motor Weight | |
|-------------|-------------------|-----------------------|------------------------|------------|------------------|-----|---------------|-------|---------------|------|--------------|------|
| | | | Nm Typ. | oz-in Typ. | ±10% @ 20°C Typ. | mNm | oz-in | g cm2 | oz-in2 | kg | lbs | |
| (Stack) | "L" Max | Amps | | | | | | | | | | |
| Single | 39.8 mm (1.57 in) | 2 | 0.48 | 68 | 1.04 | 2.2 | 15 | 2.1 | 57 | 0.31 | 0.28 | 0.62 |
| Double | 48.3 mm (1.90 in) | 2 | 0.63 | 89 | 1.3 | 2.9 | 25 | 3.5 | 82 | 0.45 | 0.36 | 0.79 |
| Triple | 62.8 mm (2.47 in) | 2 | 0.83 | 120 | 1.49 | 3.8 | 30 | 4.2 | 123 | 0.67 | 0.6 | 1.3 |

*All standard motors have plug connector. Consult factory for other options.



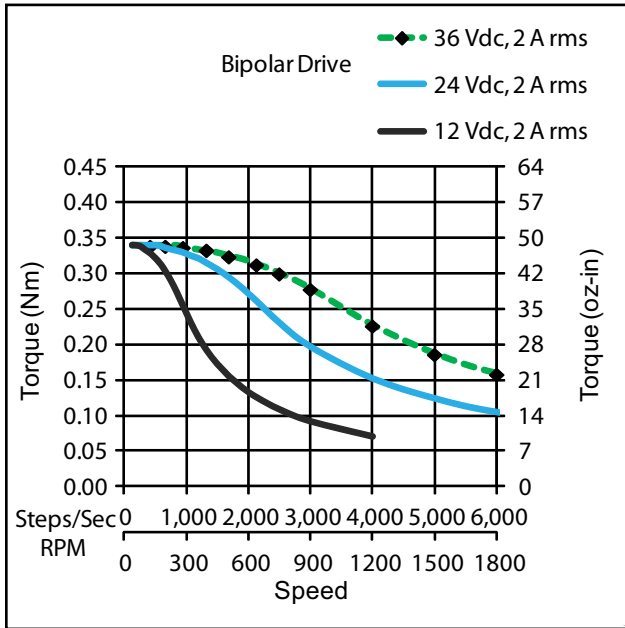
Standard shaft dimensions shown. All other dimensions apply to hollow and extended shaft options.

Dimensions: mm (in)
4 Lead Connector, PBC Part#6200490
(Consult factory for optional motor connectors)

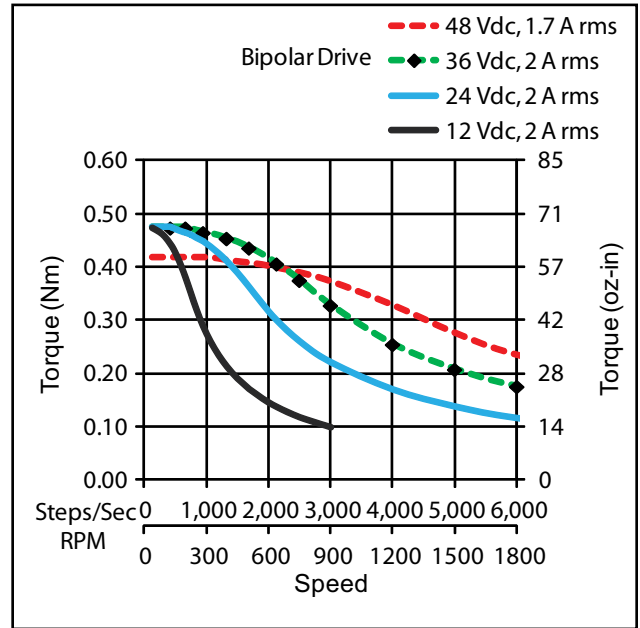


NEMA 17 Stepper Motor

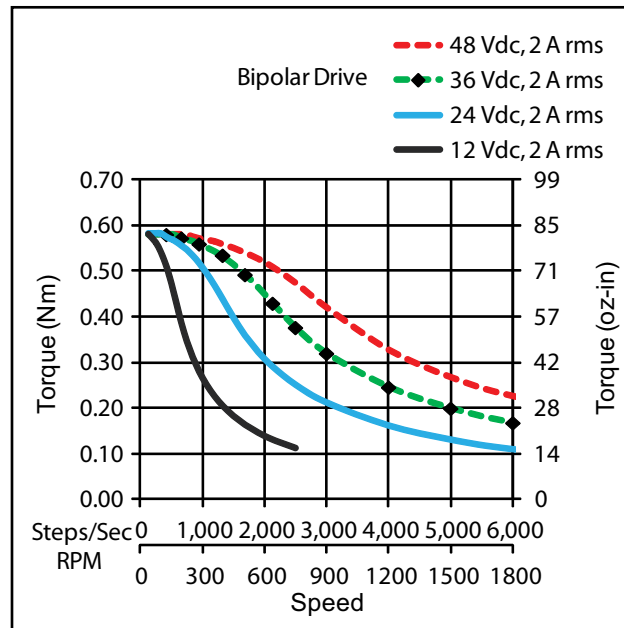
*Performance curves apply to continuous duty cycles.
Consult factory for intermittent cycles or other voltages.



Single Stack



Double Stack



Triple Stack



Stepper Motor NEMA 23

This document describes mechanical and electrical specifications for PBC Linear stepper motors; including standard, hollow, and extended shaft variations.

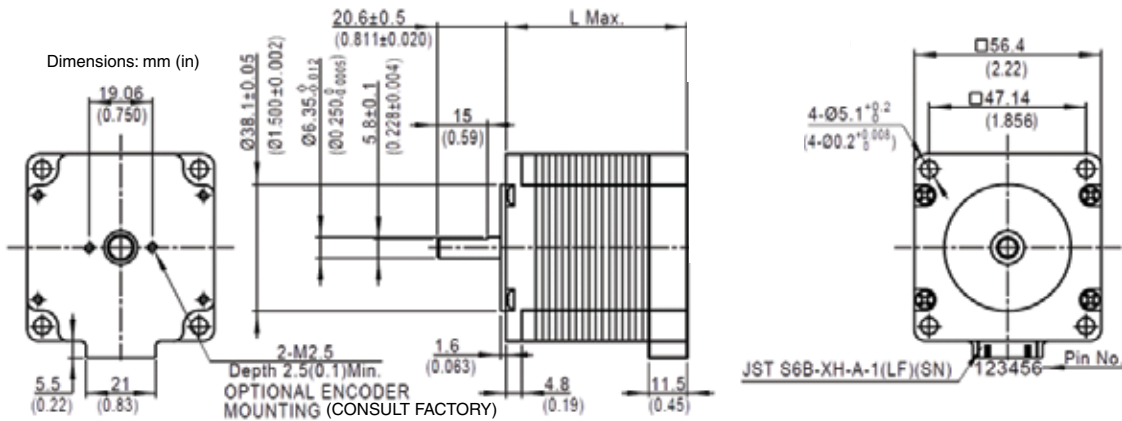


Standard shaft motor shown.

| | |
|-----------------------|--|
| Phases | 2 |
| Steps/Revolution | 200 |
| Step Accuracy | ±5% |
| Shaft Load | 20,000 Hours at 1000 RPM |
| Axial | 40 N (9 lbs.) Push 130 N (30 lbs.) Pull |
| Radial | 70 N (15.5 lbs.) At Flat Center |
| IP Rating | 40 |
| Approvals | RoHS |
| Operating Temp | -20° C to +40° C |
| Insulation Class | B, 130° C |
| Insulation Resistance | 100 MegOhms |

| Description | Length | Mounted Rated Current | Mounted Holding Torque | Winding Ohms mH | Detent Torque | Rotor Inertia | Motor Weight |
|---------------------|-------------------|-----------------------|------------------------|---------------------|---------------|--------------------------------------|--------------|
| (Stack) | "L" Max | Amps | Nm oz-in Typ. Typ. | ±10% @ 20°C Typ. | mNm oz-in | g cm ² oz-in ² | kg lbs |
| Single | 55.0 mm (2.17 in) | 2.2 | 1.50 210 | 1.6 6.9 | 45 6.4 | 220 1.2 | 0.6 1.3 |
| Double | 77.0 mm (3.03 in) | 3 | 2.30 330 | 1.1 4.5 | 75 11 | 390 2.1 | 1 2.2 |
| Power Plus (Triple) | 77.0 mm (3.03 in) | 3 | 3.30 470 | 1.1 3.7 | 150 21 | 390 2.1 | 1.1 2.4 |

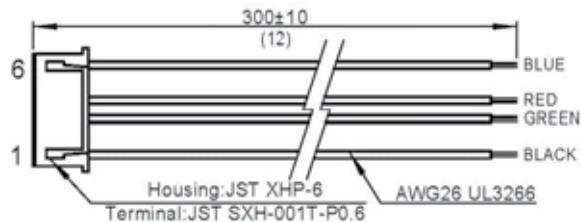
*All standard motors have plug connector. Consult factory for other options.



Motor with leads: Lead wire is 22 AWG UL3266, 300 ±10 (12 ±.5) long

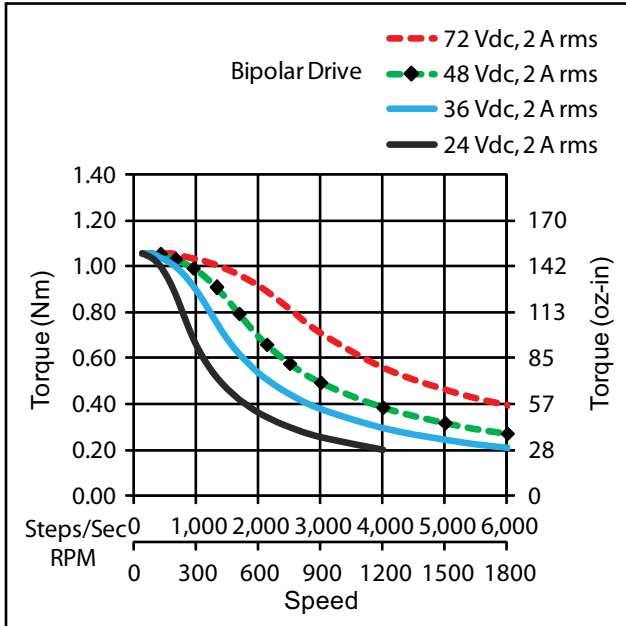
Standard shaft dimensions shown. All other dimensions apply to hollow and extended shaft options.

Dimensions: mm (in)
4 Lead Connector, PBC Part#6200491
(Consult factory for optional motor connectors)

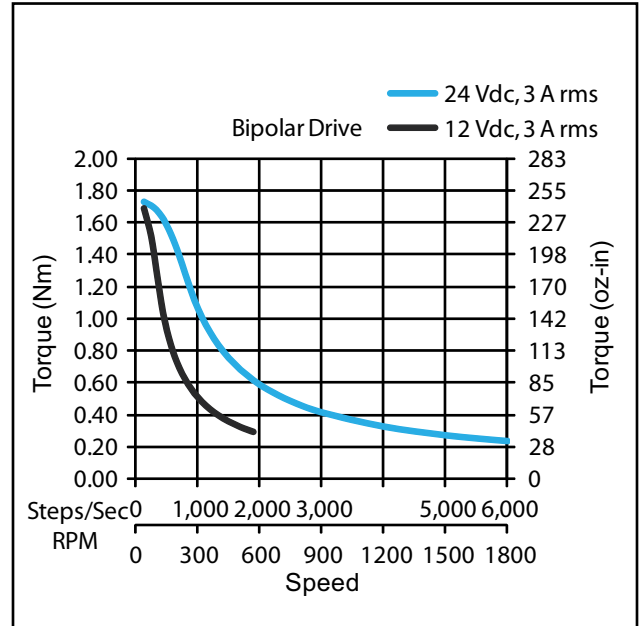


NEMA 23 Stepper Motor

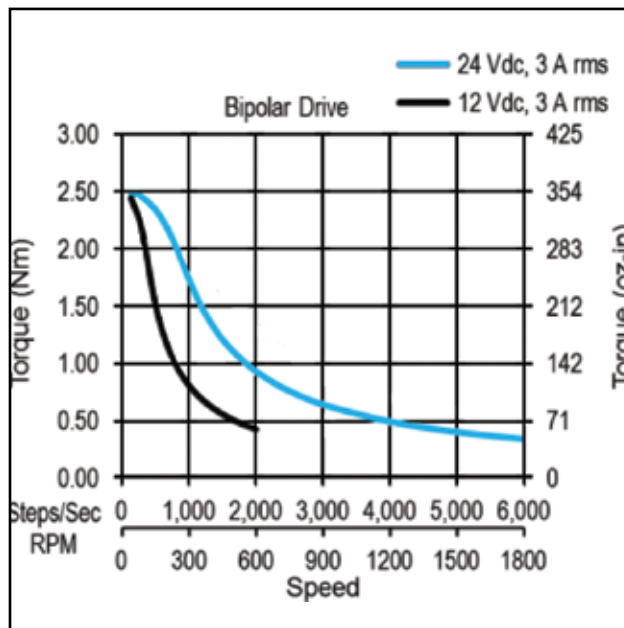
*Performance curves apply to continuous duty cycles.
Consult factory for intermittent cycles or other voltages.



Single Stack



Double Stack



Power Plus (Triple Stack)

