PBC LINEAR
A PACIFIC BEARING CO.

Stepper Motor NEMA 17

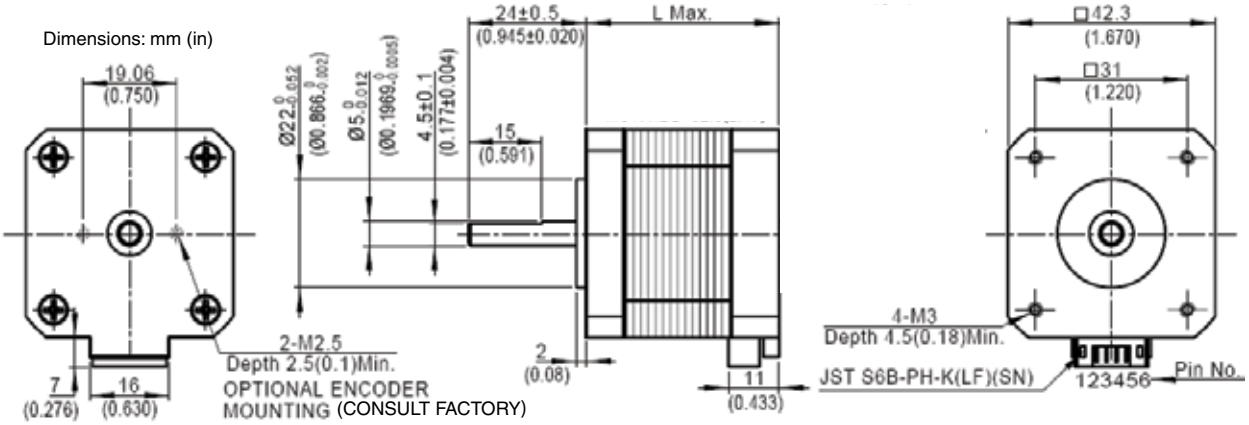
This document describes mechanical and electrical specifications for PBC Linear stepper motors; including standard, hollow, and extended shaft variations.

Standard shaft motor shown.

Phases	2
Steps/Revolution	200
Step Accuracy	±5%
Shaft Load	20,000 Hours at 1000 RPM
Axial	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

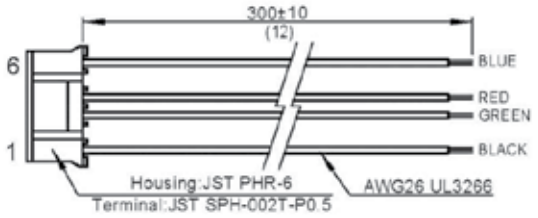
Description	Length	Mounted Rated Current	Mounted Holding Torque		Winding Ohms mH		Detent Torque		Rotor Inertia		Motor Weight	
(Stack)	"L" Max	Amps	Nm Typ.	oz-in Typ.	±10% @ 20°C	Typ.	mNm	oz-in	g cm2	oz-in2	kg	lbs
Single	39.8 mm (1.57 in)	2	0.48	68	1.04	2.2	15	2.1	57	0.31	0.28	0.62
Double	48.3 mm (1.90 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.



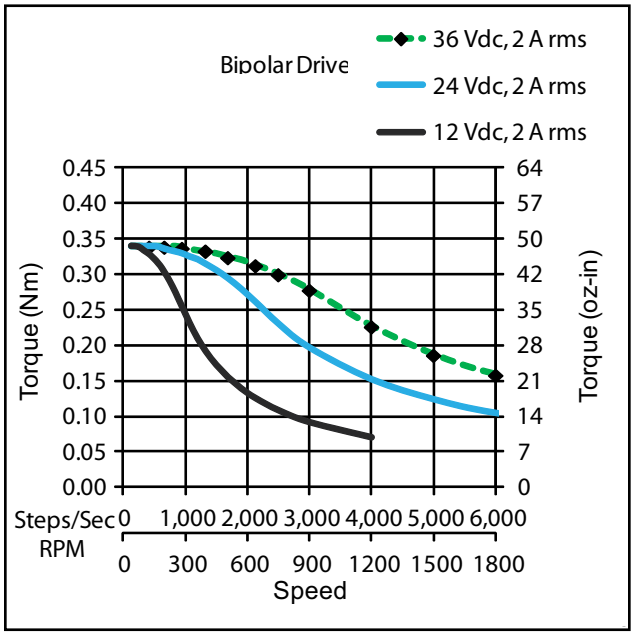
Standard shaft dimensions shown. All other dimensions apply to hollow and extended shaft options.

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

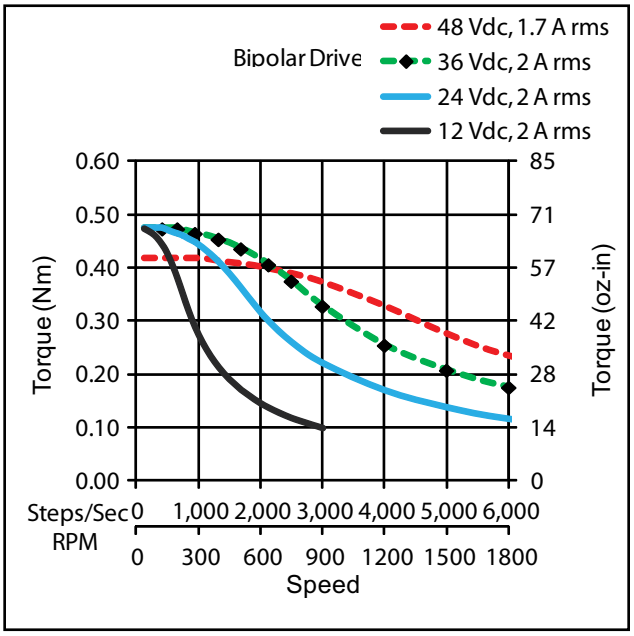


NEMA 17 **Stepper Motor**

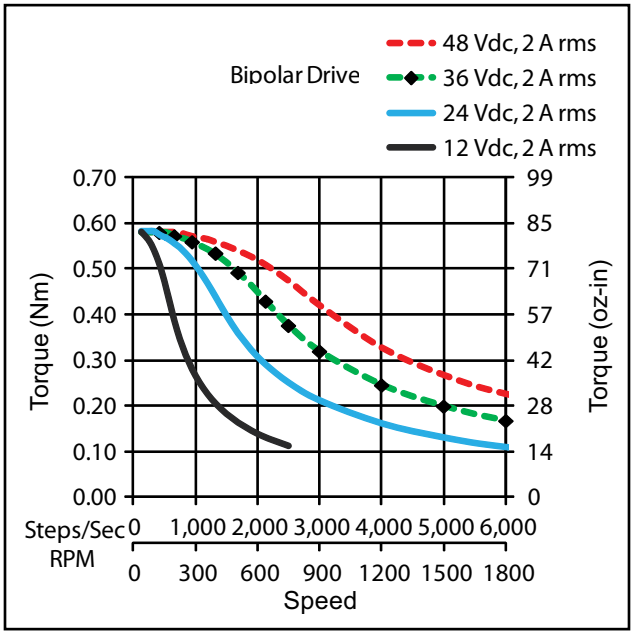
*Performance curves apply to continuous duty cycles.
Consult factory for intermittent cycles or other voltages.



Single Stack



Double Stack



Triple Stack

PBC LINEAR
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Stepper Motor NEMA 23

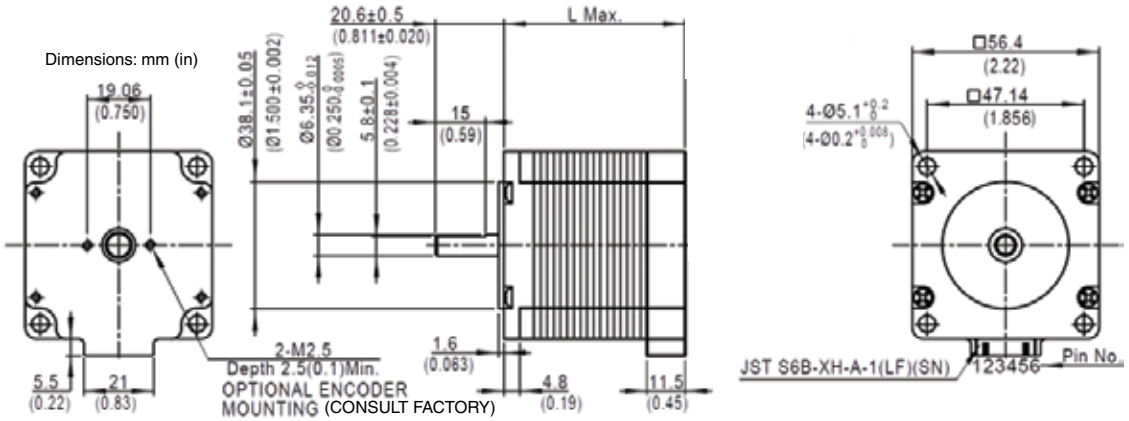
This document describes mechanical and electrical specifications for PBC Linear stepper motors; including standard, hollow, and extended shaft variations.

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 Typ.	oz-in Typ.	±10% @ 20°C	Typ.	mNm	oz-in	g cm2	oz-in2	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

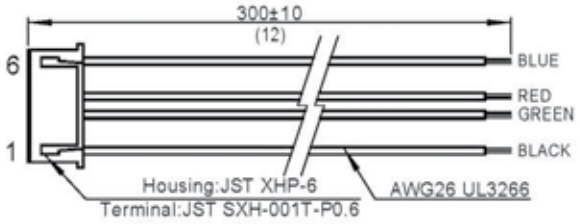
*All standard motors have plug connector. Consult factory for other options.



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)



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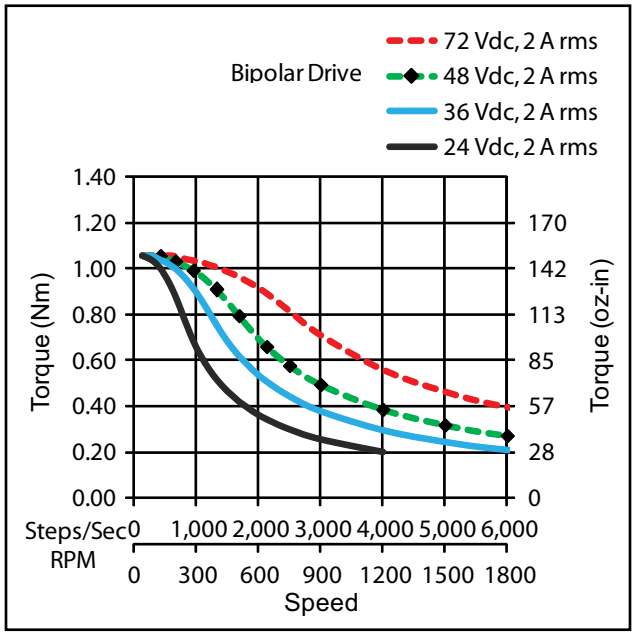
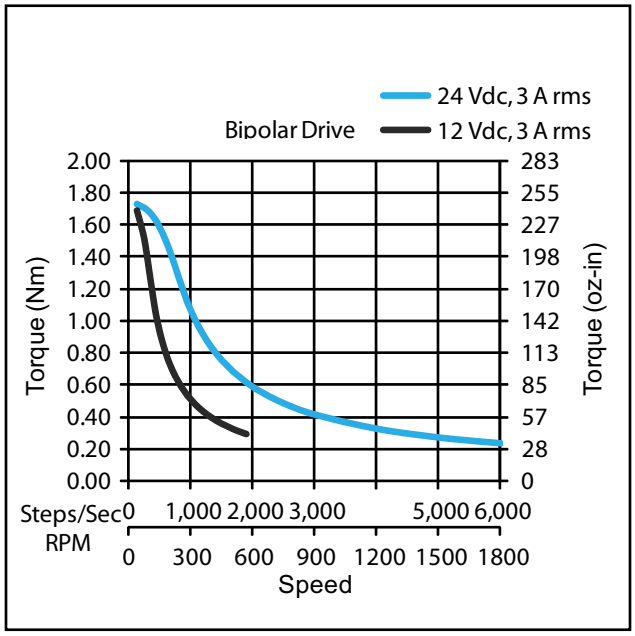
NEMA 23 **Stepper Motor**

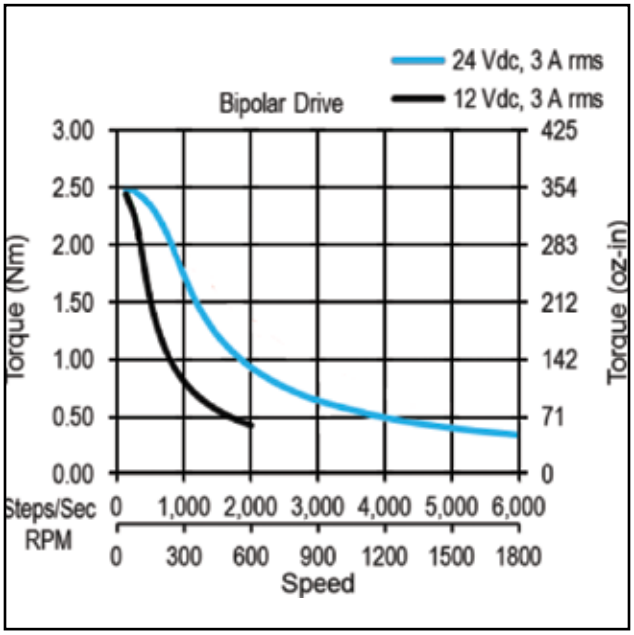
*Performance curves apply to continuous duty cycles.
Consult factory for intermittent cycles or other voltages.



Single Stack



Double Stack



Power Plus (Triple Stack)