LN & LC SERIES

Screw Driven Linear Actuators

LN Series Non-Captive Type Pages 02–16

A lead-screw nut is integrated into the motor rotor, and the lead screw passes through the center of the motor. As the motor rotates it moves linearly along the lead screw. The lead-screw can be completely unscrewed from the motor,and can be any length. The motor can be fixed so that the screw moves in out of the motor, or the lead-screw can be fixed so that the motor moves along the lead screw.

- Five frame sizes: NEMA 08/11/14/17/23/34
- Multiple motor lengths and motor sizes
- Each motor size has a rich range of lead screws
- Standard nut
- Repeatability: +/-0.02–0.05 mm
- Small lead screws can be self-locking
- Saves on installation space
- Provides high torque, speed, and efficiency

LC Series Captive Type Pages 17–31

The leadscrew drives an integral plunger in and out. The plunger is supported by a housing that is part of the motor. This is a complete assembly with a shaft that moves in and out. No separate supports are needed for the screw or nut. The LC Series captive actuators are a fully integrated small size actuator with quiet operation ideal for plungers, pushers, and perform well in sorting and assembly operations.

- Five frame sizes: NEMA 08/11/14/17/23
- Multiple motor lengths and motor sizes
- Each motor size has a rich range of lead screws
- Repeatability: +/-0.02–0.05 mm
- Small lead screws can be self-locking
- Saves on installation space
- Easy to operate which can help customers quickly build linear drive mechanisms

LN Series Configuration Table (Metric Screw)

LN 174S – E06008 – 100 – S – XXX

❶ ❷ ❸ ❹ ❺ ❻

❶	❷	❸	❹	❺	❻
SeriesL	Motor type	Lead screw type	Screw length (mm)	Customized Code S=Screw End Machining	Rated Current XXX=X.XX(A)

Nominal Diameter (mm)	Lead (mm)	Lead Screw Code	Motor Options							
			LN081S	LN143S	LN174S	LN172S	LN176SL	N234SL	N238S	LN23AS
3.5	1	M3501	●	--		-	--		--	
6	1	W0601	--	●	●	●	●		--	
	2	M0602	--	●	●	●	●		--	
6.5	3	T6503	-	●	●	●	●	--		-
8	1	T0801	--		--		-	●	●	●
	1.25	T08012	--		--		-	●	●	●
	2	T0802	--		--		-	●	●	●
	3	T0803	--		--		-	●	●	●
	4	T0804	--		--		-	●	●	●
	5	T0805	--		--		-	●	●	●
	8	T0808	--		--		-	●	●	●
	12	T0812	--		--		-	●	●	●
	20	T0820	--		--		-	●	●	●

Note: 1. Marked with ● was recommend matches
2. The table shown is standard leadscrew options

LN Series Configuration Table (Inch Screw)

LN 174S – E06008 – 100 – S – XXX

❶ ❷ ❸ ❹ ❺ ❻

❶ SeriesL	❷ Motor type	❸ Lead screw type	❹ Screw length (mm)	❺ Customized Code S=Screw End Machining	❻ Rated Current XXX=X.XX(A)

Nominal Diameter		Lead		Lead Screw Code	Motor Options								
inch	mm	inch	mm		LN081S	LN111S	LN143S	LN174S	LN172S	LN176S	LN234S	LN238S	LN23AS
0.138	3.51	**0.024**	0.61	**E03006**	●								
		0.048	1.22	**E03012**	●								
		0.096	2.44	**E03024**	●								
0.188	4.78	**0.025**	0.64	**E04006**		●							
		0.050	1.27	**E04012**		●							
		0.100	2.54	**E04025**		●							
0.218	5.54	**0.024**	0.61	**E05006**			●	●	●	●			
		0.048	1.22	**E05012**			●	●	●	●			
		0.192	4.88	**E05048**			●	●	●	●			
0.25	6.35	**0.024**	0.61	**E06006**			●	●	●	●			
		0.031	0.79	**E06008**			●	●	●	●			
		0.050	1.27	**E06012**			●	●	●	●			
		0.063	1.60	**E06016**			●	●	●	●			
		0.096	2.44	**E06024**			●	●	●	●			
		0.125	3.18	**E06032**			●	●	●	●			
		0.250	6.35	**E06063**			●	●	●	●			
		0.333	8.46	**E06085**			●	●	●	●			
		0.500	12.70	**E06127**			●	●	●	●			
0.375	9.53	**0.063**	1.60	**E09016**							●	●	●
		0.100	2.54	**E09025**							●	●	●
		0.200	5.08	**E09050**							●	●	●
		0.400	10.16	**E09102**							●	●	●

Note: 1. Marked with • was commended matches
2. The table shown is standard leadscrew options

LN Series Standard Models for stock

Size (mm)	Motor Series		Lead Screw Options		Screw Length Options		End Machining Code		Rated Current Options
20X20	LN081S	-	E03006	-	70, 80, 90, 100, 110, 125	-	S	-	050
	LN081S		E03024						
28X28	LN111S	-	E04006	-	70, 80, 90, 100, 110, 125, 150, 180	-	S	-	050,067,100
	LN111S		E04025						
35X35	LN143S	-	W0601	-	70, 80, 100, 125, 150	-	S	-	050,100,150
	LN143S		E06008						
	LN143S		E06063						
	LN143S		E06127						
42X42	LN174S	-	W0601	-	80, 90, 100, 110, 125, 155, 170, 180, 210, 250, 300	-	S	-	065,100,150
	LN174S		E06008						
	LN174S		E06063						
	LN174S		E06127						
	LN172S	-	W0601	-	80, 90, 100, 110, 125, 155, 170, 180, 210, 250, 300	-	S	-	100,150,200
	LN172S		E06008						
	LN172S		E06063						
	LN172S		E06127						
	LN176S	-	W0601	-	80, 90, 100, 110, 125, 155, 170, 180, 210, 250, 300	-	S	-	100,200
	LN176S		E06008						
	LN176S		E06063						
	LN176S		E06127						
57X57	LN234S	-	T0803	-	100, 155, 180, 210, 250, 300, 350,400	-	S	-	150,210
	LN234S		E09050						
	LN234S		E09102						
	LN238S	-	T0803	-	100, 155, 180, 210, 250, 300, 350,400	-	S	-	220
	LN238S		E09050						
	LN238S		E09102						
	LN23AS	-	T0803	-	100, 155,180, 210, 250, 300, 350,400	-	S	-	300
	LN23AS		E09050						
	LN23AS		E09102						

Order sample

❶ Select configuration codes

Motor Series		Lead Screw Options		Screw Length Options		End Machining Code		Rated Current Options
LN111S	-	E04006	-	70, 80, 90, 100, 110, 125, 150, 180	-	S	-	050, 067,100

❷ Determine the order Models

LN111S - E04006 - 100 - S - 067

LN08 Series

Phases	2
Step Accuracy	±5 %
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B (130°C)
Insulation Resistance	100MegOhms

Ordering Information

LN 08 1S - E03006 - 100 - S - XXX

Lead Screw Motor Type Code

Code	Structure Type
LN	Non-captive Shaft

Frame Size Code

Code	Frame Size
08	20 mm

Lead Screw Type Code

Code	Motor Body Length Max(mm)	Step Angle (°)
1S	30	1.8

Lead Screw Type Code

Code	Nominal Diameter (mm)	Lead (mm)	Travel(mm) Travel Per 1.8°
M3501	3.5	1	0.005

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E03006	0.138	3.51	0.024	0.61	0.0030*
E03012			0.048	1.22	0.0061*
E03024			0.096	2.44	0.0122*

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Lx

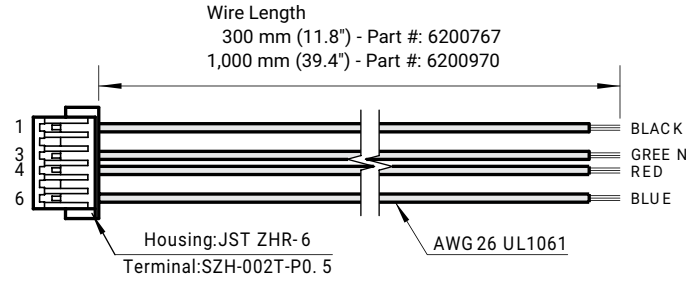
###	See page 4 for standard lengths per motor size **Note:** Non-standard cut-to-length screws available in 1 mm increments, contact an Application Engineer for details.

LN08 Series

LN08 Step Motor - 4 Lead Bi-Polar

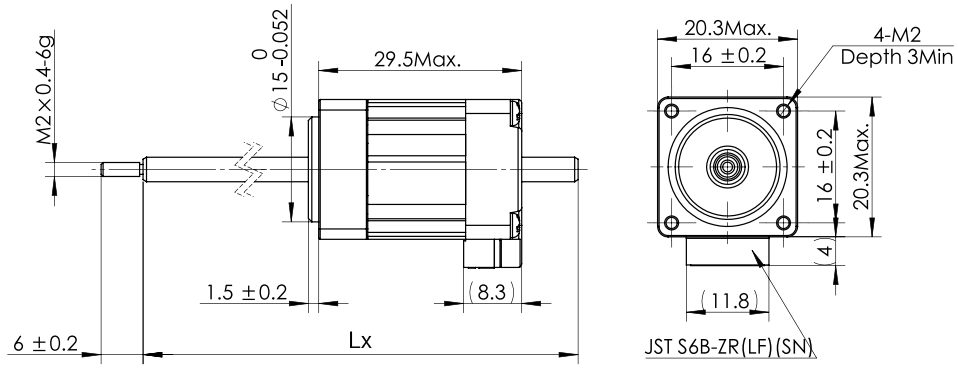
Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms)	Inductance(mH)
					±10%@20°C	Typ.
LN081S	30	1.8	Plug In Connector	0.5	8.6	6.5

Mating Connector With Leads (order separately)

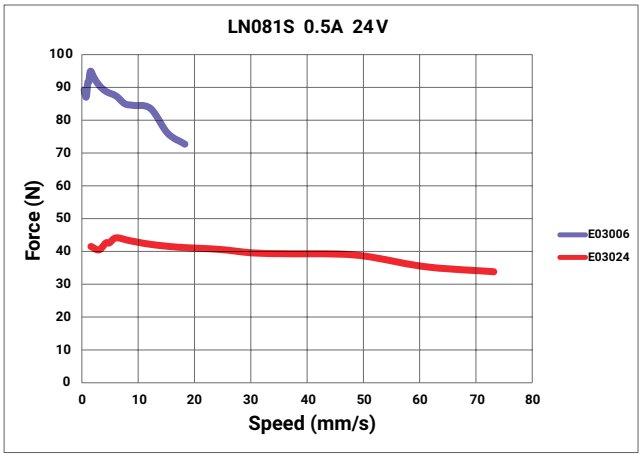


Dimensional Information

UNIT:mm



Speed - Force Reference Curve



LN11 Series

Phases	2
Step Accuracy	±5%
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B (130°C)
Insulation Resistance	100MegOhms

Ordering Information

LN 11 1S – E04006 – 100 – AR – S – XXX

Lead Screw Motor Type Code

Code	Structure Type
LN	Non-captive Shaft
LNSM	

Frame Size Code

Code	Frame Size
11	28 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
1S	32	1.8

Lead Screw Type Code

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E04006	0.188	4.78	0.025	0.64	0.0032*
E04012			0.050	1.27	0.0064*
E04025			0.100	2.54	0.0127*

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Nut Type Code

Code	Nut Type
AR	Standard Nut

Lx

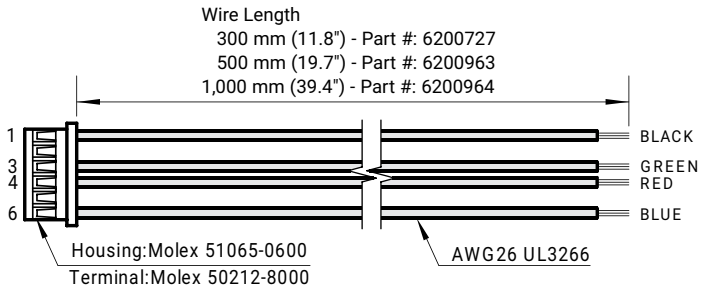
###	See page 4 for standard lengths per motor size **Note:** Non-standard cut-to-length screws available in 1 mm increments, contact an Application Engineer for details.

LN11 Series

LN Step Motor - 4 Lead Bi-Polar

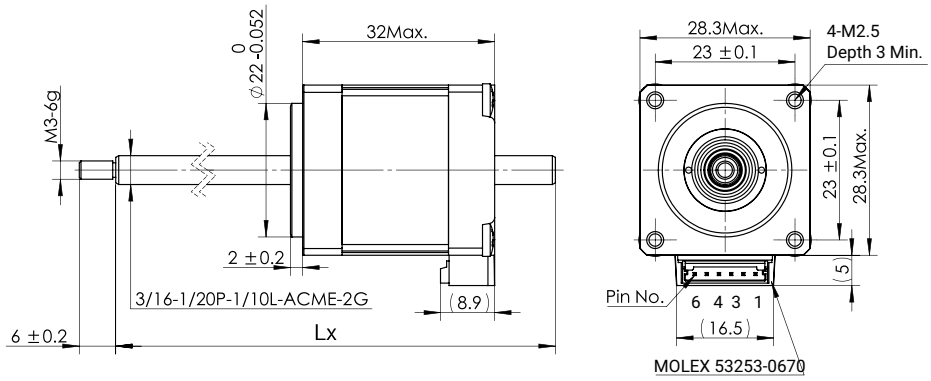
Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms)	Inductance(mH)
					±10%@20°C	Typ.
LN111S	32	1.8	Plug In Connector	0.67	6.1	5.5
				1.00	2.7	2.5

Mating Connector With Leads (order separately)



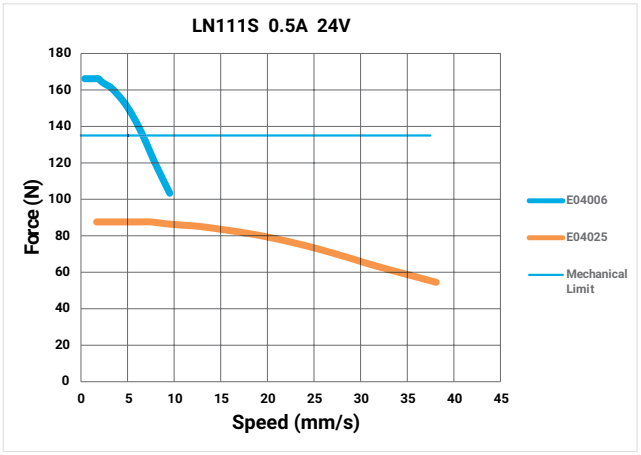
Dimensional Information

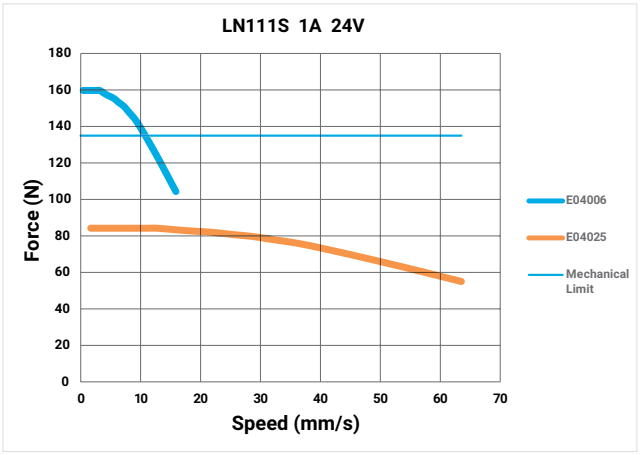
UNIT:mm



LN11 Series

Speed - Force Reference Curve





LN14 Series

Phases	2
Step Accuracy	±5 %
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B (130°C)
Insulation Resistance	100MegOhms

Ordering Information

LN 14 3S - W0601 - 100 - AR - S - XXX

Lead Screw Motor Type Code

Code	Structure Type
LN	Non-captive Shaft

Frame Size Code

Code	Frame Size
14	35 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
3S	35	1.8

Lead Screw Type Code

Code	Nominal Diameter (mm)	Lead (mm)	Travel(mm) Travel Per 1.8°
W0601	6	1	0.005
M0602		2	0.010

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E05006	0.218	5.54	0.024	0.61	0.0030*
E05012			0.048	1.22	0.0061*
E05048			0.192	4.88	0.0244*
E06006	0.25	6.35	0.024	0.61	0.0030*
E06008			0.031	0.79	0.0039*
E06012			0.050	1.27	0.0064*
E06016			0.063	1.60	0.0080*
E06024			0.096	2.44	0.0122*
E06032			0.125	3.18	0.0159*
E06063			0.250	6.35	0.0318*
E06085			0.333	8.46	0.0423*
E06127			0.500	12.70	0.0635

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Nut Type Code

Code	Nut Type
AR	Standard Nut

Lx

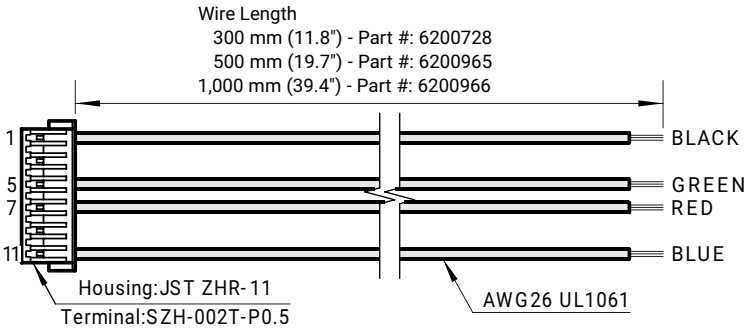
###	See page 4 for standard lengths per motor size **Note:** Non-standard cut-to-length screws available in 1 mm increments, contact an Application Engineer for details.

LN14 Series

LN14 Step Motor - 4 Lead Bi-Polar

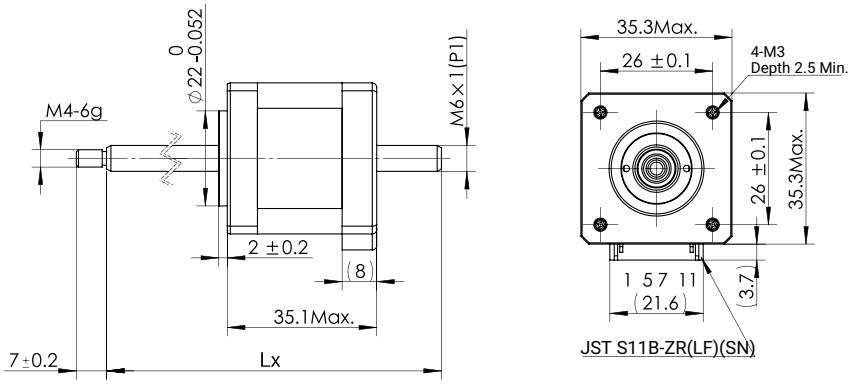
Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms)	Inductance(mH)
					±10%@20°C	Typ.
LN143S	35	1.8	Plug In Connector	0.5	15.10	25.0
				1.0	3.40	5.3
				1.5	1.61	2.5

Mating Connector With Leads (order separately)



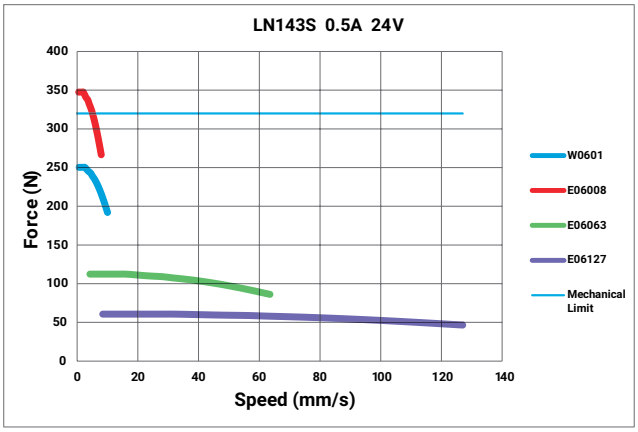
Dimensional Information

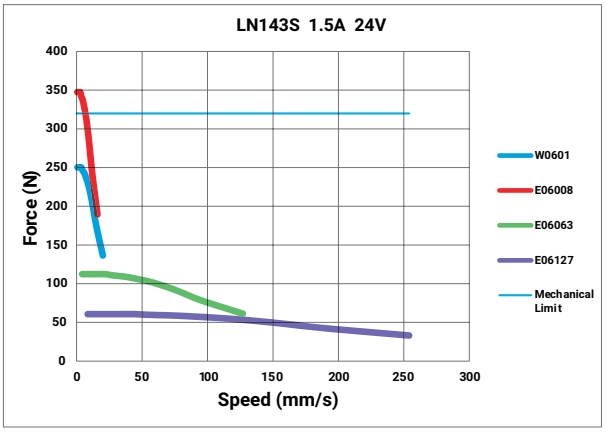
UNIT:mm



LN14 Series

Speed - Force Reference Curve





LN17 Series

Phases	2
Step Accuracy	±5 %
IP Rating	40
Approvals	RoHS
Operating Temp.	-20 °C~+50°C
Insulation Class	B (130°C)
Insulation Resistance	100MegOhms

Ordering Information

LN 17 2S – M0602 – 100 – AR – S – XXX

Lead Screw Motor Type Code

Code	Structure Type
LN	Non-captive Shaft

Frame Size Code

Code	Frame Size
17	42 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
4S	34	1.8
2S	40	
6S	48	

Lead Screw Type Code

Code	Nominal Diameter (mm)	Lead (mm)	Travel(mm) Travel Per 1.8°
W0601	6	1	0.005
M0602		2	0.010

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E05006	0.218	5.54	0.024	0.61	0.0030*
E05012			0.048	1.22	0.0061*
E05048			0.192	4.88	0.0244*
E06006	0.25	6.35	0.024	0.61	0.0030*
E06008			0.031	0.79	0.0039*
E06012			0.050	1.27	0.0064*
E06016			0.063	1.60	0.0080*
E06024			0.096	2.44	0.0122*
E06032			0.125	3.18	0.0159*
E06063			0.250	6.35	0.0318*
E06085			0.333	8.46	0.0423*
E06127			0.500	12.70	0.0635

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Nut Type Code

Code	Nut Type
AR	Standard Nut

Lx

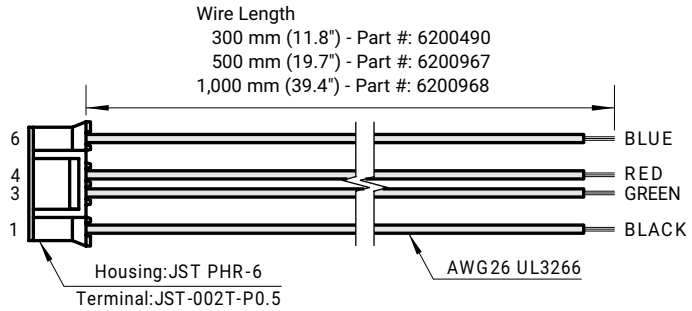
###	See page 4 for standard lengths per motor size **Note:** Non-standard cut-to-length screws available in 1 mm increments, contact an Application Engineer for details.

LN17 Series

LN17 Step Motor - 4 Lead Bi-Polar

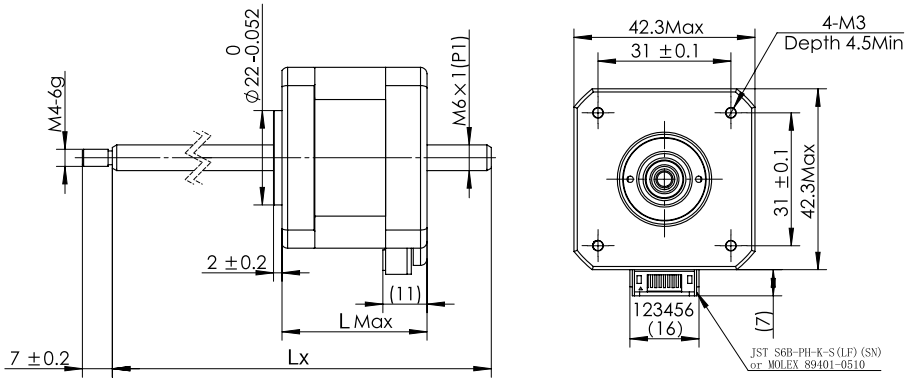
Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms)	Inductance(mH)
					±10%@20°C	Typ.
LN174S	34	1.8	Plug In Connector	0.65	8.70	15.2
				1.00	4.20	7.0
				1.50	1.75	2.8
LN172S	40	1.8	Plug In Connector	1.00	3.90	10.8
				1.50	1.98	4.9
				2.00	1.04	2.5
LN176S	48	1.8	Plug In Connector	1.00	4.90	10.2
				2.00	1.25	2.8

Mating Connector With Leads (order separately)



Dimensional Information

UNIT:mm

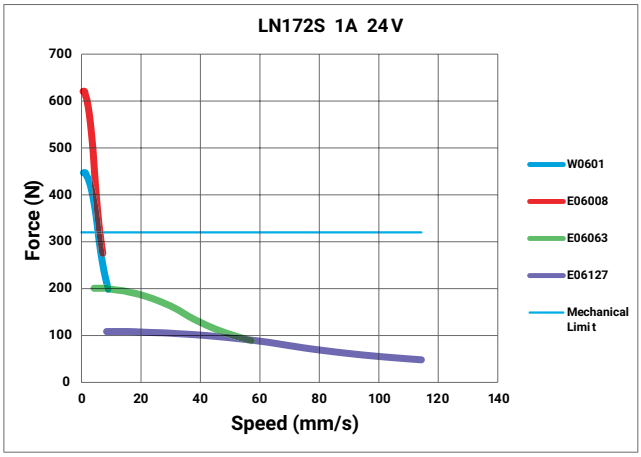


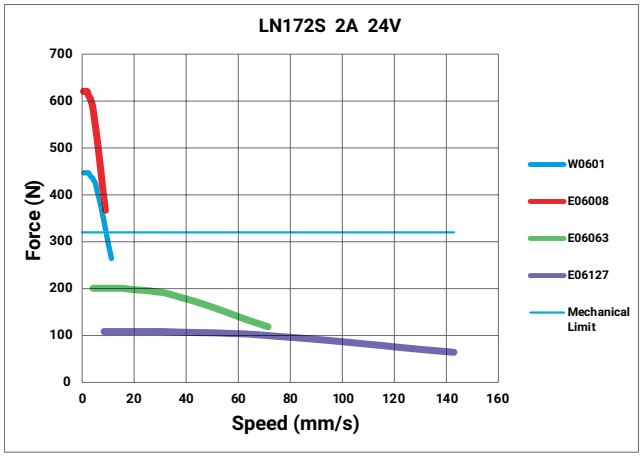
LN17 Series

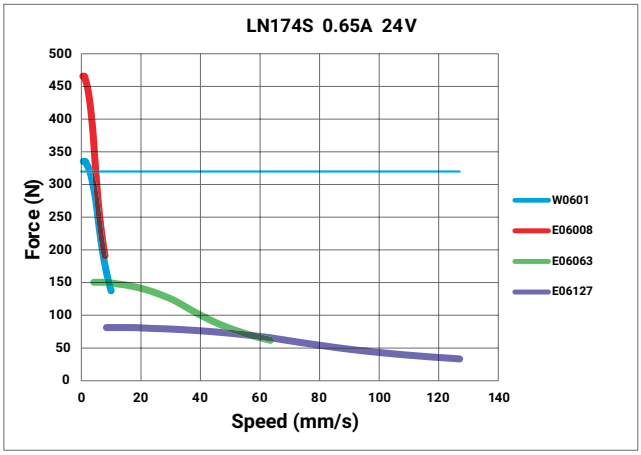
Motor Type	Dimension"L"
LN174S	34.3
LN172S	39.8
LN176S	48.3

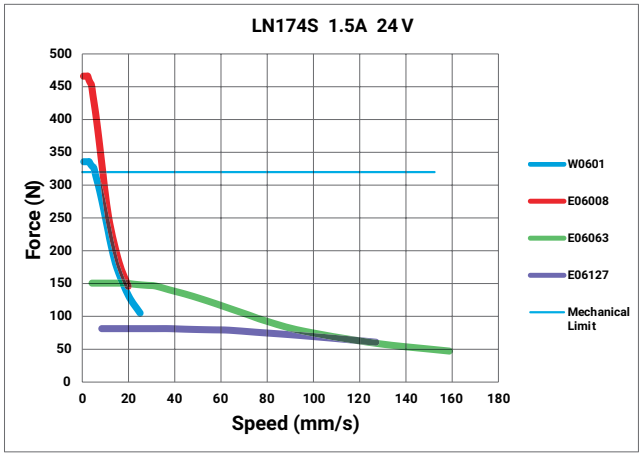
LN17 Series

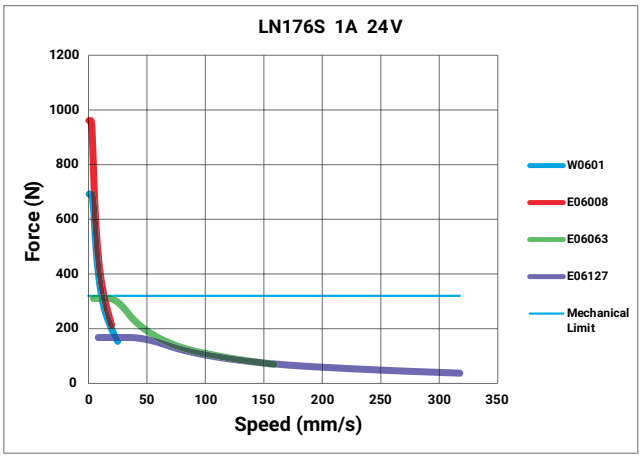
Speed - Force Reference Curve

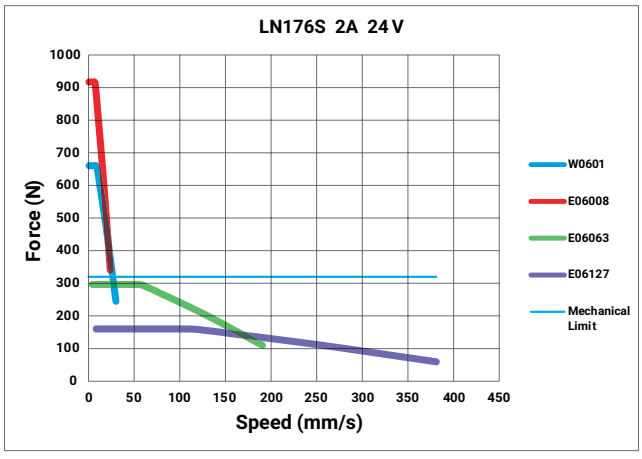












LN23 Series

Phases	2
Step Accuracy	±5 %
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B (130°C)
Insulation Resistance	100MegOhms

Ordering Information

LN 23 8S - M1001 - 100 - AR - S - XXX

Lead Screw Motor Type Code

Code	Structure Type
LN	Non-captive Shaft

Frame Size Code

Code	Frame Size
23	57 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
4S	45	1.8
8S	57	
AS*	79	

Lead Screw Type Code

Code	Nominal Diameter (mm)	Lead (mm)	Travel(mm) Travel Per 1.8°
T0801	8	1.00	0.005
T08012		1.25	0.0063*
T0802		2.00	0.010
T0803		3.00	0.015
T0804		4.00	0.020
T0805		5.00	0.025
T0808		8.00	0.040
T0812		12.00	0.060
T0820		20.00	0.100

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E09015	0.375	9.53	0.06	1.59	0.0079*
E09025			0.10	2.54	0.0127
E09050			0.20	5.08	0.0254
E09102			0.40	10.16	0.0508*

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Nut Type Code

Code	Nut Type
AR	Standard Nut

Lx

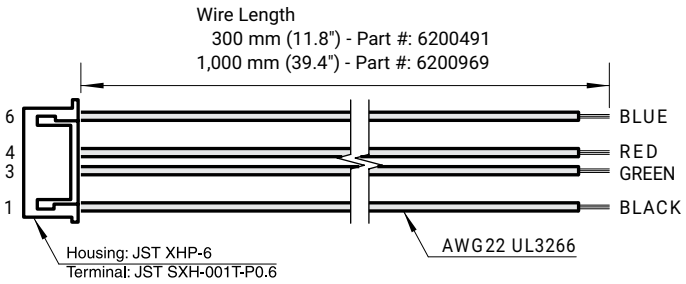
###	See page 4 for standard lengths per motor size **Note:** Non-standard cut-to-length screws available in 1 mm increments, contact an Application Engineer for details.

LN23 Series

LN23 Step Motor - 4 Lead Bi-Polar

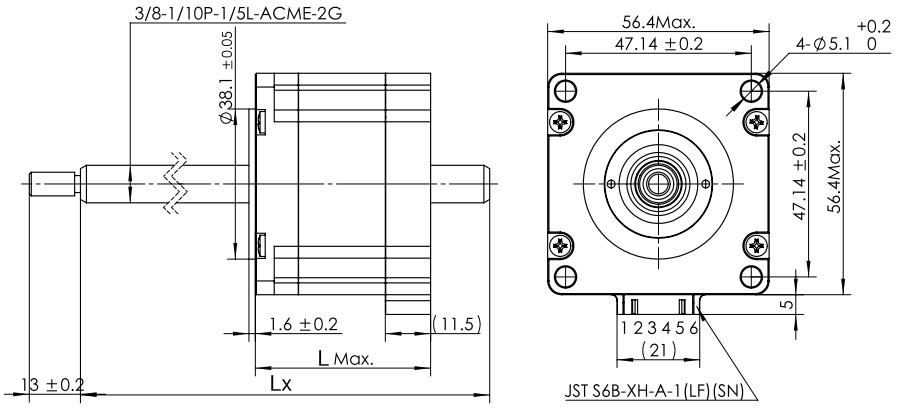
Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms)	Inductance(mH)
					±10%@20°C	Typ.
LN234S	45	1.8	Plug In Connector	1.5	2.9	7.5
				2.1	1.6	3.9
LN238S	57	1.8	Plug In Connector	1.5	3.9	15.0
				2.2	1.6	7.2
LN23AS	79	1.8	Plug In Connector	1.5	4.3	18.5
				3.0	1.1	5.0

Mating Connector With Leads (order separately)



Dimensional Information

UNIT:mm

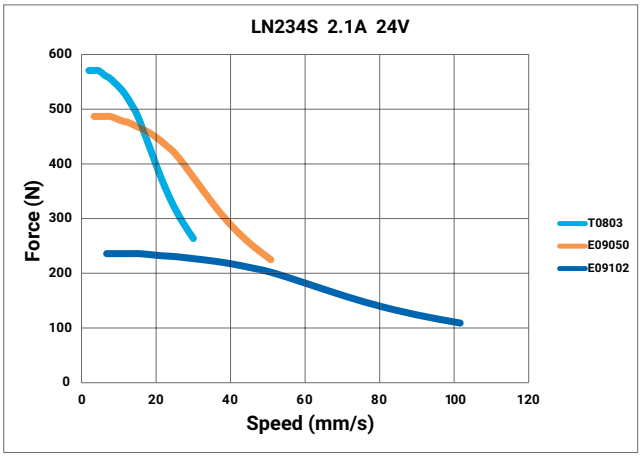


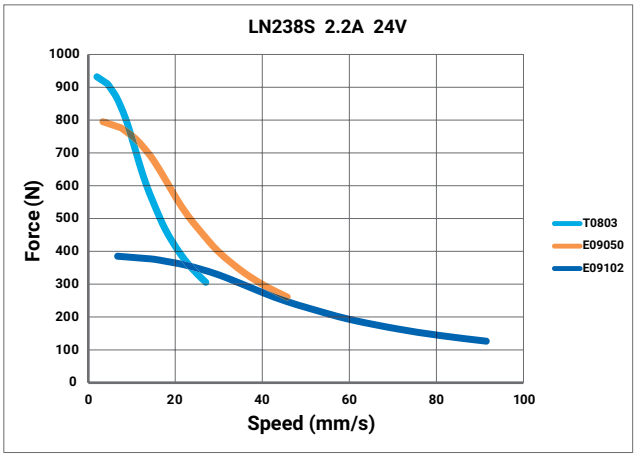
LN23 Series

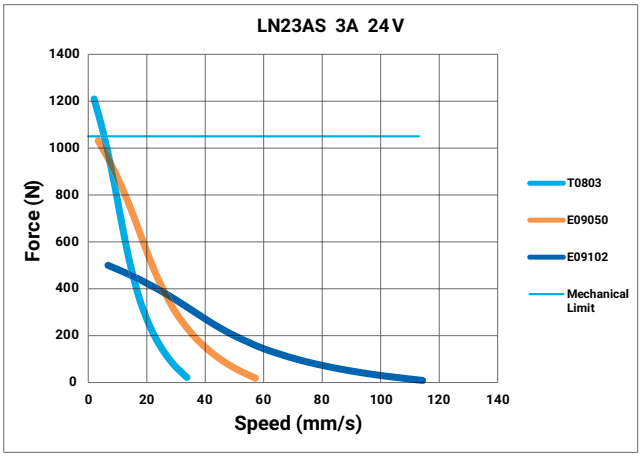
Motor Type	Dimension"L"
LN234S	45
LN238S	57
LN23AS	79

LN23 Series

Speed - Force Reference Curve







LC Series Configuration Table (Inch Screw)

LC 174S – E06008 – 25 – S – XXX

❶ SeriesL ❷ Motor type ❸ Lead screw type ❹ Stroke Code 25.4（mm） ❺ Customized Code S=Screw End Machining ❻ Rated Current XXX=X.XX(A)

Nominal Diameter		Lead		Lead Screw Code	Motor Options								
inch	mm	inch	mm		LC081S	LC111S	LC143S	LC174S	LC172S	LC176S	LC234S	LC238S	LC23AS
0.138	3.51	**0.024**	0.61	**E03006**	●								
		0.048	1.22	**E03012**	●								
		0.096	2.44	**E03024**	●								
0.188	4.78	**0.025**	0.64	**E04006**		●							
		0.050	1.27	**E04012**		●							
		0.100	2.54	**E04025**		●							
0.218	5.54	**0.024**	0.61	**E05006**			●	●	●	●			
		0.048	1.22	**E05012**			●	●	●	●			
		0.192	4.88	**E05048**			●	●	●	●			
0.25	6.35	**0.024**	0.61	**E06006**			●	●	●	●			
		0.031	0.79	**E06008**			●	●	●	●			
		0.050	1.27	**E06012**			●	●	●	●			
		0.063	1.60	**E06016**			●	●	●	●			
		0.096	2.44	**E06024**			●	●	●	●			
		0.125	3.18	**E06032**			●	●	●	●			
		0.250	6.35	**E06063**			●	●	●	●			
		0.333	8.46	**E06085**			●	●	●	●			
		0.500	12.70	**E06127**			●	●	●	●			
0.375	9.53	**0.063**	1.60	**E09016**							●	●	●
		0.100	2.54	**E09025**							●	●	●
		0.200	5.08	**E09050**							●	●	●
		0.400	10.16	**E09102**							●	●	●

Note: 1. Marked with ● are recommend matches
2. The table shown is standard leadscrew options

LC Series Standard Models for stock

Size (mm)	Motor Series		Lead Screw Options		Stroke Options		End Machining Code		Rated Current Options
20X20	LC081S	–	E03006	–	25	–	S	–	050
	LC081S		E03024						
28X28	LC111S	–	E04006	–	12, 25, 38	–	S	–	050,067,100
	LC111S		E04025						
35X35	LC143S	–	E06008	–	25	–	S	–	050,100,150
	LC143S		E06063	–					
	LC143S		E06127	–					
42X42	LC174S	–	E06008	–	25	–	S	–	065,100,150
	LC174S		E06063						
	LC174S		E06127						
	LC172S	–	E06008	–	25	–	S	–	100,150,200
	LC172S		E06063						
	LC172S		E06127						
	LC176S	–	E06008	–	25	–	S	–	100,200
	LC176S		E06063						
	LC176S		E06127						
57X57	LC234S	–	E09025	–	25	–	S	–	150,210
	LC234S		E09050						
	LC234S		E09102						
	LC238S	–	E09025	–	25	–	S	–	220
	LC238S		E09050						
	LC238S		E09102						
	LC23AS	–	E09025	–	25	–	S	–	300
	LC23AS		E09050						
	LC23AS		E09102						

Order sample

❶ Select configuration codes

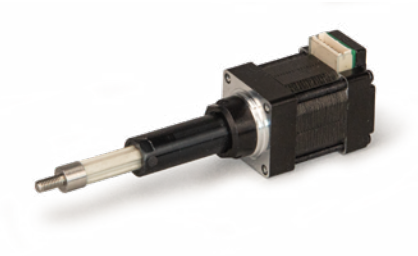
Motor Series		Lead Screw Options		Stroke Options		End Machining Code		Rated Current Options
LC111S	-	E04006	-	12, 25, 38	-	S	-	050, 067,100

❷ Determine the order Models

LC111S - E04006 - 25 - S - 067

LC08 Series

Phases	2
Step Accuracy	±5%
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B (130°C)
Insulation Resistance	100MegOhms



Ordering Information

LC 08 1S - E03006 - 25 - S - XXX

Lead Screw Motor Type Code

Code	Structure Type
LC	Captive Shaft

Frame Size Code

Code	Frame Size
08	20 mm

Lead Screw Type Code

Code	Motor Body Length Max(mm)	Step Angle (°)
1S	30	1.8

Lead Screw Type Code

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E03006	0.138	3.51	0.024	0.61	0.0030*
E03012			0.048	1.22	0.0061*
E03024			0.096	2.44	0.0122*

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Stroke Code

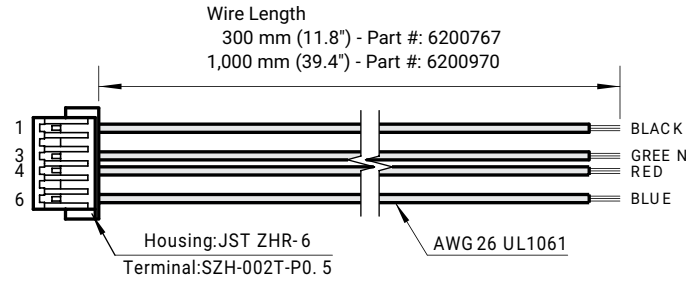
Code	Stroke(mm)
25	25.4

LC08 Step Motor - 4 Lead Bi-Polar

Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding Resistanc(Ohms) ±10%@20°C	Winding Inductance(mH) Typ.
LC081S	30	1.8	Plug In Connector	0.5	8.6	6.5

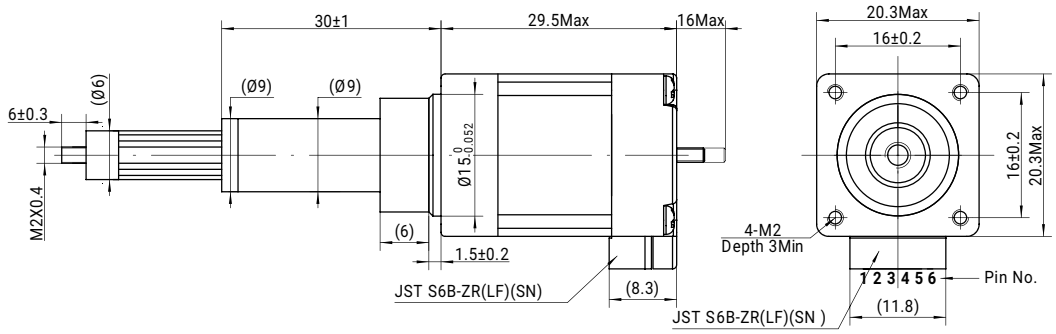
LC08 Series

Mating Connector With Leads (order separately)

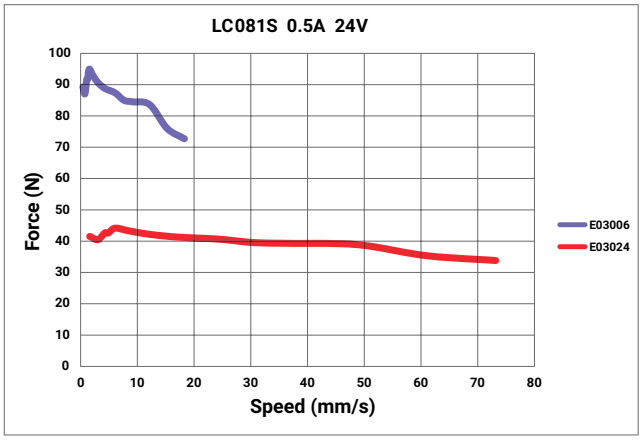


Dimensional Information

UNIT:mm

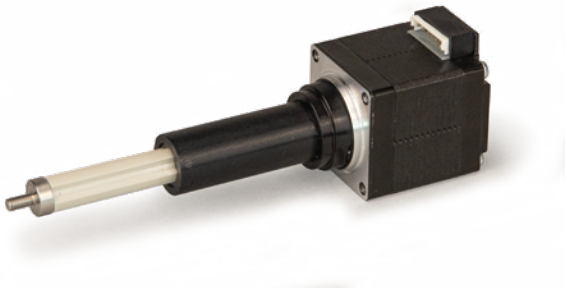


Speed - Force Reference Curve



LC11 Series

Phases	2
Step Accuracy	±5%
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B(130°C)
Insulation Resistance	100MegOhms



Ordering Information

LC 11 1S - E04006 - 25 - S - XXX

Lead Screw Motor Type Code

Code	Structure Type
LC	Captive Shaft

Frame Size Code

Code	Frame Size
11	28 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
1S	32	1.8

Lead Screw Type Code

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E04006	0.188	4.78	0.025	0.64	0.0032*
E04012			0.050	1.27	0.0064*
E04025			0.100	2.54	0.0127*

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Stroke Code

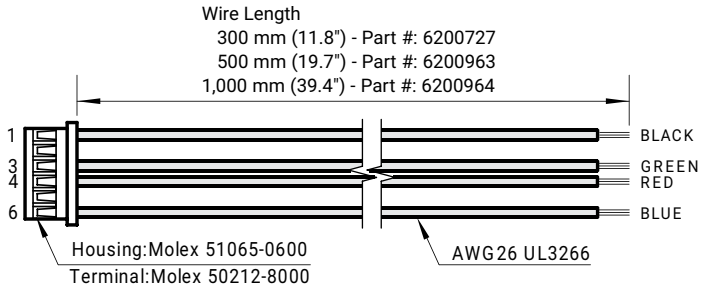
Code	Stroke(mm)
12	12.7
25	25.4
38	38.1

LC11 Step Motor - 4 Lead Bi-Polar

Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms) ±10%@20°C	Inductance(mH) Typ.
LC111S	32	1.8	Plug In Connector	0.67	6.1	5.5
				1.00	2.7	2.5

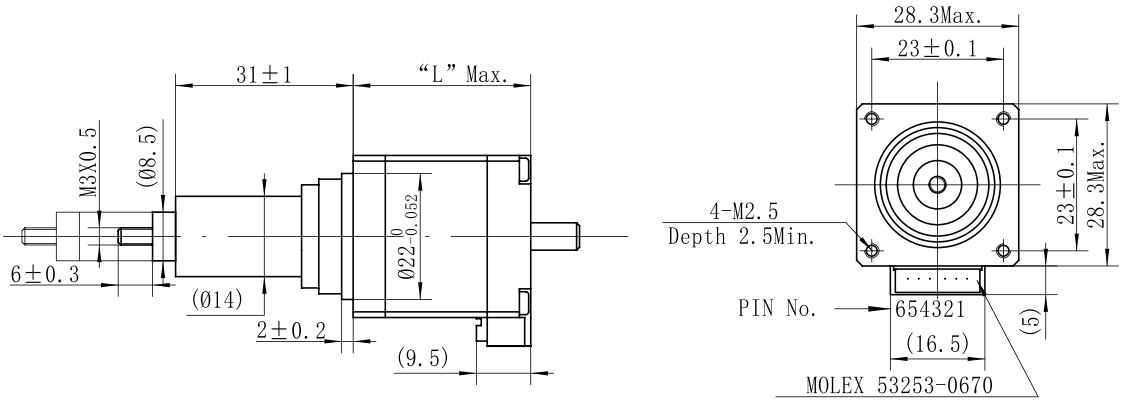
LC11 Series

Mating Connector With Leads (order separately)



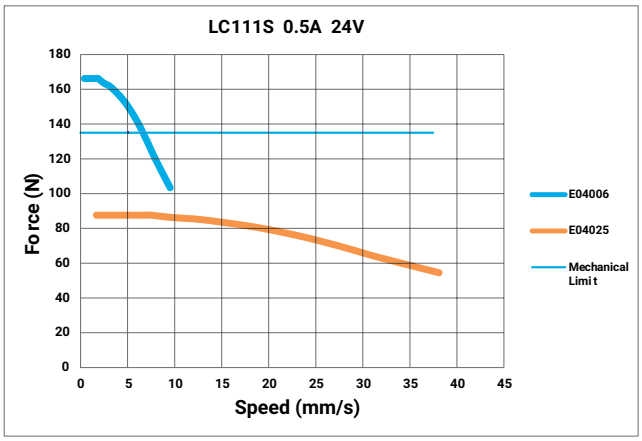
Dimensional Information

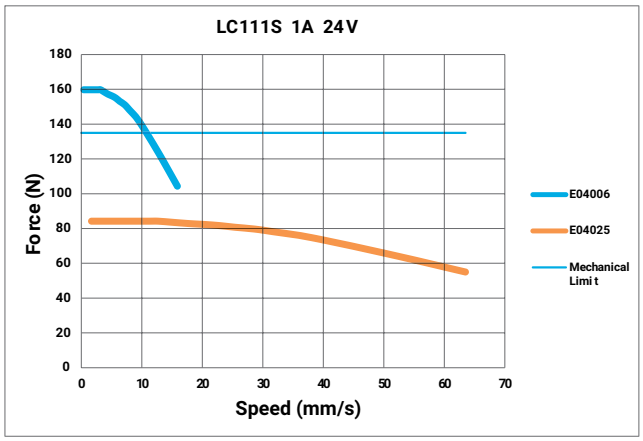
UNIT:mm



Motor Type	Dimension"L"
LC111S	32
LC113S	41

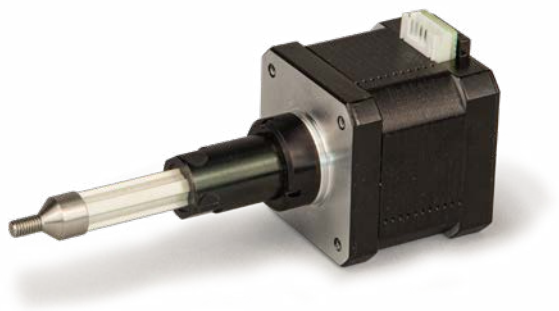
Speed - Force Reference Curve





LC14 Series

Phases	2
Step Accuracy	±5%
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B(130°C)
Insulation Resistance	100MegOhms



Ordering Information

LC 14 3S - E05006 - 25 - S - XXX

Lead Screw Motor Type Code

Code	Structure Type
LC	Captive Shaft

Frame Size Code

Code	Frame Size
14	35 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
3S	35	1.8

Lead Screw Type Code

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E05006	0.218	5.54	0.024	0.61	0.0030*
E05012			0.048	1.22	0.0061*
E05048			0.192	4.88	0.0244*
E06006	0.25	6.35	0.024	0.61	0.0030*
E06008			0.031	0.79	0.0039*
E06012			0.050	1.27	0.0064*
E06016			0.063	1.60	0.0080*
E06024			0.096	2.44	0.0122*
E06032			0.125	3.18	0.0159*
E06063			0.250	6.35	0.0318*
E06085			0.333	8.46	0.0423*
E06127			0.500	12.70	0.0635

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Stroke Code

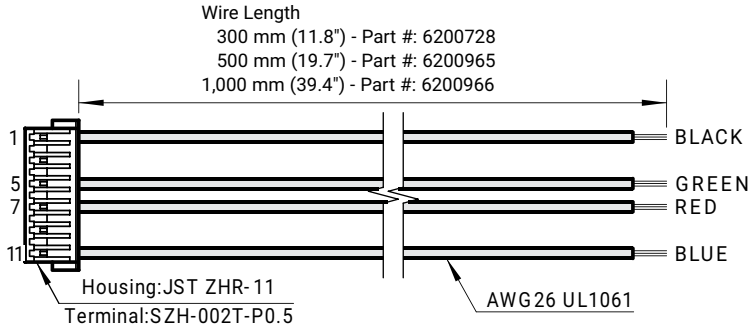
Code	Stroke(mm)
25	25.4

LC14 Step Motor - 4 Lead Bi-Polar

Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms) ±10%@20°C	Inductance(mH) Typ.
LC143S	35	1.8	Plug In Connector	0.5	15.1	25.0
				1.0	3.40	5.3
				1.5	1.61	2.5

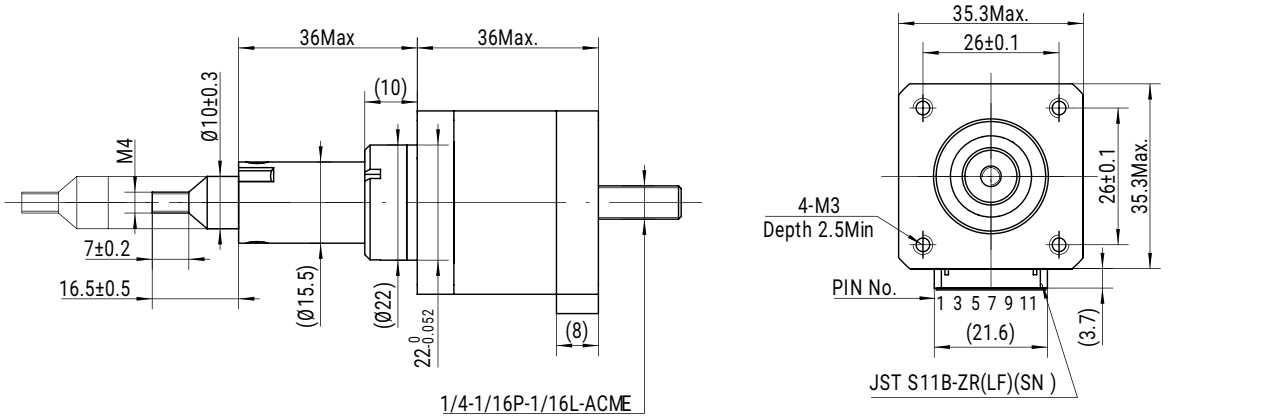
LC14 Series

Mating Connector With Leads (order separately)

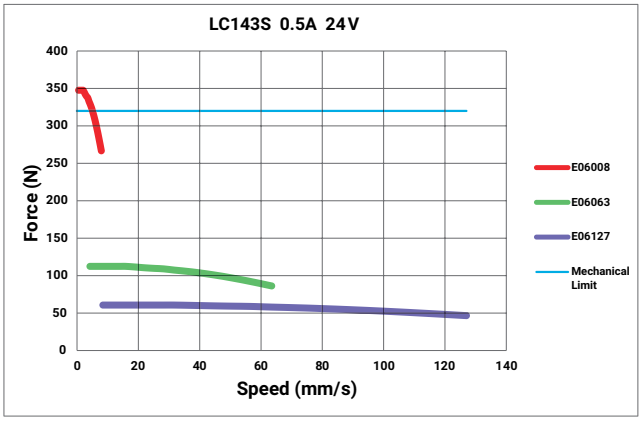


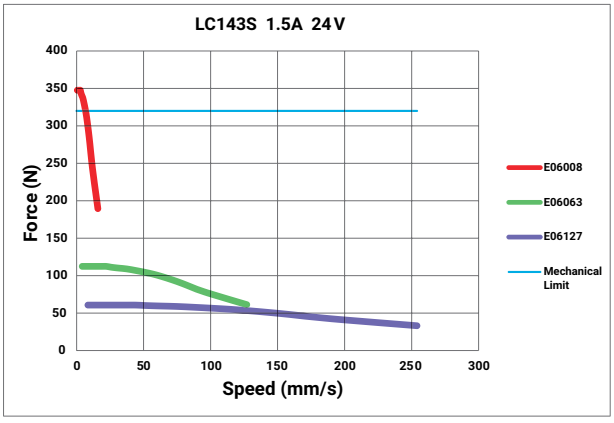
Dimensional Information

UNIT:mm



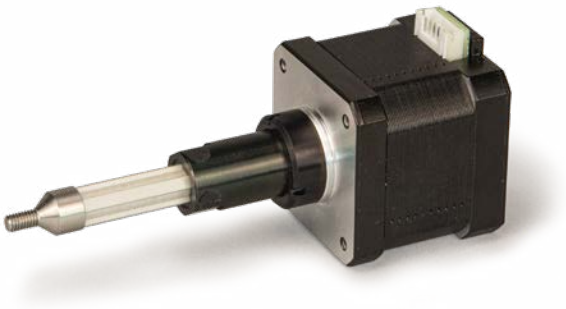
Speed - Force Reference Curve





LC17 Series

Phases	2
Step Accuracy	±5%
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B(130°C)
Insulation Resistance	100MegOhms



LC 17 2S – E05006 – 25 – S – XXX

Lead Screw Motor Type Code

Code	Structure Type
LC	Captive Shaft

Frame Size Code

Code	Frame Size
17	42 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
4S	34	1.8
2S	40	
6S	48	

Lead Screw Type Code

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E05006	0.218	5.54	0.024	0.61	0.0030*
E05012			0.048	1.22	0.0061*
E05048			0.192	4.88	0.0244*
E06006	0.25	6.35	0.024	0.61	0.0030*
E06008			0.031	0.79	0.0039
E06012			0.050	1.27	0.0064*
E06016			0.063	1.60	0.0080
E06024			0.096	2.44	0.0122*
E06032			0.125	3.18	0.0159*
E06063			0.250	6.35	0.0318*
E06085			0.333	8.46	0.0423*
E06127			0.500	12.70	0.0635

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Stroke Code

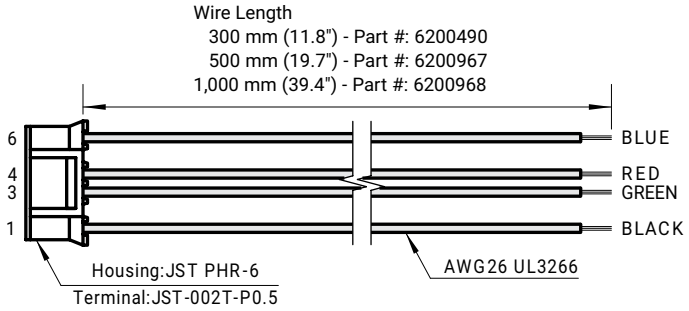
Code	Stroke(mm)
25	25.4

LC17 Series

LC17 Step Motor - 4 Lead Bi-Polar

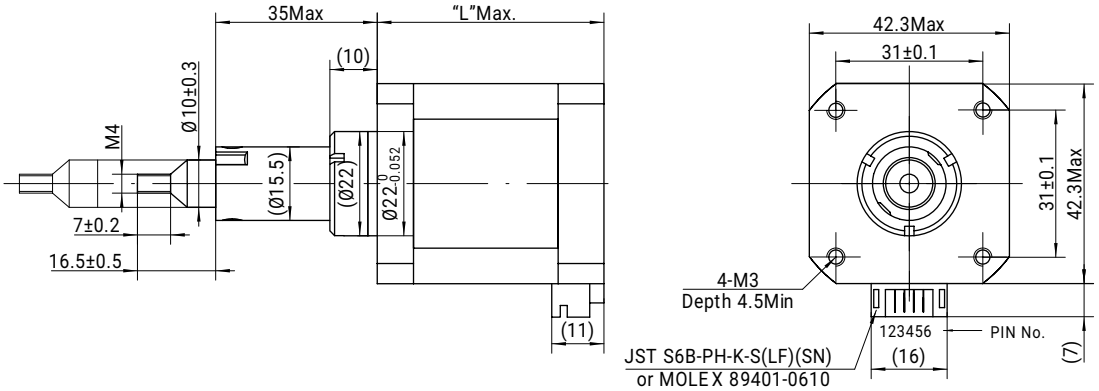
Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms)	Inductance(mH)
					±10%@20°C	Typ.
LC174S	34	1.8	Plug In Connector	0.65	8.70	15.2
				1.00	4.20	7.0
				1.50	1.75	2.8
LC172S	40	1.8	Plug In Connector	1.00	3.90	10.8
				1.50	1.98	4.9
				2.00	1.04	2.5
LC176S	48	1.8	Plug In Connector	1.00	4.90	10.2
				2.00	1.25	2.8

Mating Connector With Leads (order separately)



Dimensional Information

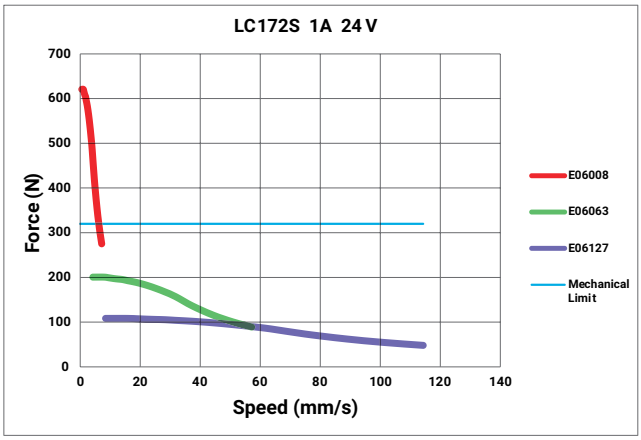
UNIT:mm

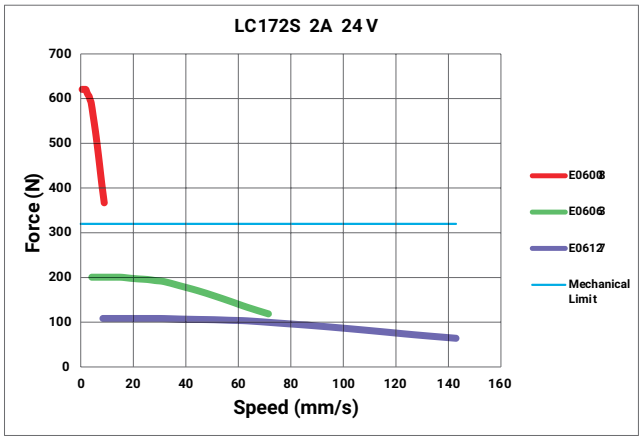


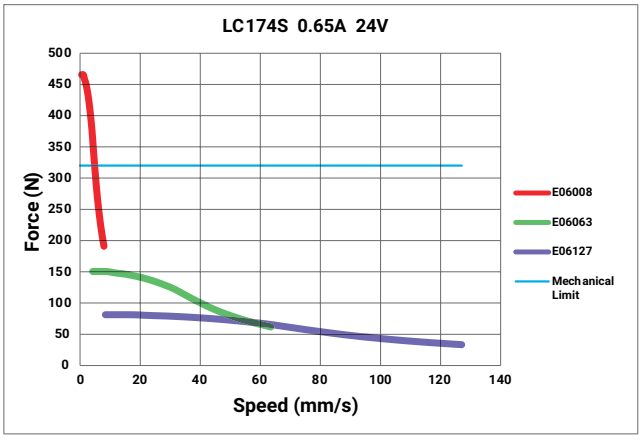
Motor Type	Dimension"L"
LC174S	34.3
LC172S	39.8
LC176S	48.3

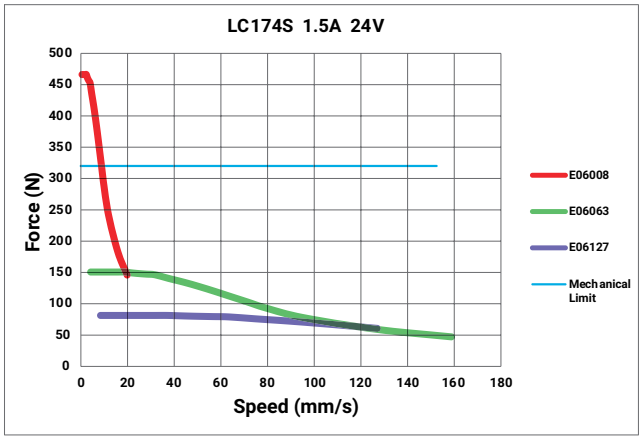
LC17 Series

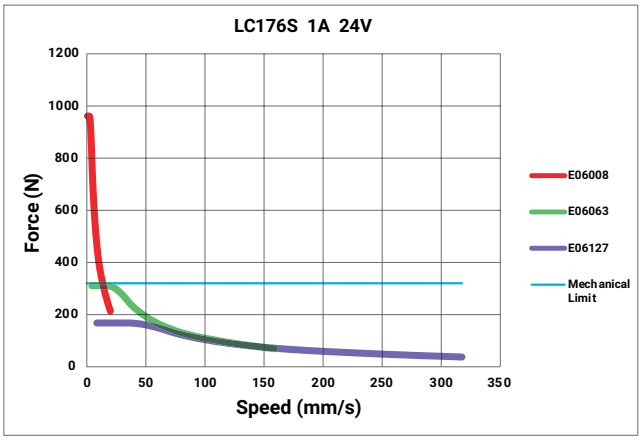
Speed - Force Reference Curve

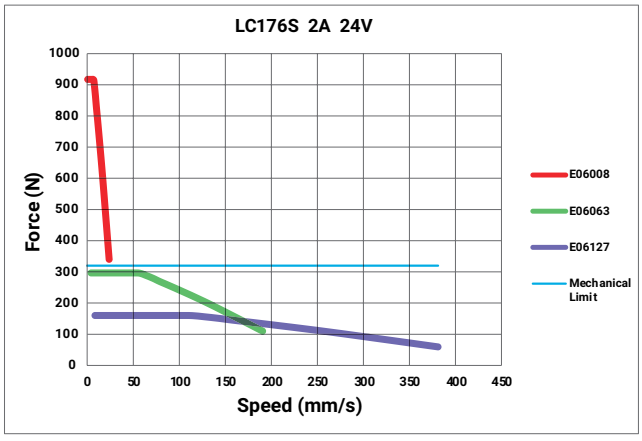






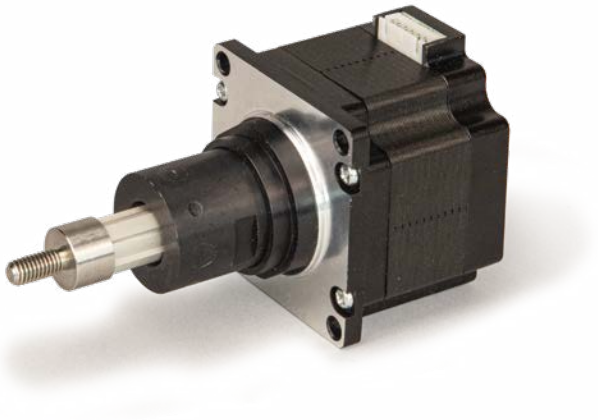






LC23 Series

Phases	2
Step Accuracy	±5 %
IP Rating	40
Approvals	RoHS
Operating Temp.	-20°C~+50°C
Insulation Class	B (130°C)
Insulation Resistance	100MegOhms



Ordering Information

LC 23 8S - E09050 - 25 - S - XXX

Lead Screw Motor Type Code

Code	Structure Type
LC	Captive Shaft

Frame Size Code

Code	Frame Size
23	57 mm

Motor Body Length Code

Code	Motor Body Length Max(mm)	Step Angle (°)
4S	45	1.8
8S	57	
AS	79	

Lead Screw Type Code

Code	Nominal Diameter		Lead		Travel(mm)
	inch	mm	inch	mm	Travel Per 1.8°
E09015	0.375	9.53	0.06	1.59	0.0079*
E09025			0.10	2.54	0.0127
E09050			0.20	5.08	0.0254
E09102			0.40	10.16	0.0508*

The number with * is abbreviated.

Rated Current Code

XXX=X.XX(A)

Special Custom Type Code

Code	Custom Type
0	Non Special Custom
S	Lead Screw End Machining
C	Other Special Custom Type

Stroke Code

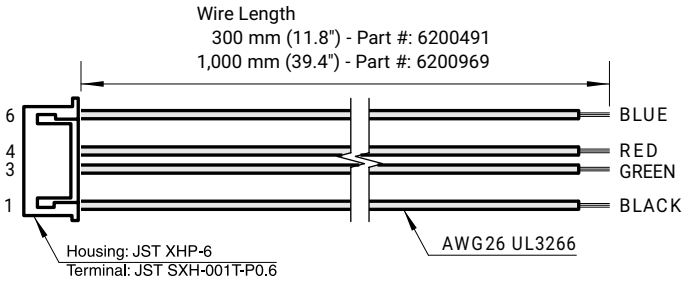
Code	Stroke(mm)
25	25.4

LC23 Series

LC23 Step Motor - 4 Lead Bi-Polar

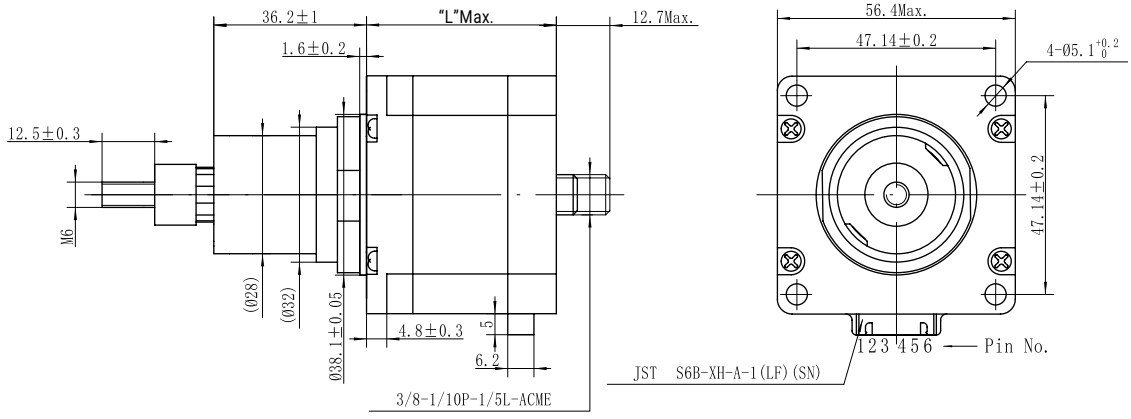
Motor Type Code	Motor Body Length (mm)	Step Angle (°)	Electrical Connection	Rated Current (Amps)	Winding	
					Resistanc(Ohms)	Inductance(mH)
					±10%@20°C	Typ.
LC234S	45	1.8	Plug In Connector	1.5	2.9	7.5
				2.1	1.6	3.9
LC238S	57	1.8	Plug In Connector	1.5	3.9	15
				2.2	1.6	7.2
LC23AS	79	1.8	Plug In Connector	1.5	4.3	18.5
				3.0	1.1	5.0

Mating Connector With Leads (order separately)



Dimensional Information

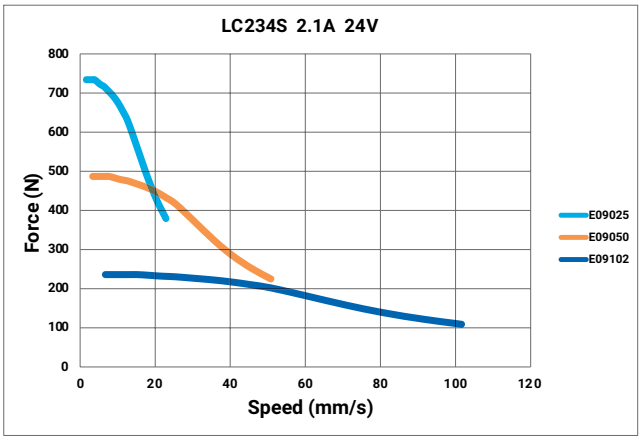
UNIT:mm

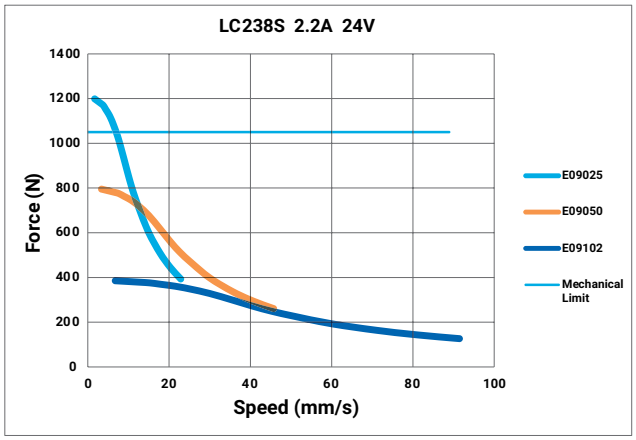


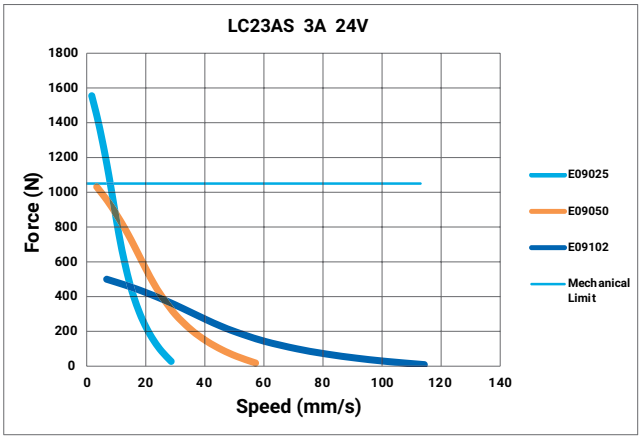
Motor Type	Dimension"L"
LC234S	45
LC238S	57
LC23AS	79

LC23 Series

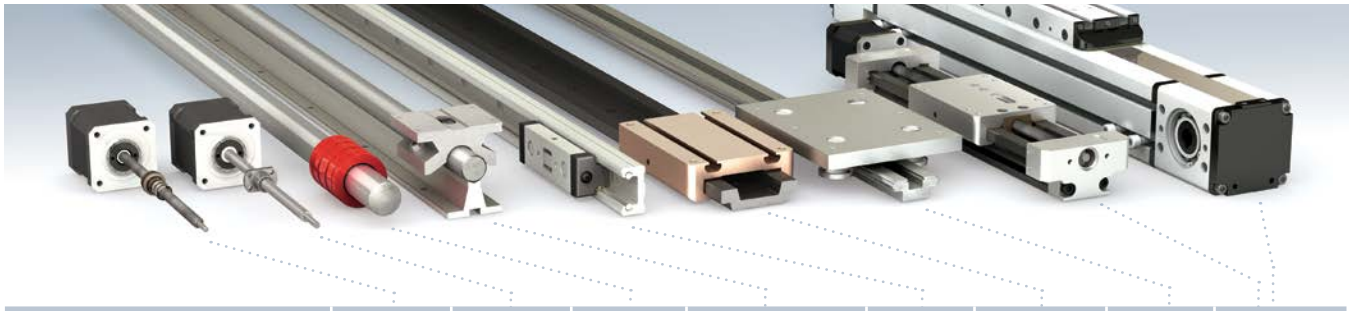
Speed - Force Reference Curve







PBC Linear has a Wide Range of Linear Solutions to Fit Your Application



	Lead Screw	Ball Screw	Simplicity Bearings	Roller Pillow Block	Cam Roller	Gliding Surface	Integral-V	Mechatronics Systems
Inexpensive	●	●	●	●	●	●	●	●
Low Maintenance	●	●	●	●		●		●
Compact Size	●	●				●		●
Low Noise	●		●					●
Multiple Configurations	●	●	●	●	●	●	●	●
Washdown Applications	●		●			●		●
Custom Design Support	●	●	●	●	●	●	●	●
Moderate to High Speed	●	●	●	●	●	●	●	●
Vacuum & Cleanroom Apps	●	●**	●			●		●
Food Processing	●	●**	●	●		●		
Ease of Installation	●	●			●		●	●

* PBC Linear ball screws are made in America using both domestic and foreign material sources.
** Only with special lubricants

PBC Linear
Worldwide Headquarters

6402 E. Rockton Road
Roscoe, Illinois 61073
USA

Tel: +1.815.389.5600
Toll-Free: +1.800.962.8979
Fax: +1.815.389.5790

sales@pbclinear.com
pbclinear.com

PBC Linear Europe GmbH
European Headquarters

Bonner Straße 363
40589 Duesseldorf
Germany

Tel: +49 211 545590 20
Fax: +49 211 545590 39

info@pbclinear.eu
pbclinear.eu

PBC–MOONS
China Headquarters

168 Mingjia Road, Minhang District,
Shanghai 201107,
P.R. China

Tel: +86 21 52634688
Fax: +86 21 52634098

info@moons.com.cn
www.moons.com.cn

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