

Electrical Specs	SX060D		SX060T		SX060Q			
	SX060D	SX060D-X0	SX060T	SX060T-X0	SX060Q	SX060Q-DC	SX060Q-X0	SX060Q-DC-X0
Continuous Force ¹	1.0N (0.23lbs)	1.3N (0.28lbs)	1.5N (0.35lbs)	1.9N (0.43lbs)	2.1N (0.46lbs)		2.5N (0.57lbs)	2.5N (0.56lbs)
Continuous Current ¹	0.51Arms				0.52Arms	1.0Arms	0.52Arms	1.0Arms
Acceleration Force ²	4.1N (0.92lbs)	5.1N (1.14lbs)	6.2N (1.38lbs)	7.6N (1.71lbs)	8.3N (1.85lbs)	8.2N (1.84lbs)	10.2N (2.29lbs)	10.1N (2.28lbs)
Acceleration Current ²	2.1Arms					4.1Arms	2.1Arms	4.1Arms
Force Constant (K _f)	2.0N/Arms (0.45lbs/amp)	2.5N/Arms (0.55lbs/amp)	3.0N/Arms (0.67lbs/amp)	3.7N/Arms (0.83lbs/amp)	4.0N/Arms (0.90lbs/amp)	2.0N/Arms (0.45lbs/amp)	4.9N/Arms (1.11lbs/amp)	2.5N/Arms (0.55lbs/amp)
Back EMF (K _e)	0.67V/m/s (26.3V/in/s)	0.82V/m/s (32.3V/in/s)	1.0V/m/s (39.4V/in/s)	1.2V/m/s (48.5V/in/s)	1.3V/m/s (52.6V/in/s)	0.67V/m/s (26.3V/in/s)	1.6V/m/s (64.69V/in/s)	0.82V/m/s (32.3V/in/s)
Resistance 25°C ³	6.9Ω		10Ω		13Ω	3.5Ω	13Ω	3.5Ω
Inductance ³	0.73mH		1.1mH		1.5mH	0.37mH	1.5mH	0.37mH
Magnetic Pitch (North-North)	24mm (0.94 in)							

Is this the proper Linear Shaft Motor for your application? Use our **SMART sizing program** to assist in your decision.

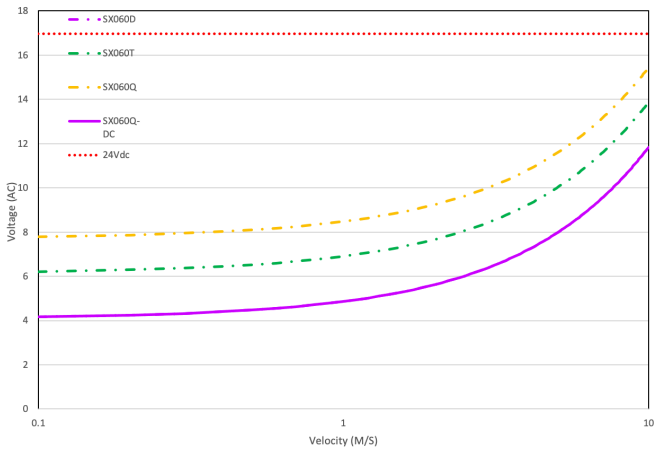
This motor can be customized to fit your application demands; contact your application engineer for more information.

¹ Based on a temp rise of coil surface of 110°K over 25°C ambient temperature stalled forcer, and no external cooling or heat sinking.

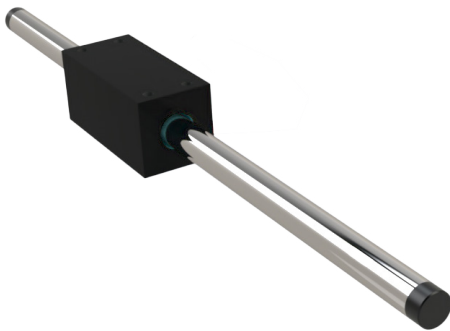
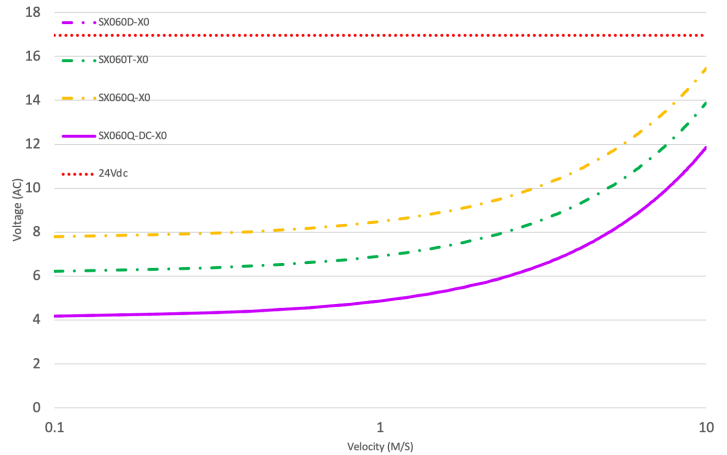
² Can be maintained for a maximum of 40 seconds. Higher forces and current possible for short periods of time, contact Nippon Pulse for more information.

³ All winding parameters listed are measured line-to-line (phase-to-phase).

Bus Voltage - standard windings



Bus Voltage - strong magnets



Part Numbering System

SX	—	Shaft Size 060	—	Forcer Size (A) <u>X</u>	—	Winding <u>XX</u>	—	Shaft Type <u>XX</u>	—	Usable Stroke (S) <u>XXst</u>	—	Options <u>XX</u>
				D: Double (2) windings T: Triple (3) windings Q: Quadruple (4) windings		Blank: Standard DC: Low voltage		Blank: Standard X0: Strong magnets		50-300mm		Blank: Standard FO: Forcer Only SO: Shaft Only

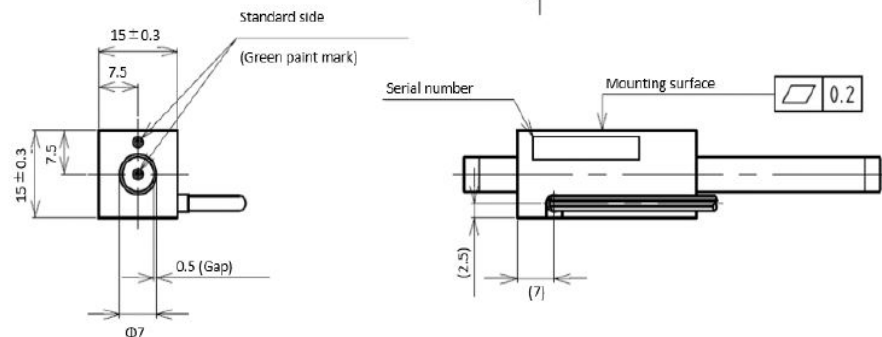
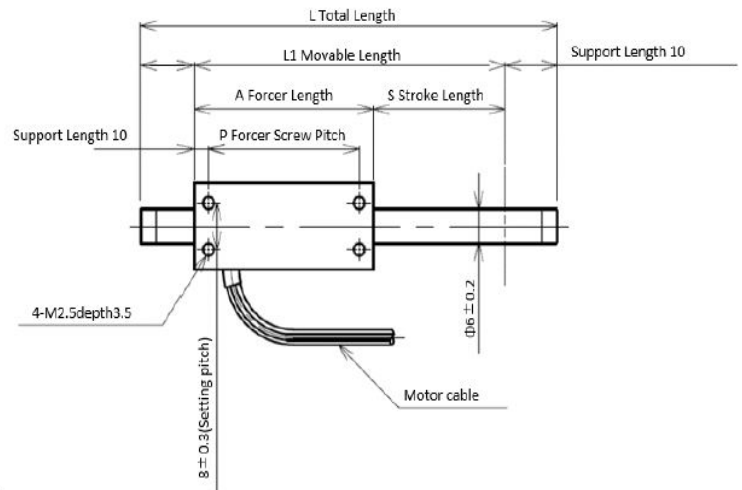
	SX060D		SX060T		SX060Q	
Forcer Specs	SX060D	SX060D-X0	SX060T	SX060T-X0	SX060Q	SX060Q-X0
Forcer Length (A)	34mm (1.34in)		46mm (1.81in)		58mm (2.28in)	
Forcer Width	15mm (0.59in)					
Forcer Screw Pitch (P)	28.6mm (1.13in)		40.6mm (1.60in)		52.6mm (2.07in)	
Forcer Weight	0.024kg (0.05lbs)		0.031kg (0.07lbs)		0.038kg (0.08lbs)	
Gap	0.50mm (0.02in)					
Screw	M2.5					

Tolerances are as follows:

Dimension (mm)	Tolerance (mm)
0 - 6	±0.1
7 - 30	±0.2
31 - 120	±0.3
121 - 315	±0.5
316 - 1000	±0.8
1001 - 2000	±1.2
2000 -	±1.5

L = See Shaft Length
L1 = Usable Stroke + A
L2 = See Support Length
A = See Forcer Length
P = See Forcer Screw Pitch

Unless otherwise specified,
dimensions are in mm



Note: Metric units guaranteed. Imperial (United States customary) units are calculated.

For assistance in selecting the best motor for your application, contact Nippon Pulse to speak with an applications engineer. 1-540-633-1677

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