

Visit nipponpulse.com to download 3D CAD drawings and 2D prints of this motor.

| Electrical Specs | L350SS | L350DS | L350TS | L350QS |
|--|----------------------|----------------------|----------------------|-----------------------|
| Continuous Force ¹ | 24N (5.4lbs) | 43N (9.7lbs) | 55N (12.4lbs) | 74N (16.6lbs) |
| Continuous Current ¹ | 2.0Arms | 1.8Arms | 1.6Arms | |
| Acceleration Force ² | 95N (21.4lbs) | 170N (38.2lbs) | 222N (49.9lbs) | 298N (67.0lbs) |
| Acceleration Current ² | 7.8Arms | 7.3Arms | 6.4Arms | |
| Force Constant (K _f) | 12N/amp (2.7lbs/amp) | 23N/amp (5.2lbs/amp) | 35N/amp (7.9lbs/amp) | 47N/amp (10.6lbs/amp) |
| Back EMF (K _v) | 4.0V/m/s | 7.7V/m/s | 12V/m/s | 16V/m/s |
| Resistance 25°C ³ | 2.7Ω | 5.3Ω | 7.9Ω | 11Ω |
| Inductance ³ | 2.9mH | 4.4mH | 6.7mH | 8.7mH |
| Electric Time Constant | 1.09ms | 0.83ms | 0.85ms | 0.82ms |
| Fundamental Motor Constant (K _m) | 7.42N√W | 10.08N√W | 12.28N√W | 14.31N√W |
| Magnetic Pitch (North-North) | 60mm (2.36in) | | | |

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.

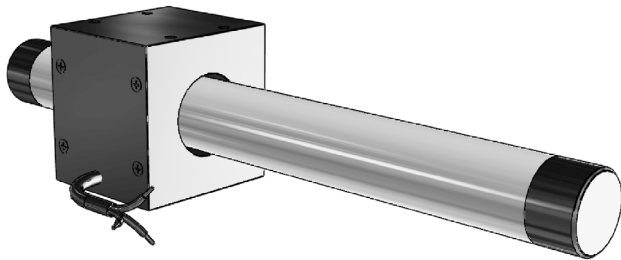
¹ Based on a temp rise of coil surface of 110°K over 25°C ambient temperature stalled forcer, and no external cooling or heat sinking.

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.

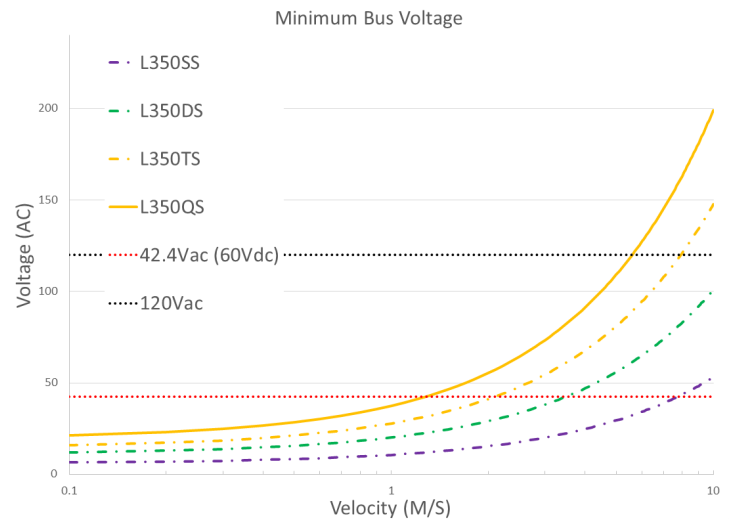
³ All winding parameters listed are measured line-to-line (phase-to-phase).

| Thermal Specs | L350SS | L350DS | L350TS | L350QS |
|---|---------------|---------|---------|---------|
| Max Phase Temperature ⁴ | 135°C (275°F) | | | |
| Thermal Resistance (Coil) (K _v) | 11°C/W | 6.2°C/W | 5.4°C/W | 4.1°C/W |

⁴The standard temperature difference between the coil and the forcer surface is 40°C.



Bus Voltage



These motors have not received a CE Declaration of Conformity, and as such are designated FGA.

| Forcer Specs | L350SS | L350DS | L350TS | L350QS |
|------------------------|-----------------|-----------------|-----------------|----------------|
| Forcer Length (A) | 50mm (1.97in) | 80mm (3.15in) | 110mm (4.3in) | 140mm (5.51in) |
| Forcer Width | 60mm (2.36in) | | | |
| Forcer Screw Pitch (P) | 40mm (1.57in) | 70mm (2.76in) | 100mm (3.94in) | 130mm (5.12in) |
| Forcer Weight | 0.34kg (0.75lb) | 0.56kg (1.23lb) | 0.78kg (1.72lb) | 1.0kg (2.20lb) |
| Gap | 3mm (0.12in) | | | |

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

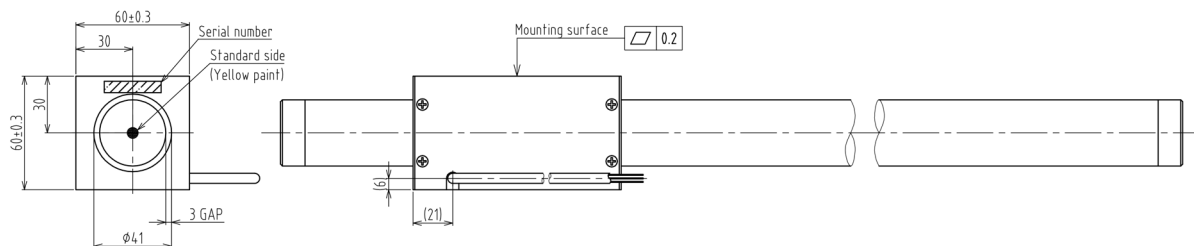
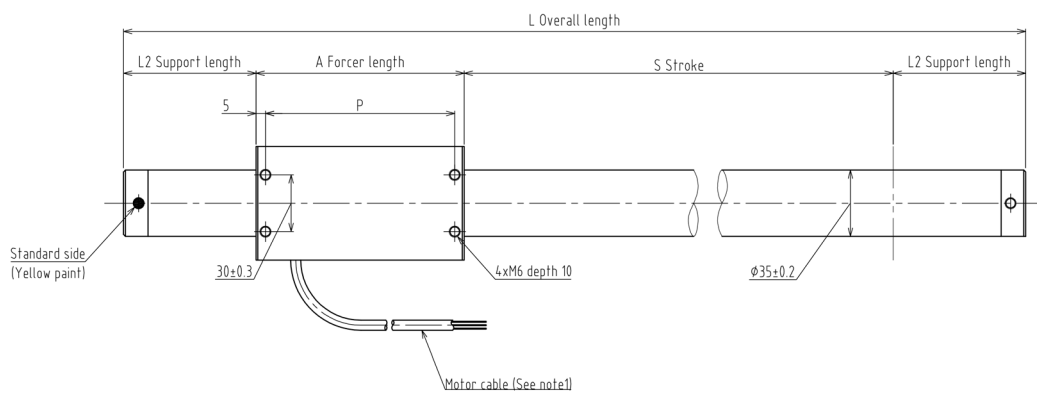
L2 = See Support Length

A = See Forcer Length

P = See Forcer Screw Pitch

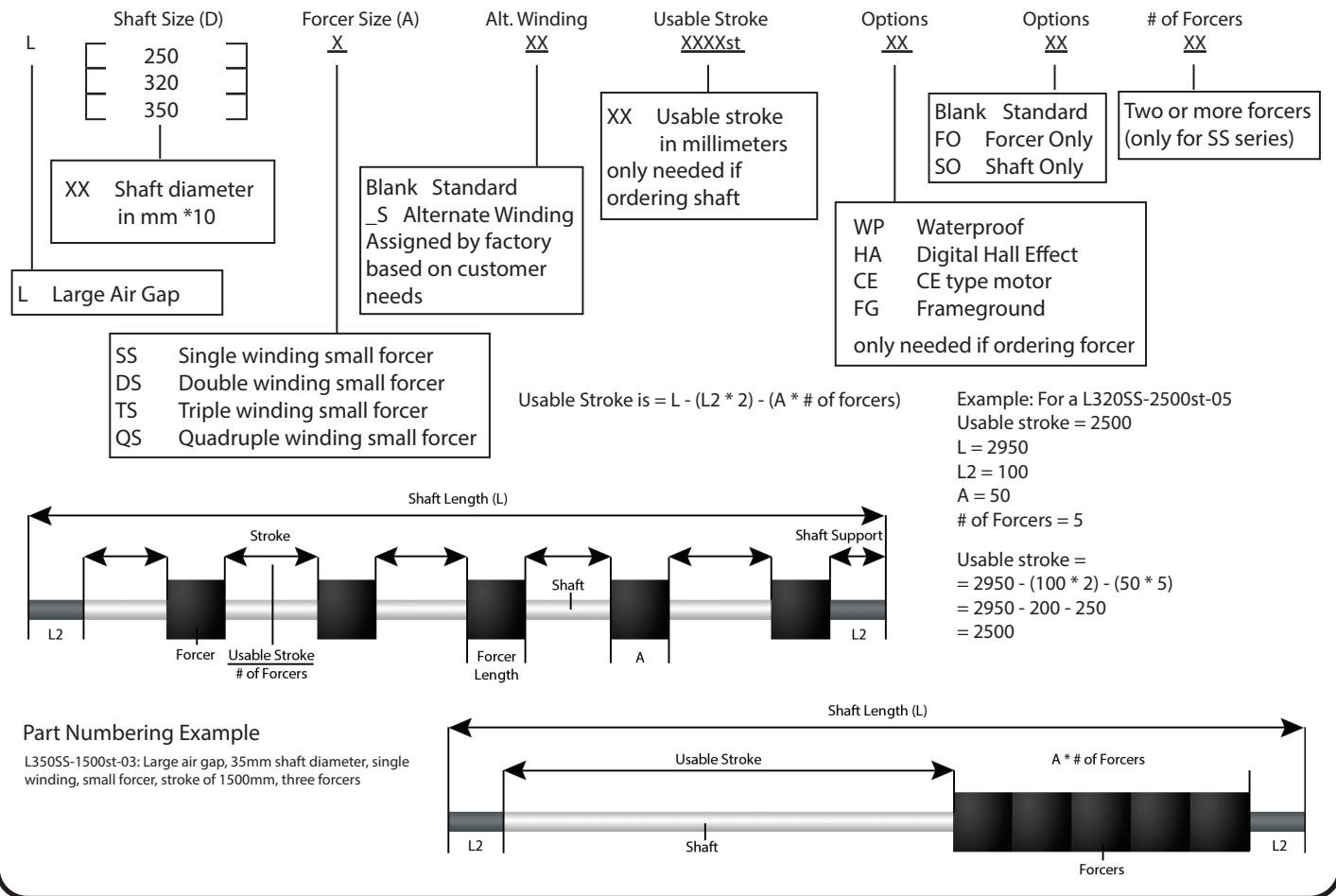
Unless otherwise specified, dimensions are in mm

Note: Cable length 300mm. The bending radius of the motor cable should be 36.6mm (wire diameter 6.1 * 6) as suggested by the wire manufacturer. This radius should be maintained. Use supplied connector to attach the proper high-flex cable as required by your application.

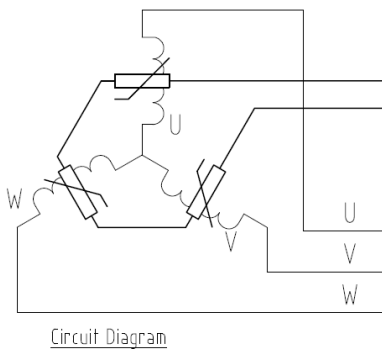


Note: Metric units guaranteed. Imperial (United States customary) units are calculated.

Linear Shaft Motor Part Numbering Guide (SS Series)

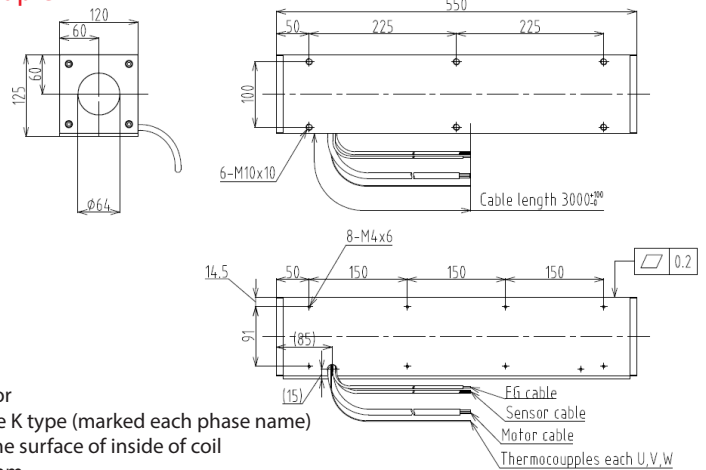


THM Option



4. Thermistor
PTCSL20T071DBE (Vishay)

Thermocouple



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