

- High Thrust, High Speed, High Responsiveness, High Precision, Long Stroke
- Simple Design and Easy Installation
- Non-Contact Drive means Low Noise, Long Lifespan, and Maintenance-Free

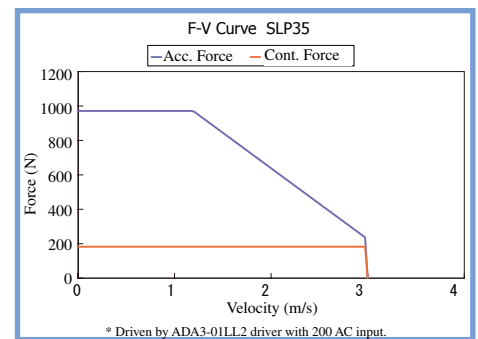


### Stage Specifications

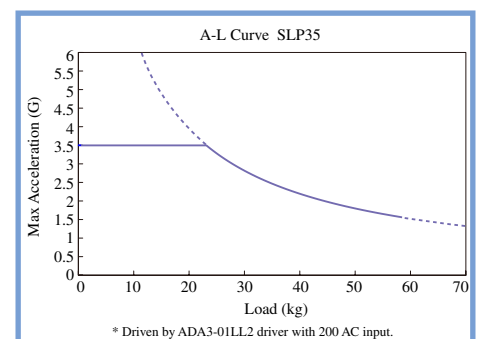
Rated Spec	Unit	Specification
Encoder Resolution	μm	1 (HEIDENHAIN LIDA279)
Continuous Force	N	185
Acceleration Force <sup>1</sup>	N	970
Continuous Current <sup>2</sup>	A	2.7
Acceleration Current <sup>1</sup>	A	14.4
Force Constant (Kf)	N/A rms	68
Back-EMF Constant	V/m/s	22
Resistance <sup>3</sup>	ohm	7.2
Inductance <sup>3</sup>	mH	12
Magnetic Pitch (N-N)	mm	120
Maximum Acceleration <sup>4</sup>	G	3.5
Maximum Velocity <sup>4, 5</sup>	m/s	3
Bi-Directional Repeatability	mm	±0.0005
Max Load, Horizontal	kg	60
Load Capacity	kg	30
Stroke, Single Forcer <sup>6</sup>	mm	300-1200 (100 interval)
Stroke, Double Forcer <sup>6</sup>	mm	300-900 (100 interval)
Operating Temperature	°C	0~+40
Operating Humidity	%	20~80 (no condensation)
Storage Temperature	°C	-20~+60
Moving Mass	kg	4.4

Note 1: Acceleration Force given is based on the output with the use of the following driver - SLP35: (14) Hitachi Production Machine System ADA3-01LL2  
 Note 2: The effective amperage when the temperature increase of the coil front becomes 110K.  
 Note 3: An average value of U-V, U-W, and V-W.  
 Note 4: There are instances when this is not achieved due to load or operation specifications.  
 Note 5: There are instances when this is not achieved due to the length of the stroke.  
 Note 6: Contact NPA for longer stroke lengths.

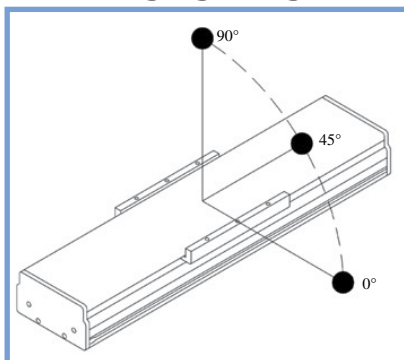
### F-V Curve



### Max. Acceleration vs. Load

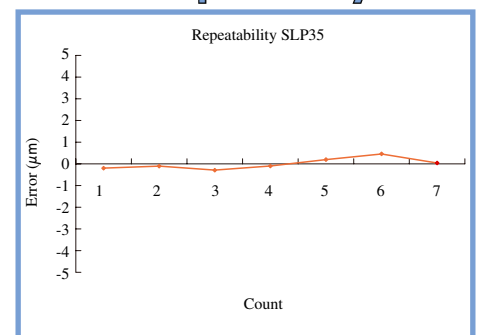


### Overhanging Weight Tolerance (in mm)



	Load	0°	45°	90°
Horizontal	10kg	1000	1000	1000
	20kg	1000	900	1000
	30kg	940	780	1000
	40kg	840	660	1000
	50kg	750	590	950
	60kg	680	540	900
Wall	5kg	1000	1000	700
	10kg	1000	900	600
	15kg	1000	810	520
	20kg	1000	710	430
	25kg	980	620	350
	30kg	890	530	300

### Position Repeatability



### Single Slider Dimensions

For frame ground terminal  
FG label

186  
90  
163  
P  
Q

35  
70  
70  
70

2xN-M6 Depth 10  
Pitch 100 x (N-1)

65  
100  
110  
84

2xN-ø6.5 Drill ø11 Countersink Depth 6.5 (From rear)

20 (Including mechanical stop)  
280  
90  
90  
2-ø6H7 Depth 15  
4-M8 Depth 15  
L  
Stroke  
30 (Including mechanical stop)

Encoder Cable (140)  
Power Supply Cable (140)

Detail For P&Q

All units are listed as mm

Stroke (mm)	L (mm)	N	Weight (Kg)
300	630	6	17
400	730	7	30
500	830	8	21
600	930	9	23
700	1030	10	25
800	1130	11	26
900	1230	12	28
1000	1330	13	30
1100	1430	14	32
1200	1530	15	34

N = sets of holes on stage

**Motor Cable Specifications**  
Hitachi Cable  
UL2570  
AWG 18  
Outer Diameter ø 6.1  
JST HL Connector (male)

**Encoder Cable Specifications**  
Heidenhain  
Outer Diameter ø 4.3  
Dsub 15 Pin Connector (Male)

### Double Slider Dimensions

For frame ground terminal  
FG label

186  
90  
163  
P  
Q

35  
70  
70  
70

4-M5 Depth 10

2xN-M6 Depth 10  
Pitch 100 x (N-1)

60  
100  
110  
84

2xN-ø6.5 Drill ø6.5 Countersink Depth 6.5 (From rear)

20 (Including mechanical stop)  
4-M8 Depth 15  
280  
90  
90  
2-ø6H7 Depth 15  
5 (mechanical stop)  
L  
Stroke  
5 (mechanical stop)  
30 (Including mechanical stop)  
280

Encoder Cable (140)  
Power Supply Cable (140)

Detail For P&Q

All units are listed as mm

Stroke (mm)	L (mm)	N	Weight (Kg)
300	920	9	28
400	1020	10	30
500	1120	11	32
600	1220	12	33
700	1320	13	35
800	1420	14	37
900	1520	15	39

N = sets of holes on stage

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Hitachi Cable  
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AWG 18  
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Heidenhain  
Outer Diameter ø 4.3  
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