

Shaft Length (mm)

Stroke	S320D	S320T	S320Q
150	410	470	530
200	460	520	580
250	510	570	630
300	560	620	680
350	610	670	730
400	660	720	780
450	710	770	830
500	760	820	880
550	810	870	930
600	860	920	980
650	910	970	1030
700	960	1020	1080
750	1010	1070	1130
800	1100	1160	1220
850	1150	1210	1270
900	1200	1260	1320
950	1250	1310	1370
1000	1300	1360	1420
1050	1350	1410	1470
1100	1400	1460	1520
1150	1450	1510	1570
1200	1500	1560	1620
1250	1550	1610	1670
1300	1600	1660	1720
1350	1650	1710	1770
1400	1700	1760	1820
1450	1750	1810	1870
1500	1800	1860	1920
1550	1910	1970	2030
1600	1960	2020	2080
1650	2010	2070	2130
1700	2060	2120	2180
1750	2110	2170	2230
1800	2160	2220	2280
1850	2210	2270	2330
1900	2260	2320	2380
1950	2310	2370	2430
2000	2360	2420	2480

Shaft Mass (kg)

Stroke	S320D	S320T	S320Q
150	2.1	2.4	2.8
200	2.4	2.7	3
250	2.7	3	3.3
300	2.9	3.3	3.6
350	3.2	3.6	3.9
400	3.5	3.8	4.2
450	3.8	4.1	4.5
500	4.1	4.4	4.7
550	4.3	4.7	5
600	4.6	5	5.3
650	4.9	5.2	5.6
700	5.2	5.5	5.9
750	5.5	5.8	6.1
800	5.8	6.2	6.5
850	6.1	6.5	6.8
900	6.4	6.7	7.1
950	6.7	7	7.4
1000	7	7.3	7.6
1050	7.3	7.6	7.9
1100	7.5	7.9	8.2
1150	7.8	8.2	8.5
1200	8.1	8.4	8.8
1250	8.4	8.7	9.1
1300	8.7	9	9.3
1350	8.9	9.3	9.6
1400	9.2	9.6	9.9
1450	9.5	9.8	10.2
1500	9.8	10.1	10.5
1550	10.2	10.5	10.9
1600	10.5	10.8	11.2
1650	10.8	11.1	11.5
1700	11.1	11.4	11.7
1750	11.3	11.7	12
1800	11.6	12	12.3
1850	11.9	12.2	12.6
1900	12.2	12.5	12.9
1950	12.5	12.8	13.1
2000	12.7	13.1	13.4

S320

Linear Shaft Motor

Lead Wire

Wire Type	UL 2464FA
Wire AWG	20
U Phase	Red
V Phase	White
W Phase	Black

300mm lead wire bare leads
The bending radius of the motor cable should be 36.6mm as suggested by the wire manufacturer.

Connector (Motor Cable)

Receptacle Housing	HLR-03V
Plug Housing	HLP-03V
Retainer	HLS-03V
Pin Contact	SSM-21T-P1.4
Socket Contact	SSF-21T-P1.4

To be installed by the user

CE Type Motor Cable

300mm lead wire bare leads. The bending radius of the motor cable should be 18.96mm as suggested by the wire manufacturer.

Wire Type	UL 1330
Wire AWG	24
U Phase	Red
V Phase	White
W Phase	Black

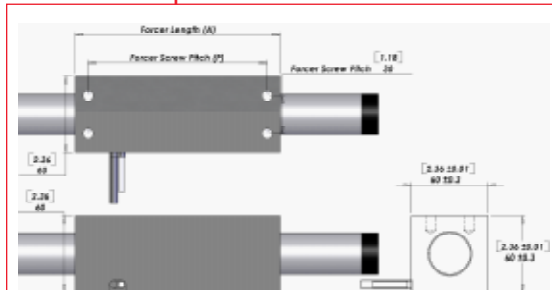
Ground Wire	CE
Wire Type	UL 1330
Wire AWG	20
Frame Ground	Green/Yellow

Support and Bending

Stroke (D/T/Q)	Support Length	Max. bending
0~750	50mm	0.00mm
751~1000	70mm	0.30mm
1001~1500	70mm	0.70mm
1501~max	100mm	0.70mm

Shaft Diameter (D) - 32mm ±0.2
Total Length (L)=Stroke (S)+Forcer Length (A)+(Support Length (L2)x2)
Stroke lengths available from 100mm to 2700mm. Contact Nippon Pulse for more information.

Hall Effect Specs



* Note 1
The bending radius of the motor cable should be R36.6mm (wire diameter 4.6 * 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.

Sensor Cable Specs

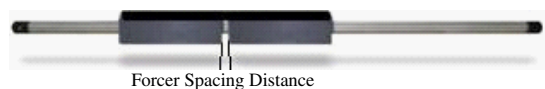
Wire Type	UL 758
Wire AWG	28
VCC	White/Red
GND	White/Black
Sensor 1	Orange/Red
Sensor 2	Orange/Black
Sensor 3	Gray/Red

The bending radius of the sensor cable should be R27.6mm (wire diameter 6.1 * 6) as suggested by the wire manufacturer. This radius should be maintained. Attach the proper high flex cable as required by your application.

Part Numbering System

S	Shaft Size (D) 320	Forcer Size (A) X	Parallel Option XX	Usable Stroke XXXXSL 100-2000mm	Options XX	Options XX	# of Forcers XX Two or more
		D: Double (2) windings T: Triple (3) windings Q: Quadruple (4) windings	Blank: Single Motor PL: Parallel Motors		Blank: Standard WP: Water Resistant HA: Digital Hall Effect CE: CE type motor	Blank: Standard FO: Forcer Only SO: Shaft Only	

Tandem Forcer



Forcer Spacing Distance

Spec	S320T	S320Q
Forcer Spacing Distance	20mm	20mm
Pole (N/S) Distance	60mm	60mm
Forcer Length	220mm	280mm
Flip Forcers	No	Yes

Tandem S320D forcers are possible, but are equivalent to one (1) S320Q forcer and thus are not listed above.