

Motor Specs

Electrical Specs	S080T
Continuous Force ¹	2.7N
Continuous Current ¹	0.8Arms
Acceleration Force ²	10.8N
Acceleration Current ²	3.4Arms
Force Constant (K _f)	3.2N/Arms
Back EMF (K _e)	1.1V/m/s
Resistance 25°C, ³	6.8Ω
Inductance ³	1.0mH
Electric Time Constant	0.147ms
Rated Voltage (AC)	240V
Fundamental Motor Constant (K _m)	1.23N√W
Magnetic Pitch (North-North)	30mm

All specifications are for reference only. Specifications may change depending on servo driver selected. Consult Nippon Pulse.

- 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. Addition of 10cm x 20cm x 1.2cm aluminum heat sink increases continuous force up to 75%.
- 2) Can be maintained for a maximum of 40 seconds, higher forces and current possible for short periods of time, consult Nippon Pulse.
- 3) All winding parameters listed are measured line-to-line (phase-to-phase).

Thermal Specs	S080T
Max Phase Temperature ⁴	135°C
Thermal Resistance (Coil) (K _q)	22.9°C/W

4) The standard temperature difference between the coil and the forcer surface is 10°C

Forcer Specs	S080T
Forcer Length (A)	55mm
Forcer Width	20mm
Forcer Screw Pitch (P)	49mm
Forcer Weight	0.06kg
Gap	0.50mm

Encoder Specs

Spec	Value
Power Supply	5VDC, ±5%
Output	LD
Output Signals	A; /A; B; /B; I; /I
Working Temp.	-10°C~+70°C
Storage Temp.	-30°C~+80°C
Humidity	100%, condensation allowed
Pole Length	15mm
Cable Length	Increments of 0.1m, max. 10m
Resolution (mm)	0.003, 0.00375, 0.006, 0.0075, 0.01, 0.015, 0.02, 0.03, 0.05
Pulse Interval (us)	0.2, 0.5, 2.5, 4.0, 8.0, 16.0, 32.0, 66.0

Motor Specs

Electrical Specs	L250TS
Continuous Force ¹	51N
Continuous Current ¹	1.3Arms
Acceleration Force ²	206N
Acceleration Current ²	5.1Arms
Force Constant (K _f)	40N/Arms
Back EMF (K _e)	13.5V/m/s
Resistance 25°C, ³	19.5Ω
Inductance ³	34.1mH
Electric Time Constant	1.75ms
Rated Voltage (AC)	240V
Fundamental Motor Constant (K _m)	9.05N√W
Magnetic Pitch (North-North)	60mm

All specifications are for reference only. Specifications may change depending on servo driver selected. Consult Nippon Pulse.

- 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. Addition of 25 cm x 25 cm x 2.5 cm aluminum heat sink increases continuous force by 20%.
- 2) Can be maintained for a maximum of 40 seconds, higher forces and current possible for short periods of time, consult Nippon Pulse.
- 3) All winding parameters listed are measured line-to-line (phase-to-phase).

Thermal Specs	L250TS
Max Phase Temperature ⁴	135°C
Thermal Resistance (Coil) (K _q)	3.5°C/W

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

Forcer Specs	L250TS
Forcer Length (A)	110mm
Forcer Width	56mm
Forcer Screw Pitch (P)	100mm
Forcer Weight	1.1kg
Gap	2mm

Encoder Specs

Spec	Value
Power Supply	5VDC, ±5%
Output	LD
Output Signals	A; /A; B; /B; I; /I
Working Temp.	-10°C~+70°C
Storage Temp.	-30°C~+80°C
Humidity	100%, condensation allowed
Pole Length	30mm
Cable Length	Increments of 0.1m, max. 10m
Resolution (mm)	0.006, 0.0075, 0.012, 0.015, 0.02, 0.03, 0.04, 0.06, 0.1
Pulse Interval (us)	0.2, 0.5, 1.0, 2.5, 4.0, 8.0, 16.0, 32.0, 66.0