



SLU22CH048 SERIES

SLU22CH048-24-G111-M16-1024

SLOTLESS BLDC MOTOR

FEATURES AND BENEFITS

- Extremely quick response and high acceleration
- Quiet Operation
- High power density

MOTOR SPECIFICATIONS

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Frame Size	22 mm
Weight	186 g
Number of pole	2
Number of Phases	3
Certification	RoHS

MOTOR VALUES (AT NOMINAL SPEED)

Nominal Voltage	24 VDC
No Load Current	285 mA
Nominal Speed	97 RPM
Nominal Torque (Max Cont. Torque)	1600 mNm
Nominal Current (Max Cont. Current)	2.94 A
Rated Speed	85.2 RPM
Rated Torque	1600 mNm
Rated Current	1.44 A
Stall Torque	17600 mNm

Stall Current	15.96 A
Max. Efficiency	65.9%

MOTOR CHARACTERISTICS

Terminal Resistance	0.94 ohm
Terminal Inductance	0.104 mH
Speed/Torque Gradient	58 RPM/mNm
Speed Constant	770 RPM/V
Mechanical Time Constant	2.36 ms
Rotor Inertia	3.64 g-cm ²

MOTOR MECHANICAL DATA

Axial play	0 mm - 0.1 mm
Radial play	0.1
Max. Radial Load	60 N
Distance From Flange For Radial Load	10 mm
Max Force For Press Fit	100 N
Max Speed (Mechanical)	30000 RPM

MOTOR THERMAL DATA

Ambient Temperature	-40.00 °C to 100.00 °C
Insulation Class	F
Thermal time constant motor	510 s
Thermal time constant winding	1.59 s

GEARHEAD SPECIFICATIONS

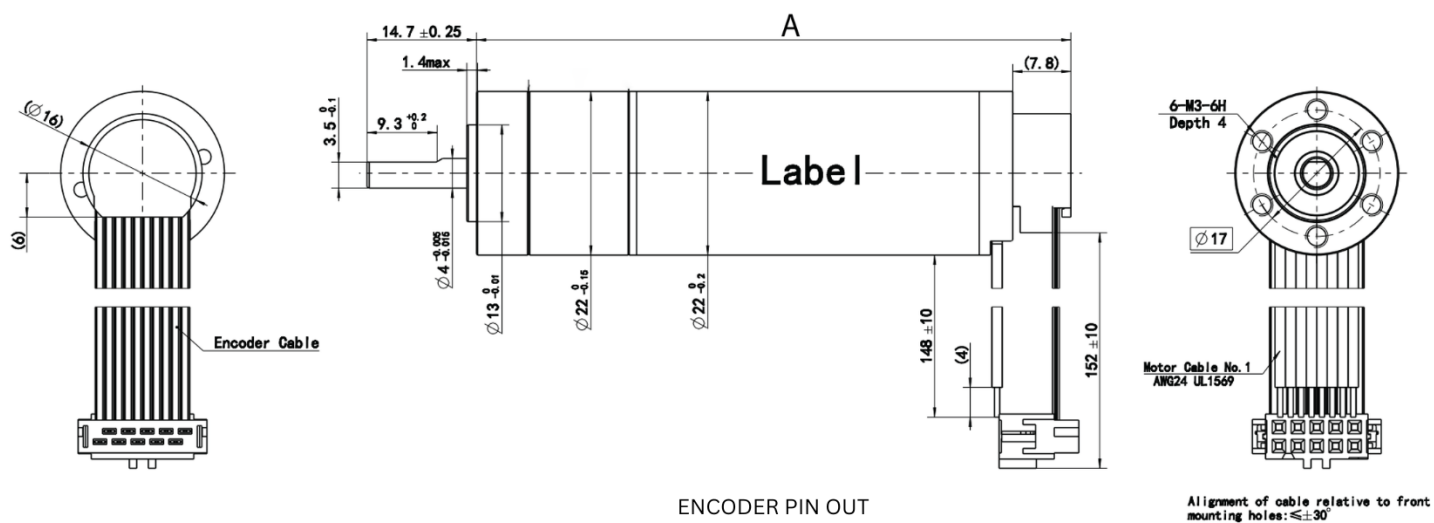
Type Of Gearhead	Planetary Gearhead
Gearhead Reduction Ratio	111
Nominal Reduction Ratio	111.2
Absolute Reduction Ratio	357075/3211
Number Of Stages	3
Average Backlash (No Load)	1.2

ENCODER SPECIFICATIONS

Counts Per Turn	1024
Number Of Channels	3

DIMENSIONS

Model	SLU22CH048-24-G111-M16-1024
DIM. A (length) mm	

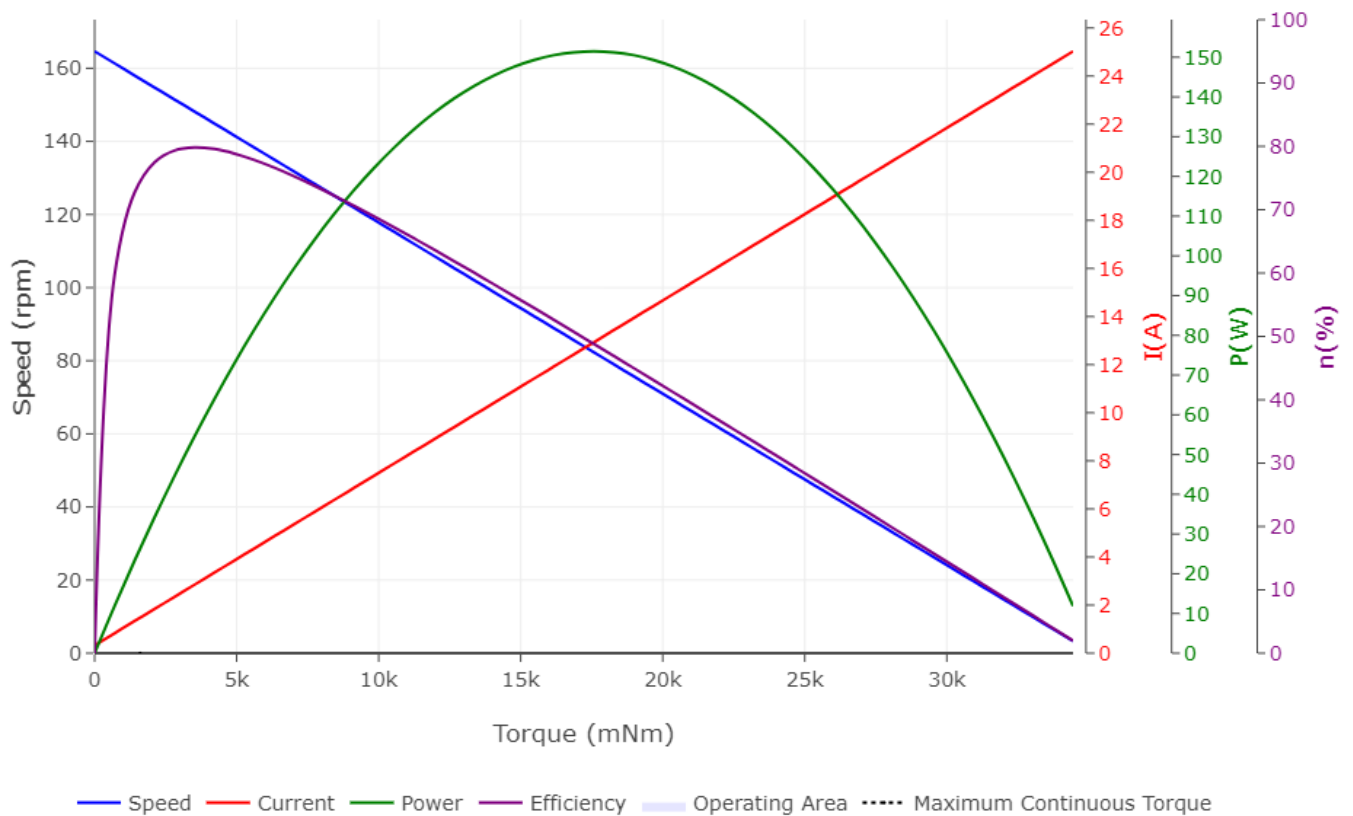


PIN #	SIGNAL	COLOR
1	WINDING 1	BROWN
2	WINDING 2	RED
3	WINDING 3	ORANGE
4	3-24 VDC	YELLOW
5	GND	GREEN
6	HALL IC 1	BLUE
7	HALL IC 2	VIOLET
8	HALL IC 3	GREY

PIN #	SIGNAL
1	N.C
2	VCC 4.5-5.5 V
3	GND
4	N.C
5	CHANNEL $\bar{A}$
6	CHANNEL A
7	CHANNEL B
8	CHANNEL B
9	CHANNEL $\bar{I}$
10	CHANNEL I

Alignment of cable relative to front
mounting holes: $\leq \pm 30^\circ$

PERFORMANCE CURVE



Motion Control, **Solved.**

Motor Engineering and Manufacturing



*Optimized For
Your
Applications*



*Quick Prototype
Turnaround*



*Small Batch to
OEM Volume
Production*



*US Based
Support &
Manufacturing*