



SLU22CH048 SERIES

SLU22CH048-24-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
Motor Type	Motor + Encoder
Weight	124 g
Number of pole	2
Number of Phases	3
Certification	RoHS

MOTOR VALUES (AT NOMINAL SPEED)

Nominal Voltage	24 VDC
No Load Speed	19200 RPM
No Load Current	326 mA
Nominal Speed	17310 RPM
Nominal Torque (Max Cont. Torque)	32.5 mNm
Nominal Current (Max Cont. Current)	2.94 A
Rated Speed	15835 RPM
Rated Torque	21.6 mNm

Rated Current	1.67 A
Stall Torque	316.6 mNm
Stall Current	25.53 A
Max. Efficiency	86%

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 - 0.14 mm
Radial play	Preloaded
Max. Radial Load	15 N
Distance From Flange For Radial Load	5 mm
Max Force For Press Fit	53 N
Max Speed (Mechanical)	40000 RPM

MOTOR THERMAL DATA

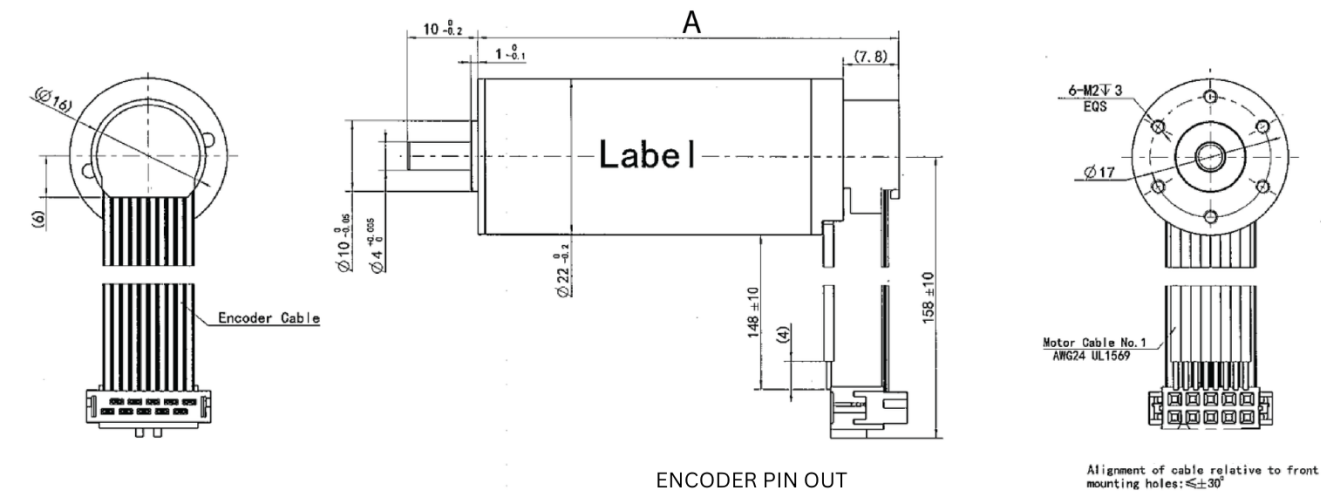
Ambient Temperature	-40.00 °C to 100.00 °C
Insulation Class	F
Max winding temperature	155.00 °C
Max winding temperature	155.00 °C
Thermal resistance (Housing-Ambient)	9.00 °C/W
Thermal resistance (Winding-Housing)	1.75 °C/W
Thermal time constant motor	510 s
Thermal time constant winding	5.26 s

ENCODER SPECIFICATIONS

Counts Per Turn	1024
Number Of Channels	3

DIMENSIONS

Model	SLU22CH048-24-M16-1024
DIM. A (length) mm	60 mm

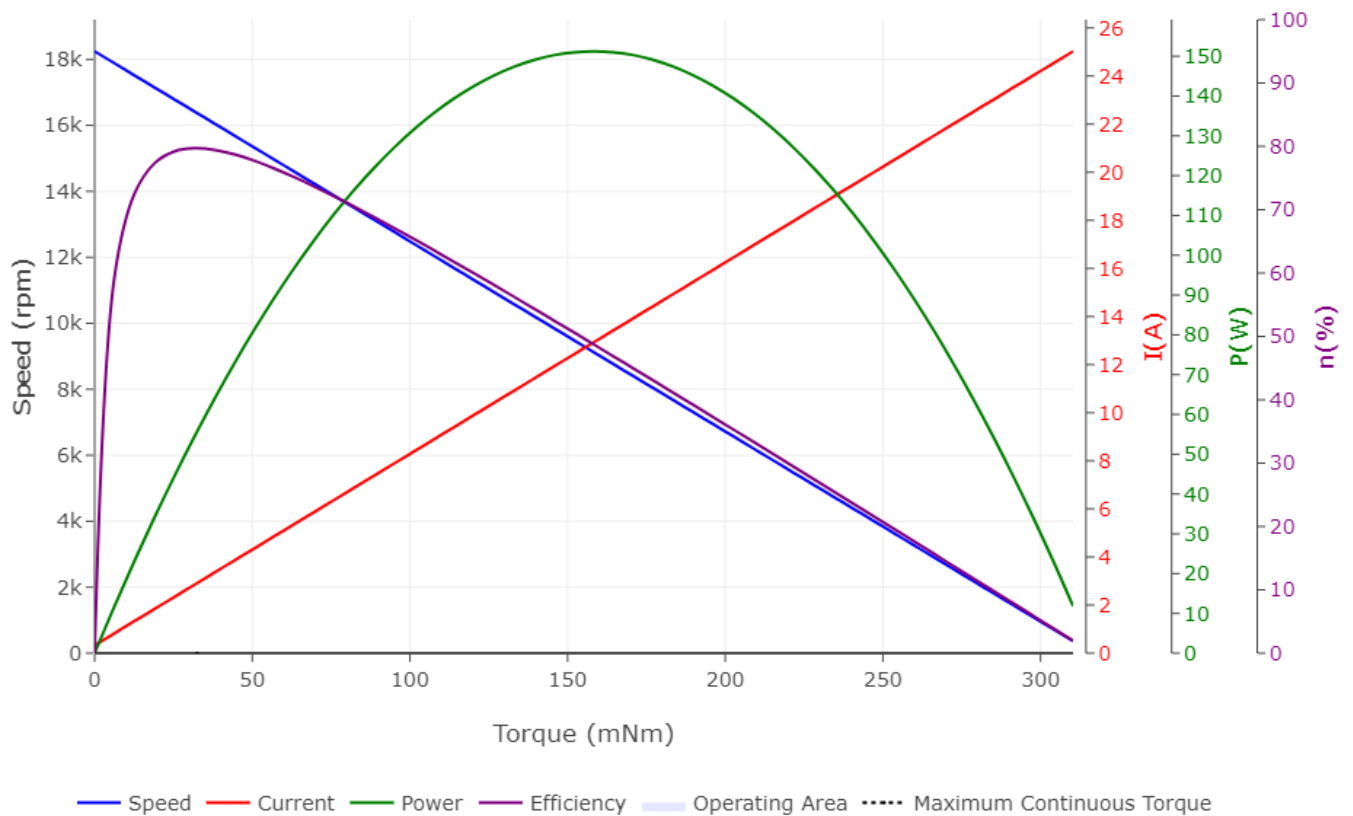


ENCODER PIN OUT

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 A
6	CHANNEL A
7	CHANNEL B
8	CHANNEL B
9	CHANNEL I
10	CHANNEL I

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*