



SLU30CH064 SERIES

SLU30CH064-24-G100-M24-1024

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	30 mm
Motor Type	Motor + Encoder + Gearhead
Weight	473 g
Number of pole	2
Number of Phases	3
Certification	RoHS

MOTOR VALUES (AT NOMINAL SPEED)

Nominal Voltage	24 VDC
No Load Speed	99.7 RPM
No Load Current	560 mA
Nominal Speed	91.9 RPM
Nominal Torque (Max Cont. Torque)	4618 mNm
Nominal Current (Max Cont. Current)	3.84 A
Rated Speed	86.4 RPM
Rated Torque	4200 mNm
Rated Current	2.43 A
Stall Torque	70000 mNm
Stall Current	43.6 A

Max. Efficiency	60.8%
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MOTOR CHARACTERISTICS

Terminal Resistance	0.551 ohm
Terminal Inductance	0.104 mH
Speed/Torque Gradient	10.1 RPM/mNm
Speed Constant	418.6 RPM/V
Mechanical Time Constant	2.05 ms
Rotor Inertia	19.4 g-cm ²

MOTOR MECHANICAL DATA

Axial play	0.3 mm
Radial play	0.1
Max. Radial Load	120 N
Distance From Flange For Radial Load	12 mm
Max Force For Press Fit	30 N
Max Speed (Mechanical)	15000 RPM

MOTOR THERMAL DATA

Ambient Temperature	-40.00 °C to 80.00 °C
Insulation Class	F
Max winding temperature	155.00 °C
Max winding temperature	155.00 °C
Thermal resistance (Housing-Ambient)	9.60 °C/W
Thermal resistance (Winding-Housing)	0.98 °C/W
Thermal time constant motor	1094 s
Thermal time constant winding	6.8 s

GEARHEAD SPECIFICATIONS

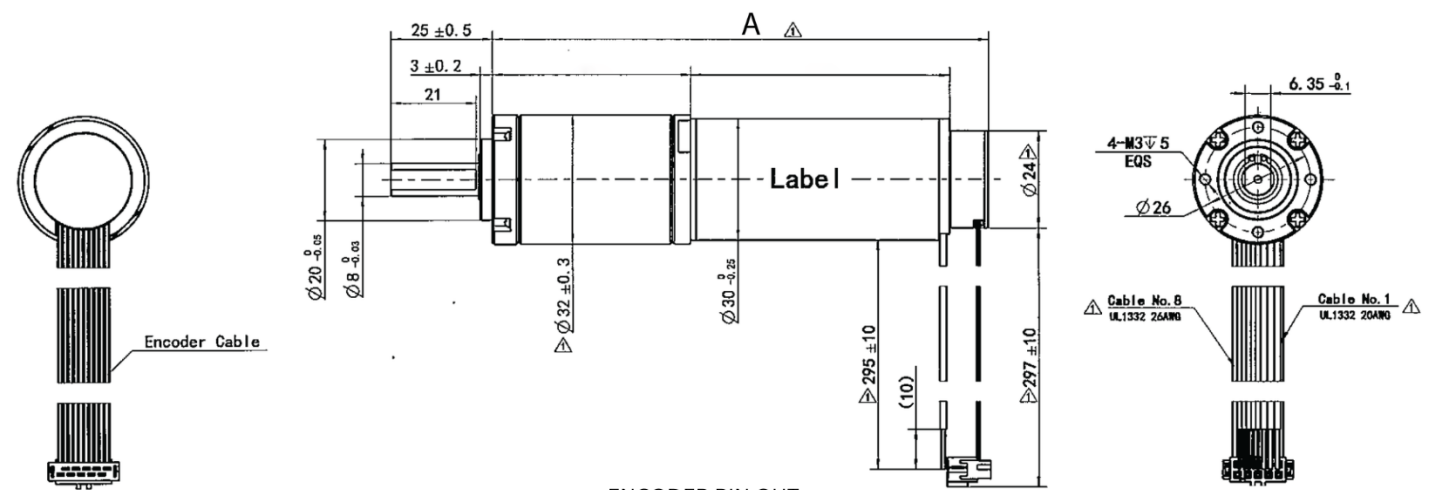
Type Of Gearhead	Planetary Gearhead
Gearhead Reduction Ratio	100
Nominal Reduction Ratio	99.02
Absolute Reduction Ratio	203687/2057
Number Of Stages	3
Average Backlash (No Load)	2

ENCODER SPECIFICATIONS

Counts Per Turn	1024
Number Of Channels	3

DIMENSIONS

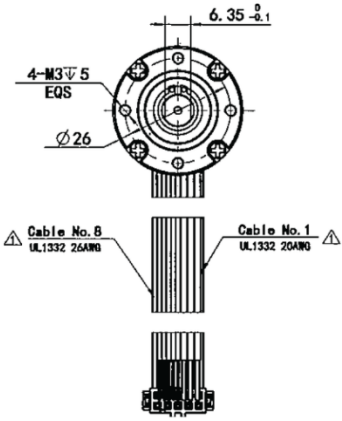
Model	SLU30CH064-24-G100-M24-1024
DIM. A (length) mm	123.2 mm



ENCODER PIN OUT

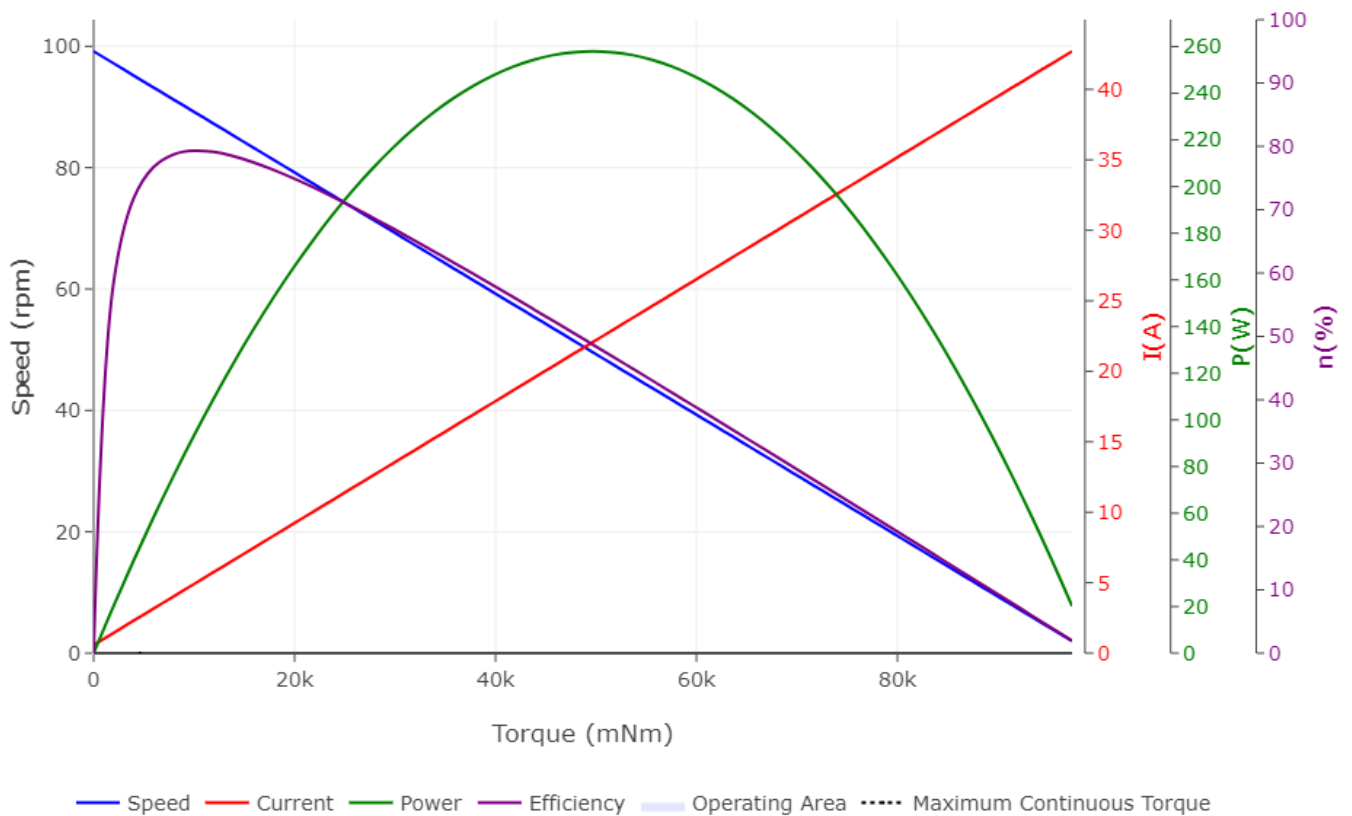
PIN #	SIGNAL	COLOR
1	WINDING 1	RED
2	WINDING 2	BLACK
3	WINDING 3	WHITE
4	3-24 VDC	GREEN
5	GND	BLUE
6	HALL IC 1	YELLOW
7	HALL IC 2	BROWN
8	HALL IC 3	GREY

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



Alignment of cable relative to front mounting holes: ≤ ± 45°

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*