

SBL40DC SERIES

**SBL40D2-02**  
 SERVO BLDC MOTOR

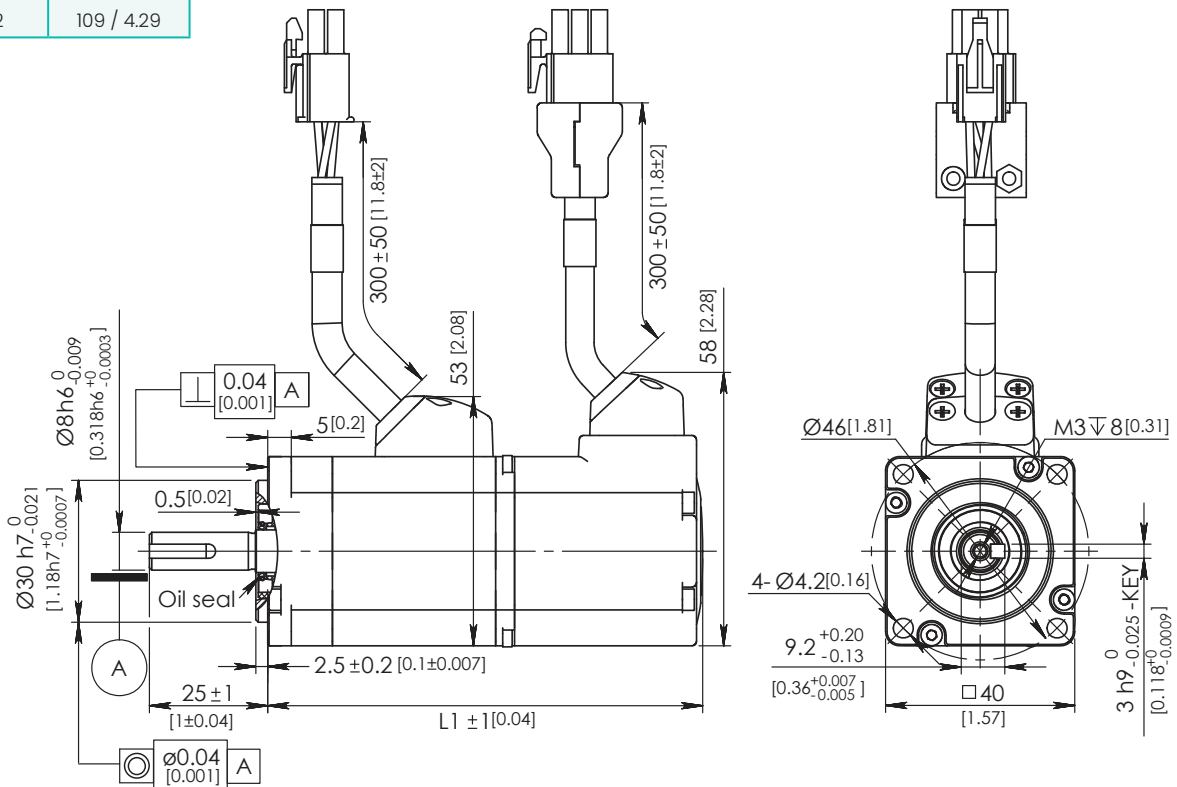


**MOTOR SPECIFICATIONS**

Frame Size	40 mm
Rated Voltage	60 VDC
Rated Output Power	100 W
Rated Speed	3,000 RPM
Max Speed	6,000 RPM
Rated Torque	0.32 Nm (45.3 oz-in)
Rated Current	5.2 A
Voltage Constant	3.8 V rms/ K rpm
Max Torque	0.91 Nm (128.8 oz-in)
Resistance	0.48 Ohm
Terminal Inductance	0.58 mH
Torque Constant	0.061 Nm/A
Rotor Inertia	42.8 g-cm <sup>2</sup>
# of Poles	8
Encoder Type	Incremental
Encoder Resolution	2,500 CPR Incremental
IP Rating	IP65
Weight	0.55 kg (1.21 lbs)

**SPECIFICATIONS (Unit: mm/in)**

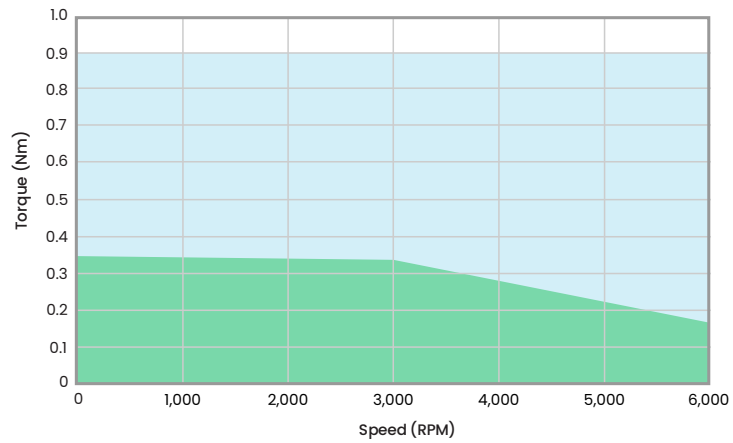
Without Brake	L1 (mm/in)
SBL40D2-02	109 / 4.29



## TORQUE CURVES (Unit: mm/in)

SBL40D2-02 (100 Watts)  
60 VDC - 5.2 Amps

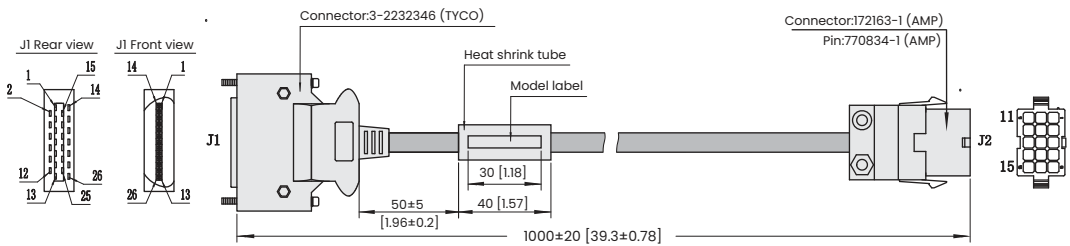
**Note:** The torque and maximum speed depend on the DC bus voltage. Please choose the proper supply voltage.



Max. Intermittent Torque  
Max. Continuous Torque

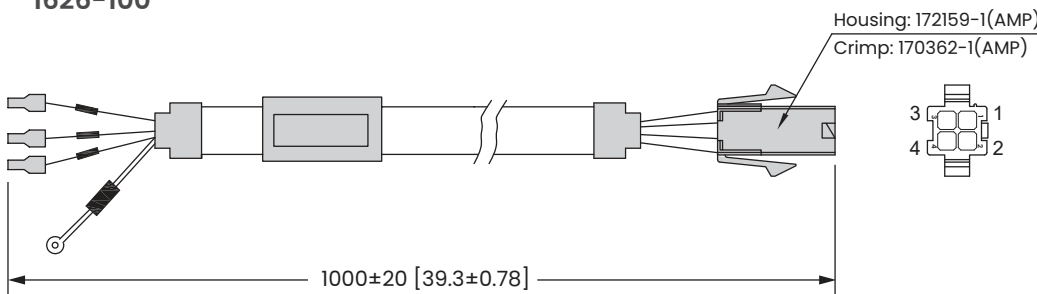
## WIRE HARNESS

### 2624-100



PINOUT DIAGRAMS			
SIGNAL	J1 CON	COLOR	J2 CON
+5V	11	Red	1
GND	24	Black	2
U+	4	Brown	3
U-	6	Brown/Black	4
V+	17	Grey	5
V-	19	Grey/Black	6
W+	5	White	7
W-	7	White/Black	8
A+	1	Blue/Black	9
A-	14	Blue	10
B+	2	Green	11
B-	15	Green/Black	12
Z+	3	Yellow	13
Z-	16	Yellow/Black	14
SHIELD			15

### 1626-100



Signal	Color	Connect to motor AMP172159-1
U	Red	1
V	Yellow	2
W	Blue	3
PE	Yellow/Green	4

**Notes:** Wire harness cable extensions (2624-100 and 1626-100) must be purchased separately.

# Motion Control, Solved.

## MOTOR ENGINEERING & MANUFACTURING



Optimized  
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Application



Quick  
Prototype  
Turnaround



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to OEM Volume  
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