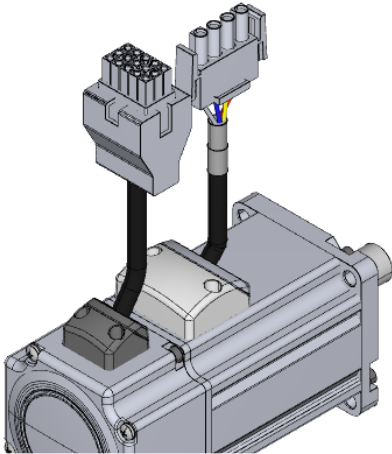




**SBL60DC SERIES**

**SBL60D2-03**

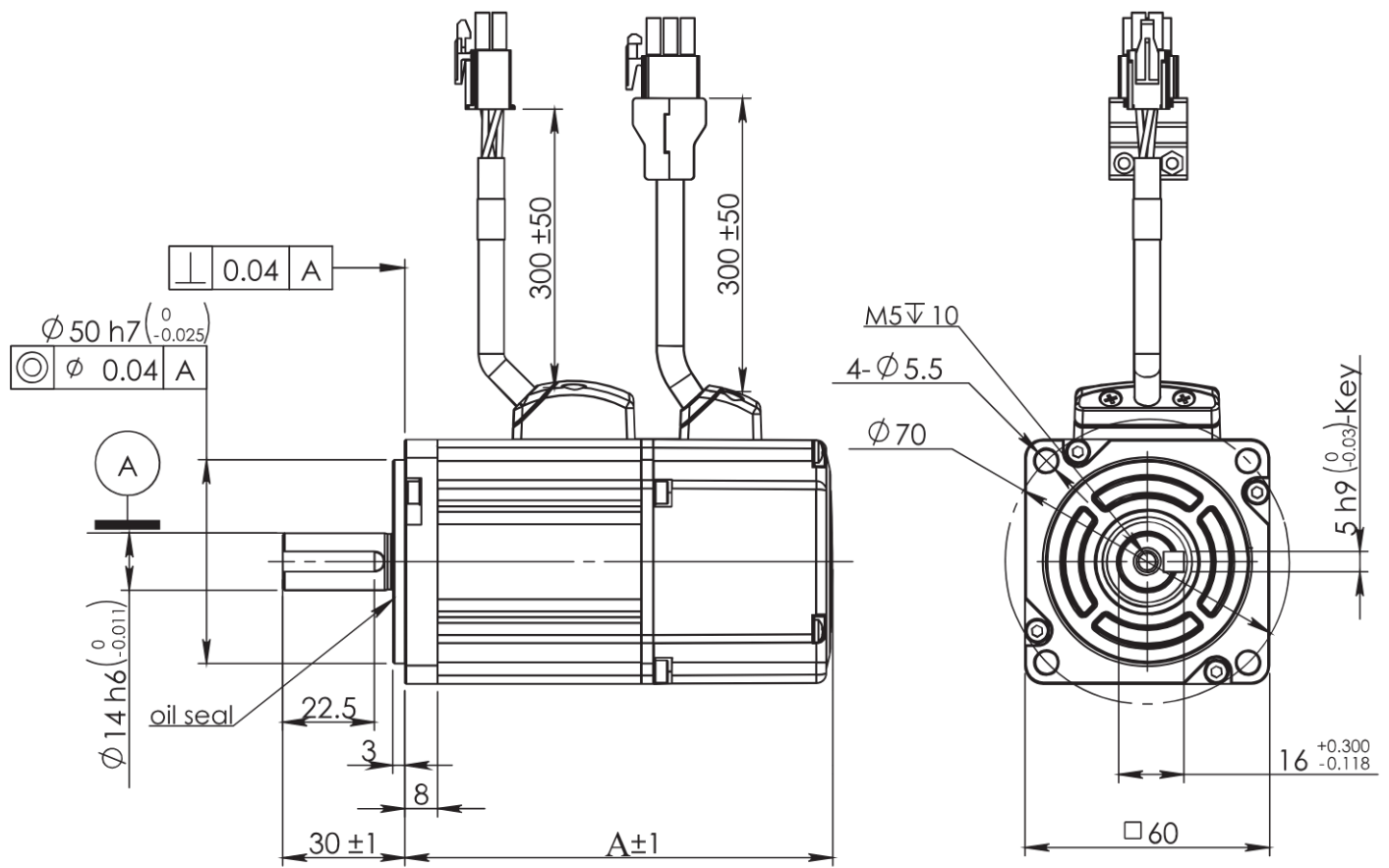
SERVO BLDC MOTOR

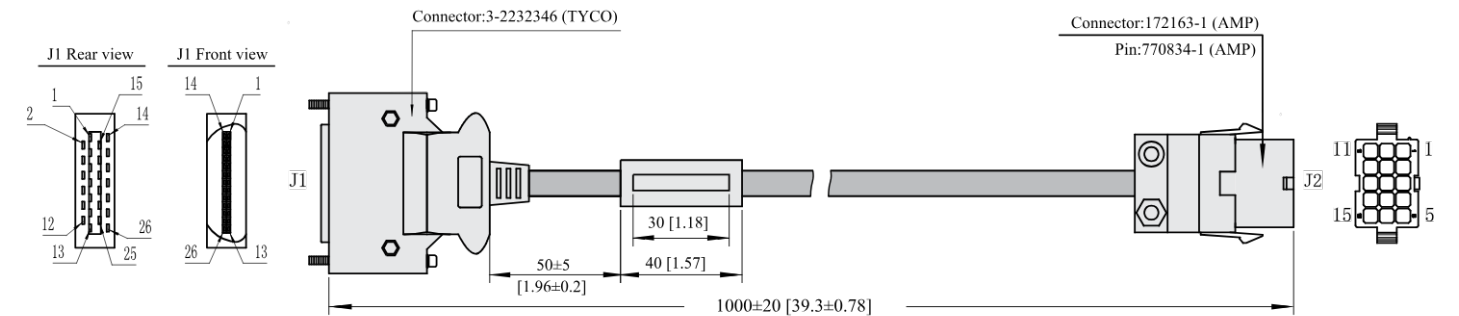
## MOTOR SPECIFICATIONS

|                            |                       |
|----------------------------|-----------------------|
| <b>Frame Size</b>          | 60 mm                 |
| <b>Rated Voltage</b>       | 48 VDC                |
| <b>Rated Output Power</b>  | 400 W                 |
| <b>Rated Speed</b>         | 3000 RPM              |
| <b>Max Speed</b>           | 6000 RPM              |
| <b>Rated Torque</b>        | 1.27 Nm               |
| <b>Rated Current</b>       | 12 A                  |
| <b>Voltage Constant</b>    | 6.3 V rms/ K rpm      |
| <b>Max Torque</b>          | 3.4 Nm                |
| <b>Resistance</b>          | 0.214 ohm             |
| <b>Terminal Inductance</b> | 0.6 mH                |
| <b>Torque Constant</b>     | 0.103 Nm/A            |
| <b>Rotor Inertia</b>       | 272 g-cm <sup>2</sup> |
| <b>Weight</b>              | 1 kg                  |

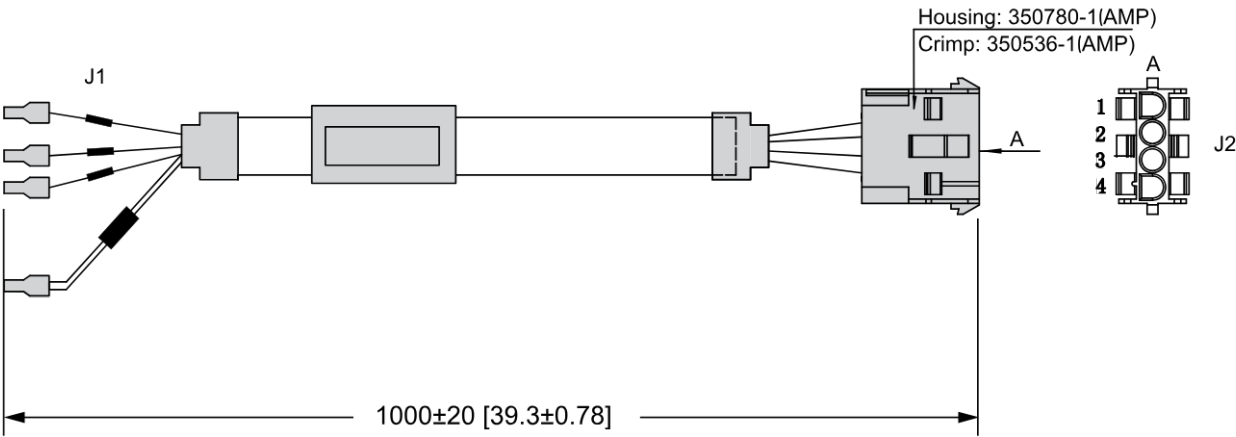
## DIMENSIONS

|                               |            |
|-------------------------------|------------|
| <b>Model</b>                  | SBL60D2-03 |
| <b>DIM. A (length) mm Max</b> | 125 mm     |





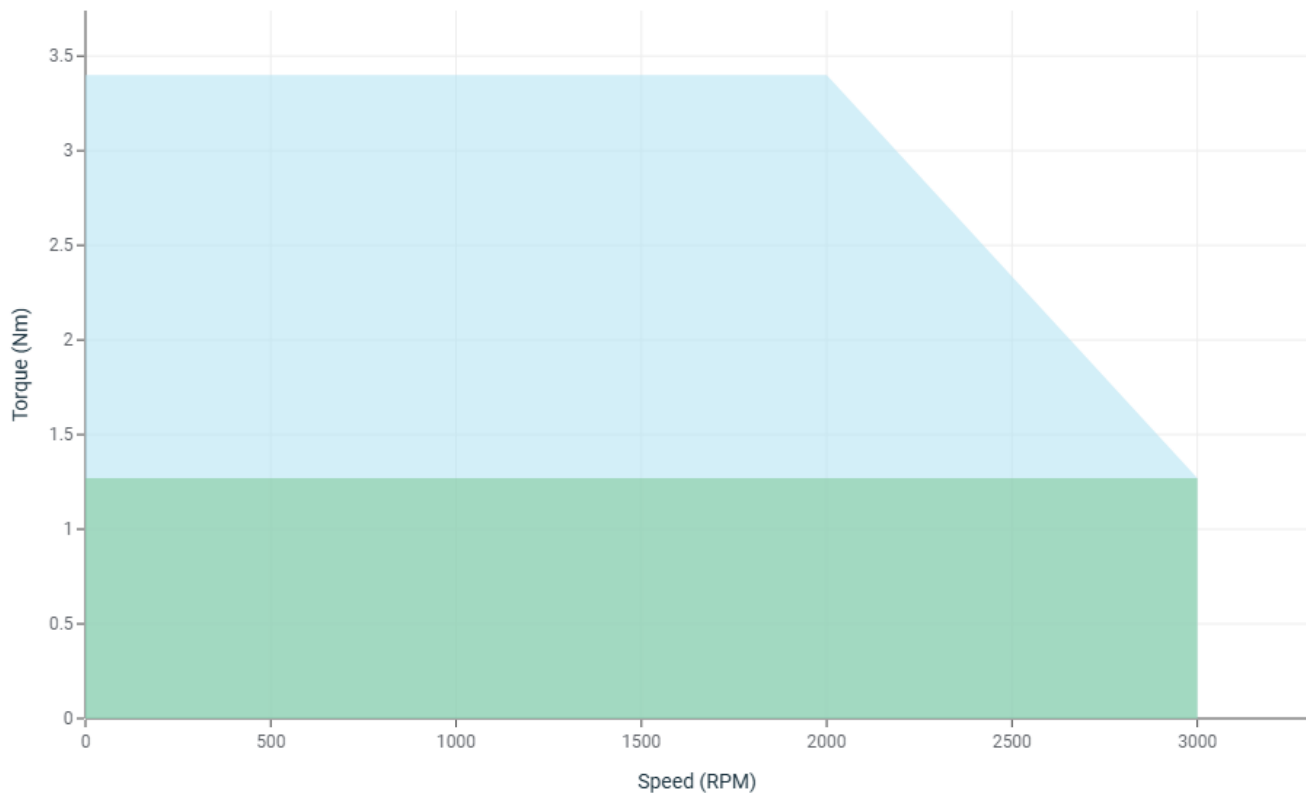
| PINOUT DIAGRAMS |        |              |        |
|-----------------|--------|--------------|--------|
| SIGNAL          | J1 CON | COLOR        | J2 CON |
| +5V             | 11     | Red          | 1      |
| GND             | 24     | Black        | 2      |
| U+              | 4      | Brown        | 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     |



| Signal | Colour       | Connect to motor |
|--------|--------------|------------------|
|        |              | AMP 350780-1     |
| U      | Red          | 1                |
| V      | Yellow       | 2                |
| W      | Blue         | 3                |
| PE     | Yellow/Green | 4                |

## PERFORMANCE CURVE

**SBL60D2-03**  
48 VDC, 12 A



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Turnaround*



*Small Batch to  
OEM Volume  
Production*



*US Based  
Support &  
Manufacturing*