

SE600 SERVO MOTORS

BRUSHLESS LOW INERTIA



High Quality Low Inertia Brushless Servo Motors

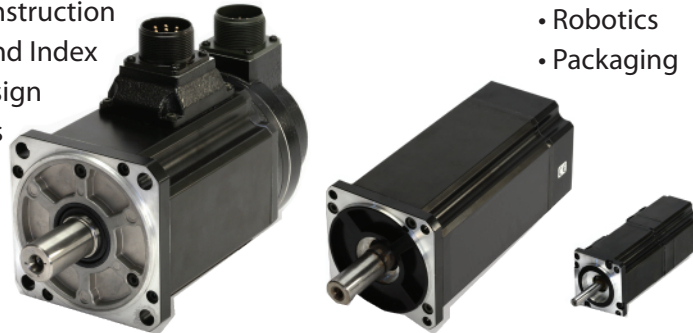
The Trust Automation SE600 Series Brushless Servo Motors are compact, high quality motors designed specifically to reduce motor size while increasing motor torque. The torque ripple is low, approximately .3% of the rated motor torque. Available in four frame sizes, the SE600 Series delivers continuous stall torque from .96 lb-in to 43.37 lb-in and peaks from 2.85 lb-in to 130.11 lb-in.

The increased torque and smooth operation of the SE600 Series motors is due to the increased number of pole pairs on the rotor. While many motors of this size have four pairs and some have as many as eight pairs, the SE600 Series has ten pole pairs providing the best performance available.

This low inertia model is suited best in applications that require high acceleration capability allowing the application to position faster. Faster positioning translates to higher machine throughput. Applications include medical imaging, semiconductor processing, packaging and robotics, just to name a few.

FEATURES

- Standard models stocked for short lead time
- Rugged high quality industrial construction
- Differential encoder signals A, B and Index
- 10-pole pair, low torque ripple design
- High quality neodymium magnets
- NEMA IP67 rated
- CE/UL certified
- Customization available



APPLICATIONS

- Medical imaging and research equipment
- Semiconductor processing equipment
- Robotics
- Packaging

TECHNICAL SPECIFICATIONS

Electrical

Insulation Grade

F Type, 500 VDC, 10MΩ

Dielectric Strength

1,500 VAC, 1 min

Connections

**SE620-0030 – SE640-0750
Motor and Sensor Connections**

Type: Pigtail, un-terminated

Length: 9.8 ft (3.0 M)

**SE650-1000 – SE650-1500
Motor and Sensor Connections**

Type: Circular Connector

Length: N/A

Mechanical

Vibration Grade

V10

Excitation System

Permanent Magnet

Protection Systems

Fully Enclosed, Self Cooling

Weight

1lb to 14 lb (.45 kg to 6.35 kg)

Environmental

Maximum Altitude

6,560ft (2000M)

Temperature (ambient)

Normal operation: 0° C to +40° C

Storage: -20° C to +65° C

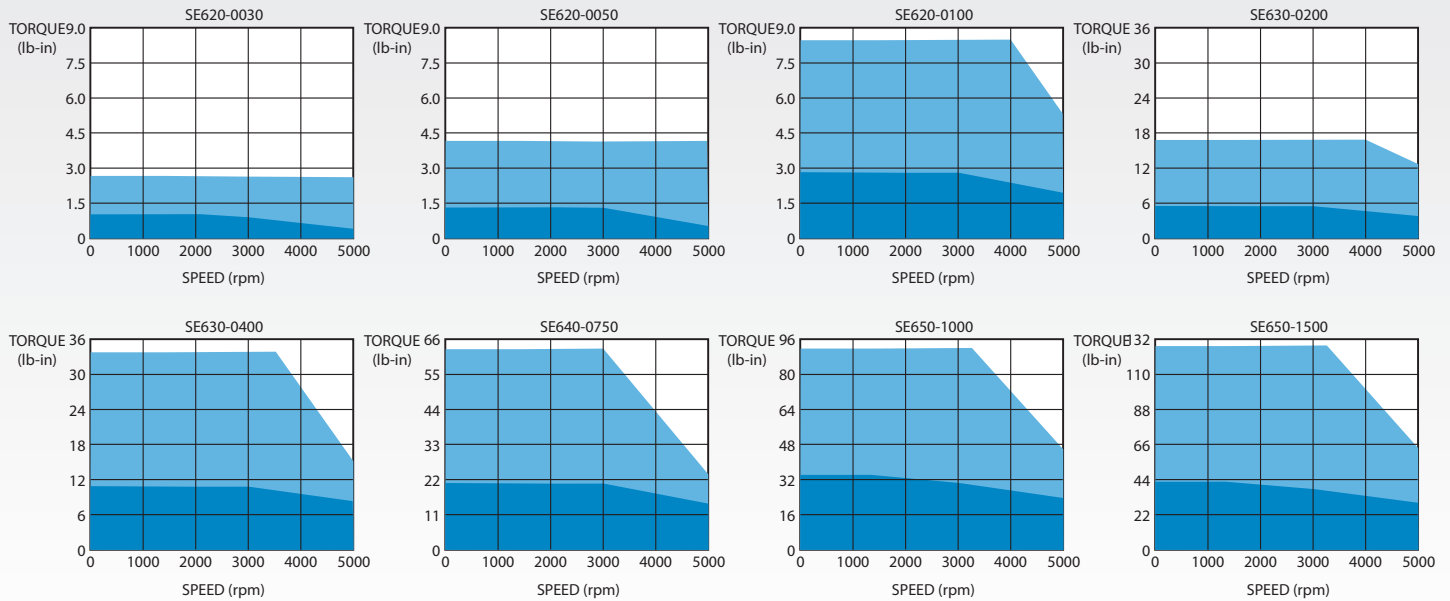
Humidity

Operating: 10% to 70%, non-condensing

Storage: 10% to 95%, non-condensing



PERFORMANCE



MOTOR SPECIFICATIONS

| Model | Rated Output (Watts) | Cont. Stall Torque (lb-in) | Peak Stall Torque (lb-in) | Cont. Current (A) RMS | Peak Current (A) RMS | Torque Constant (lb-in/A) | Voltage Constant (V/KRPM) | Flange Size (mm) |
|------------|----------------------|----------------------------|---------------------------|-----------------------|----------------------|---------------------------|---------------------------|------------------|
| SE620-0030 | 30 | 0.96 | 2.85 | 1.2 | 5.1 | 0.80 | 9.4 | 40 |
| SE620-0050 | 50 | 1.41 | 4.22 | 2.5 | 9.0 | 0.66 | 7.7 | 40 |
| SE620-0100 | 100 | 2.81 | 8.45 | 2.8 | 10.1 | 1.21 | 14.3 | 40 |
| SE630-0200 | 200 | 5.64 | 16.91 | 5.7 | 19.8 | 1.12 | 13.2 | 60 |
| SE630-0400 | 400 | 11.24 | 33.81 | 3.7 | 13.4 | 3.52 | 41.6 | 60 |
| SE640-0750 | 750 | 21.07 | 63.37 | 5.7 | 19.1 | 4.23 | 50.1 | 76 |
| SE650-1000 | 1000 | 34.69 | 92.93 | 7.8 | 24.5 | 4.87 | 19.3 | 100 |
| SE650-1500 | 1500 | 43.37 | 130.11 | 8.3 | 26.5 | 5.81 | 22.9 | 100 |

