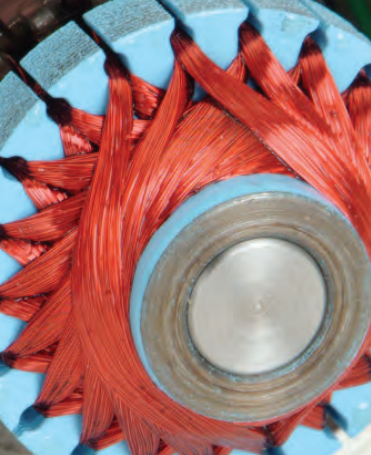


TORQUE SYSTEMS

# Brush Motor Product Guide



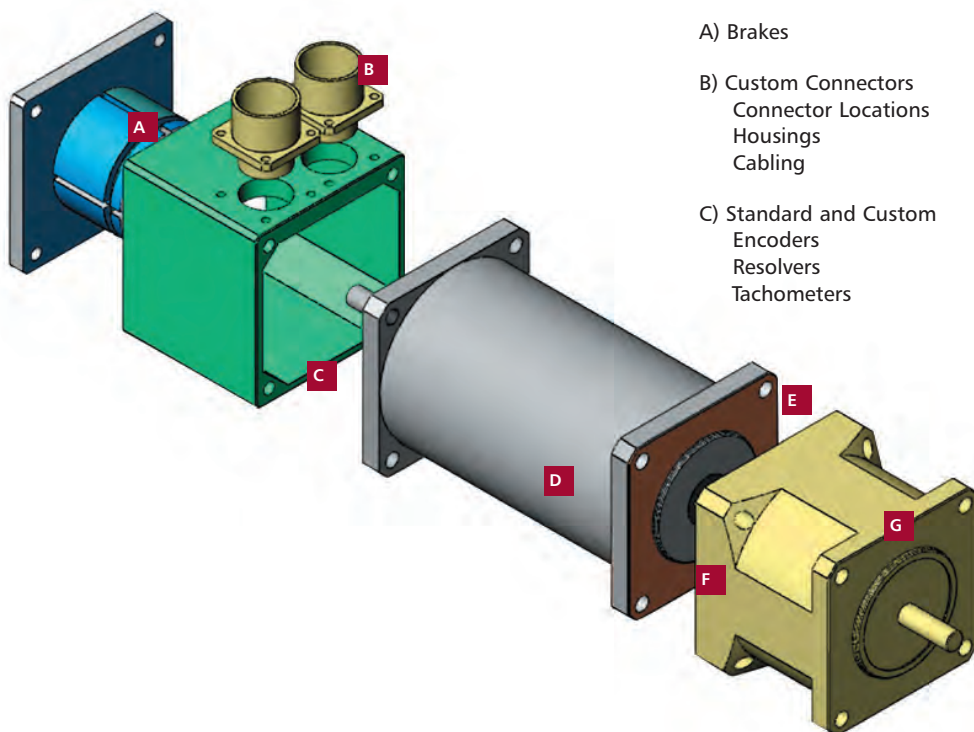


## We can offer you more because we have more behind us.

At SLMTI Torque Systems, we have always believed in giving you more choices. After all, your application is unique, so the servomotor you choose for it should be unique too. While the competition stacks their shelves with motors and hardware, we pack ours with engineered solutions. The truth is, our shelf contains just about any type of solution you could require, from simple integration components such as brakes, encoders and tachometers, to elaborate breakthrough designs.

To complement our line of Brush Servomotors, we offer you a wide range of standard integration and custom engineered options to complete your solution.

### Our typical standard integration options include:



- A) Brakes
- B) Custom Connectors  
Connector Locations  
Housings  
Cabling
- C) Standard and Custom  
Encoders  
Resolvers  
Tachometers
- D) Multiple Standard  
Winding Configurations  
Matched Windings  
Thermostats
- E) Standard Flange  
Mounting  
NEMA Mounting  
IEC Mounting  
Custom Mechanical  
Interfaces
- F) Standard & Custom  
Shaft Configurations
- G) Multiple Gearhead  
Options

When you come to us for your Brush DC Servomotor solutions you also get the experience and knowledge of our highly trained sales force to guide you through the selection process. They will work side-by-side with you to fully understand your application, so they can give you an accurate appraisal of how the best solution can be created. Next, our application development engineers will step in and work directly with you to ensure you receive a reliable, high-quality working solution.

Plus, with Torque Systems, as a design engineer, you even have the opportunity to size motors and select many standard integration options using our convenient web site servomotor platform configuration feature. Just visit [www.torquesystems.com](http://www.torquesystems.com) to begin the process.

**Simply put:** Torque Systems will design a product to fit your application — rather than altering your application to fit our product.

### Our typical custom engineered options include:

- Extended Ambient Temperature Ratings
- Custom Winding Configurations
- Special Electromagnetic Design Platforms
- Specialized Military Coatings
- Corrosion Resistant Materials
- Food Grade Materials
- Custom Bearings
- Witness Testing
- IP65 Sealing

# Brush Servomotor Platforms


Key: ■ Continuous Duty ■ Intermittent Duty ■ Commutation

## STANDARD DESIGN FEATURES:


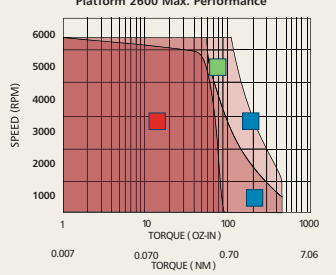
CE/UL and ROHS Compliant  
 Multiple Winding Availability  
 Sealed Bearings  
 Chip Resistant Painted Steel Housings  
 Superior Low Speed Performance

## RIGID APPLICATION DEVELOPMENT PROCESS:


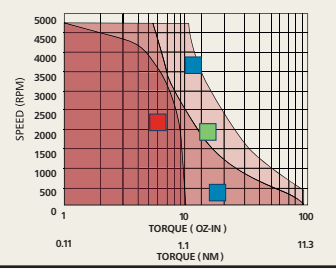
Application Review  
 Motion Profile Analysis  
 Magnetic FEA Computer Simulation  
 Prototype Design  
 Performance Verification

Platform 2100		8 standard available windings							Platform 2100 Max. Performance	
	Platform Number	Rated Power W	Cont. Stall Torque oz-in	Torque NM	Peak Torque oz-in	Torque NM	Rotor Inertia			
	2105	15	12	0.085	50	0.353	0.0018	0.1271		
	2110	30	18	0.127	100	0.706	0.0031	0.2189		
	2115	60	30	0.212	150	1.059	0.0044	0.3107		
	2120	75	38	0.268	200	1.412	0.0057	0.4025		
	2130	115	53	0.374	300	2.119	0.0083	0.5862		

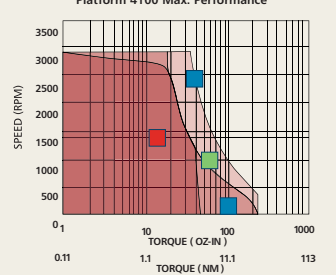
  

Platform 2600		8 standard available windings							Platform 2600 Max. Performance	
	Platform Number	Rated Power W	Cont. Stall Torque oz-in	Torque NM	Peak Torque oz-in	Torque NM	Rotor Inertia			
	2605	30	17	0.12	75.00	0.53	0.0018	0.1271		
	2610	45	29	0.20	150.00	1.06	0.0031	0.2189		
	2615	75	42	0.30	200.00	1.41	0.0044	0.3107		
	2620	90	52	0.37	300.00	2.12	0.0057	0.4025		
	2630	135	70	0.49	350.00	2.47	0.0083	0.5862		
2640	200	90	0.64	450.00	3.18	0.0115	0.8121			

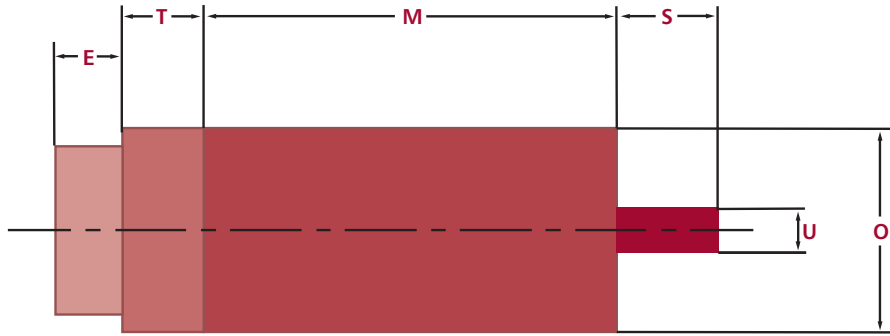
Platform 3500		8 standard available windings							Platform 3500 Max. Performance	
	Platform Number	Rated Power W	Cont. Stall Torque lb-in	Torque NM	Peak Torque lb-in	Torque NM	Rotor Inertia			
	3505	75	2.63	0.30	21.90	2.47	0.0004	0.4519		
	3509	100	4.25	0.48	37.50	4.24	0.0006	0.6779		
	3515	135	6.44	0.73	56.30	6.36	0.0008	0.9039		
3528	220	10.60	1.20	93.80	10.60	0.0015	1.6948			

Platform 4100		7 standard available windings							Platform 4100 Max. Performance	
	Platform Number	Rated Power W	Cont. Stall Torque lb-in	Torque NM	Peak Torque lb-in	Torque NM	Rotor Inertia			
	4101	175	12.00	1.36	60.00	6.78	0.0078	8.8128		
	4102	410	24.00	2.71	120.00	13.56	0.0110	12.428		
	4104	475	36.00	4.07	180.00	20.34	0.0180	20.337		
4106	580	48.00	5.42	240.00	27.12	0.0240	27.116			

Custom design motors up to 7.25 in. (185 mm) diameter and 300 lb-in. (34 NM) continuous torque also available.

## Nominal Motor Dimensions



Platform	Frame Length M -in. (mm)	Frame Diameter O -in. (mm)	Tach Addition, max T -in. (mm)	Encoder Addition, max E -in. (mm)	Shaft Extension S -in. (mm)	Shaft Diameter U -in. (mm)
2100	2105	3.13 (79.50)	2.25 (57.2)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
	2110	3.63 (92.20)	2.25 (57.2)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
	2115	4.13 (104.9)	2.25 (57.2)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
	2120	4.63 (117.9)	2.25 (57.2)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
2600	2130	5.63 (143.0)	2.25 (57.2)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
	2605	3.13 (79.50)	2.625 (66.7)	1.6 (40.6)	0.85 (21.6)	1 (25.4)
	2610	3.63 (92.20)	2.625 (66.7)	1.6 (40.6)	0.85 (21.6)	1 (25.4)
	2615	4.13 (104.9)	2.625 (66.7)	1.6 (40.6)	0.85 (21.6)	1 (25.4)
	2620	4.63 (117.9)	2.625 (66.7)	1.6 (40.6)	0.85 (21.6)	1 (25.4)
	2630	5.63 (143.0)	2.625 (66.7)	1.6 (40.6)	0.85 (21.6)	1 (25.4)
	2640	6.63 (168.4)	2.625 (66.7)	1.6 (40.6)	0.85 (21.6)	1 (25.4)
3500	3505	2.50 (63.50)	3.38 (85.9)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
	3509	3.25 (82.55)	3.38 (85.9)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
	3515	4.00 (101.6)	3.38 (85.9)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
	3528	5.24 (133.1)	3.38 (85.9)	1.5 (38.1)	0.85 (21.6)	1 (25.4)
4100	4101	7.19 (182.6)	4.00 (102)	0 0	1 (25.4)	2 (43.2)
	4102	8.19 (208.0)	4.00 (102)	0 0	1 (25.4)	2 (50.8)
	4104	10.2 (258.8)	4.00 (102)	0 0	1 (25.4)	2 (50.8)
	4106	12.2 (309.9)	4.00 (102)	0 0	1 (25.4)	2 (50.8)

### Notes:

Additional including brakes, resolvers, rear shaft extensions, sealed motors will increase overall length

Shaft Extension includes motor face pilot height

Connectors, connector housings, brush housings and mounting flanges may increase overall diameter

Nema and IEC mounting standards available

Motor Dimensions Subject to Change

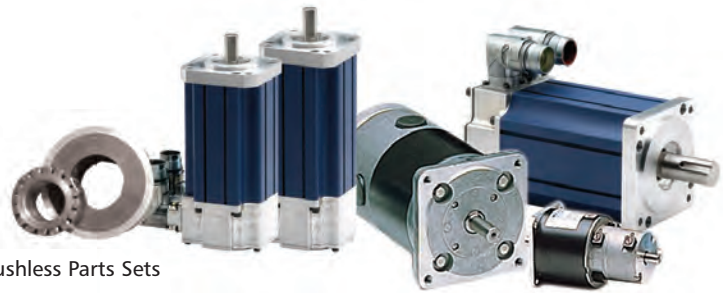
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