

# D Series Motors

## Frameless Motors



Designed to meet the robotic and automation demands of the market. Light weight for Low Inertia, High Efficiency, High Torque Density and Compact Size.

**Torque Range (Continuous):** .165 Nm to 4.3 Nm

**Torque Range (Peak):** .495 Nm to 12.9 Nm

**Rated Voltages:** 12Vdc – 60Vdc, 110Vac – 600Vac

**Power:** .1 KW to 1 KW

**Warranty:** One year limited warranty



### Product Features

- High torque to inertia ratio
- High torque density
- Accuracy and resolution to suit your application
- Supported by rigorous testing for performance and reliability
- Small Package Size with Low Rotor Inertia
- Customizable for drop in applications

### Product Overview and Options

#### The D Series is designed to provide:

- Cost effective design utilizing machine frame & bearings
- Compact Size
- Large rotor ID for convenient cable routing
- Direct Load Coupling
- Option of Hall Effect Sensors
- Low Cogging Torque
- 155 C rating for continuous operation
- UL agency recognition
- RoHS Compliant
- Machine Wound for high reliability

#### Typical Applications:

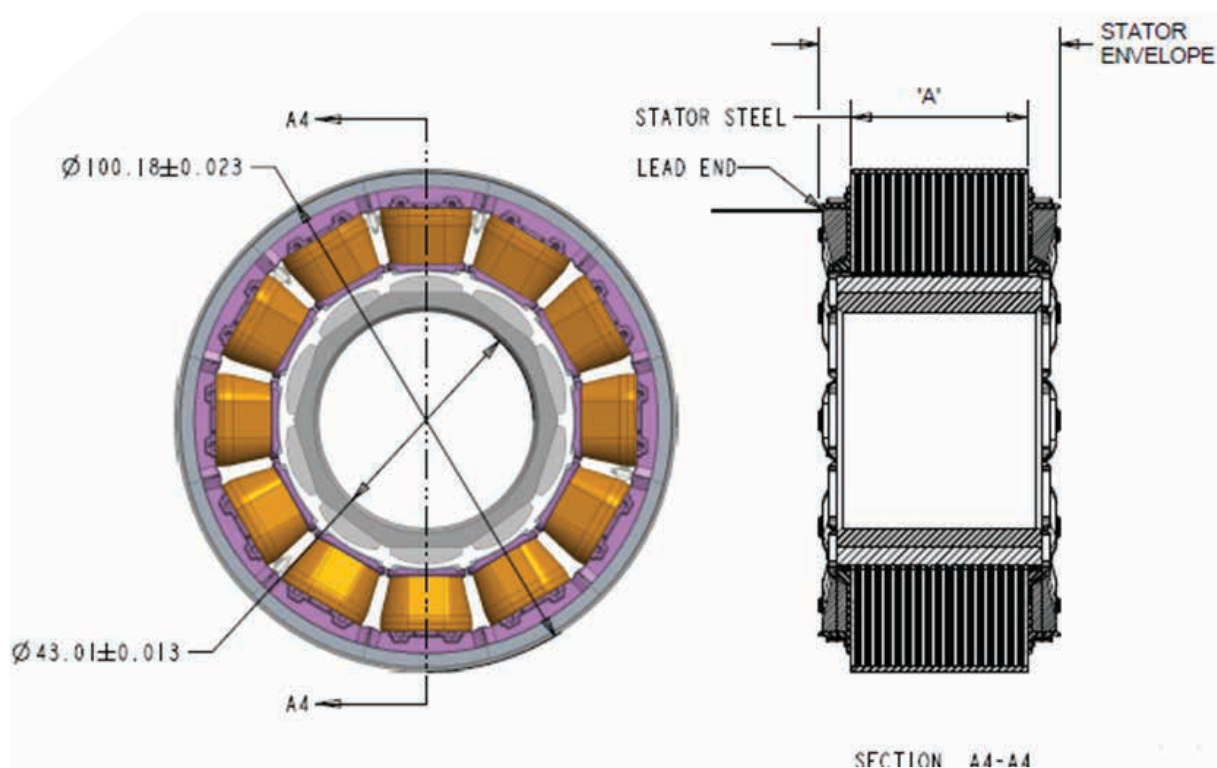
- Robotics
- Packaging Equipment
- Medical Equipment
- Indexing and positioning
- Pumping
- General purpose equipment



## Specifications

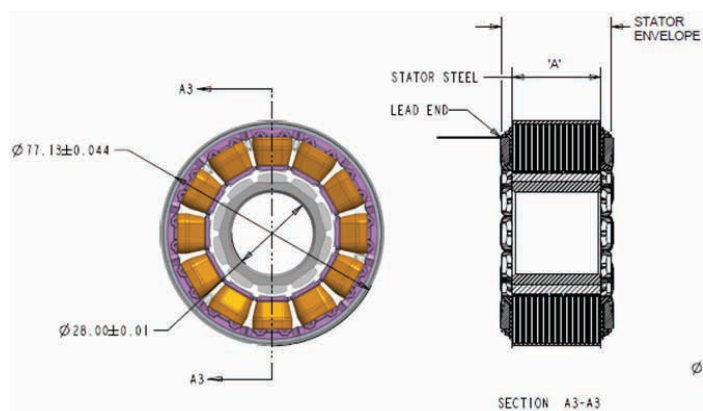
Part Number	D35	D52	D64	D77	D100
Stack Height Range (mm)	15-35	15-35	15-35	20-50	25-75
Ref stack height for data below	20.5	18.5	25.5	28	35
Continuous stall torque (Nm)	0.175	0.55	1.1	2.4	4.4
Peak torque (Nm)	0.495	1.35	3	6.9	12.9
Standard inertia (kgcm <sup>2</sup> )	0.013	0.047	0.158	0.445	1.593
Insulation rating (deg C)	155	155	155	155	155
Stator weight (kg)	0.077	0.172	0.417	0.635	1.193
Rotor weight (kg)	0.027	0.045	0.099	0.158	0.326
Number of poles	6	6	8	10	10
Ke @ 1000 rpm (V/krpm)	3.3	7	9	9.3	11.2
Kt @ 1000 rpm (Nm/A)	0.045	0.11	0.139	0.144	0.17
Rated torque (Nm)	0.165	0.45	1	2.3	4.3
Stall current (A)	3.8	4.5	8	16.5	25
Rated power (kW)	0.1	0.14	0.31	0.72	0.99
R (ph-ph) (Ohms)	2.6	1.55	0.74	0.24	0.1
L (ph-ph) (Ohms)	1	1.92	1.1	0.6	0.42

## Motor Dimensions

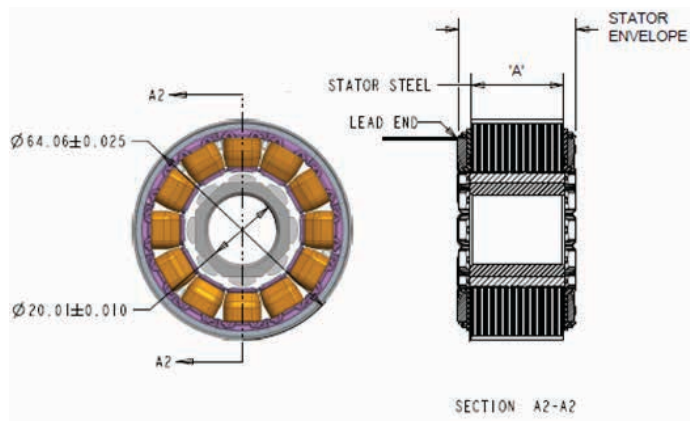


**D100**

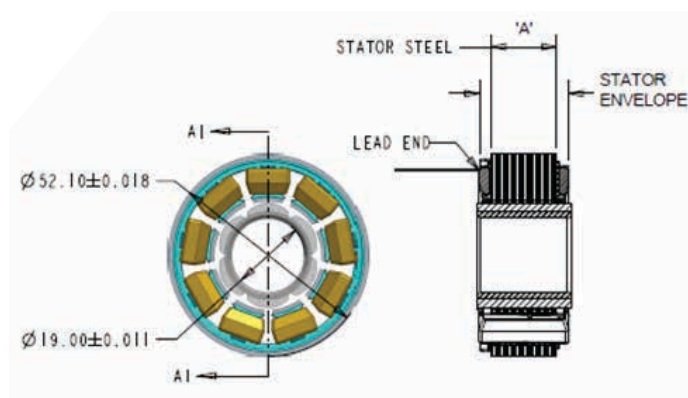
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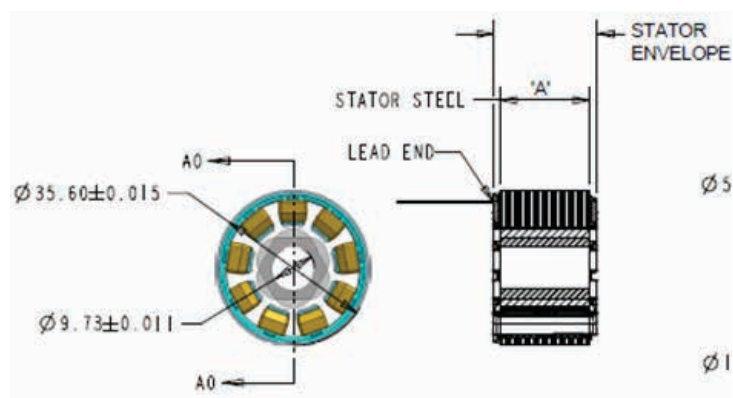
**D77**



**D64**



**D52**



**D35**

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