

Endurance 25 Series Permanent-Magnet DC Brush Motors

2.5-inch Diameter, Fixed or Replaceable Brushes

Allied Motion's Endurance 25 series of 2.5-inch (64 mm) diameter PMDC brush motors are a cost-effective solution for a wide range of commercial applications in mobile HVAC systems, pumps, and electric linear actuators.

Standard winding voltage is 12 VDC, and 24 VDC up to 115 VDC designs are available upon request. Rated power output is up to 1/5 HP.

Endurance 25 models are especially suited to battery-fed applications. They offer excellent performance, long service life, and high reliability. Custom design versions are available to exactly match application needs.

Features and Benefits

- Gloss-black, fully-dipped 2.5-inch (64 mm) diameter field housing
- Rugged zinc die-cast end frames
- Continuous power output up to 1/5 HP (0.15 kW)
- Rated speed up to 3500 RPM
- Self-aligning bronze sleeve bearings
- IP54 protection level
- Optimized brush life
- Class B (130 °C) winding insulation
- High strength ceramic magnets
- 5/16-inch (8 mm) cold-rolled steel shaft

Options

- Choice of fixed or replaceable brush designs
- Customized shaft, mounting, and lead configurations to match application requirements
- Sealed ball bearings
- Stainless steel shaft
- Economical stamped steel end frame versions
- EMI/RFI suppression circuit
- High temperature Class H (180 °C) winding insulation
- IP56 sealing (wash-down version)
- E-coated, chrome- or zinc-plated housing
- Vented end frames
- Overload protection
- Thermal protection
- High strength steel thru bolts



- 1/5 HP, 2.5-inch diameter PMDC brush motor
- 12 VDC winding voltage with up to 48 VDC available for fixed brush models
- 12 VDC winding voltage with up to 115 VDC available for replaceable brush models
- Rated torque up to 60 oz-in (0.42 Nm) and rated speed up to 3500 RPM

SPECIFICATIONS

Model*	Weight lb (kg)	Winding Voltage VDC	Rated Torque oz-in (Nm)	Rated Speed RPM	No-load Speed RPM	Current			Rated Power HP (W)
						Pk A	Rated A	NL A	
ENA-025Q0000	1.0 (0.46)	12	10 (0.07)	3000	3300	7	3.5	1	0.03 (22)
ENA-025Q2000	1.5 (0.68)	12	20 (0.14)	2600	3200	7	5	1	0.05 (38)
ENA-025Q3000	2.0 (0.91)	12	30 (0.21)	3150	3900	12	9	1.5	0.09 (70)
ENA-025Q4000	2.5 (1.13)	12	40 (0.28)	2950	3800	14	11	2	0.12 (87)
ENA-025Q6000	3.0 (1.36)	12	50 (0.35)	3500	4250	20	16	2	0.17 (129)
ENA-025Q7000	3.5 (1.59)	12	60 (0.42)	2800	4000	20	16	2	0.17 (129)
ENA-025Q8000	4.0 (1.81)	12	60 (0.42)	3400	3800	20	16	2.5	0.20 (150)

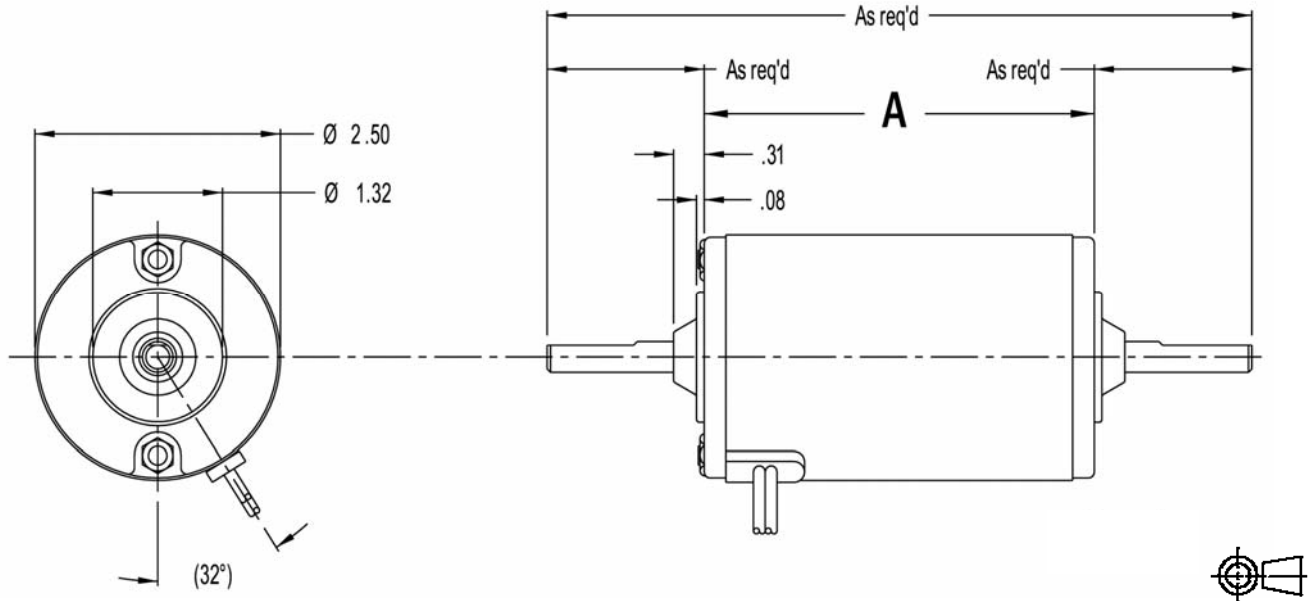
Values above are nominal for a 12 volt DC motor. Contact Allied Motion for specific model performance.

* Replace "Q" with "W" in model number for replaceable brush version.

PMDC Motors

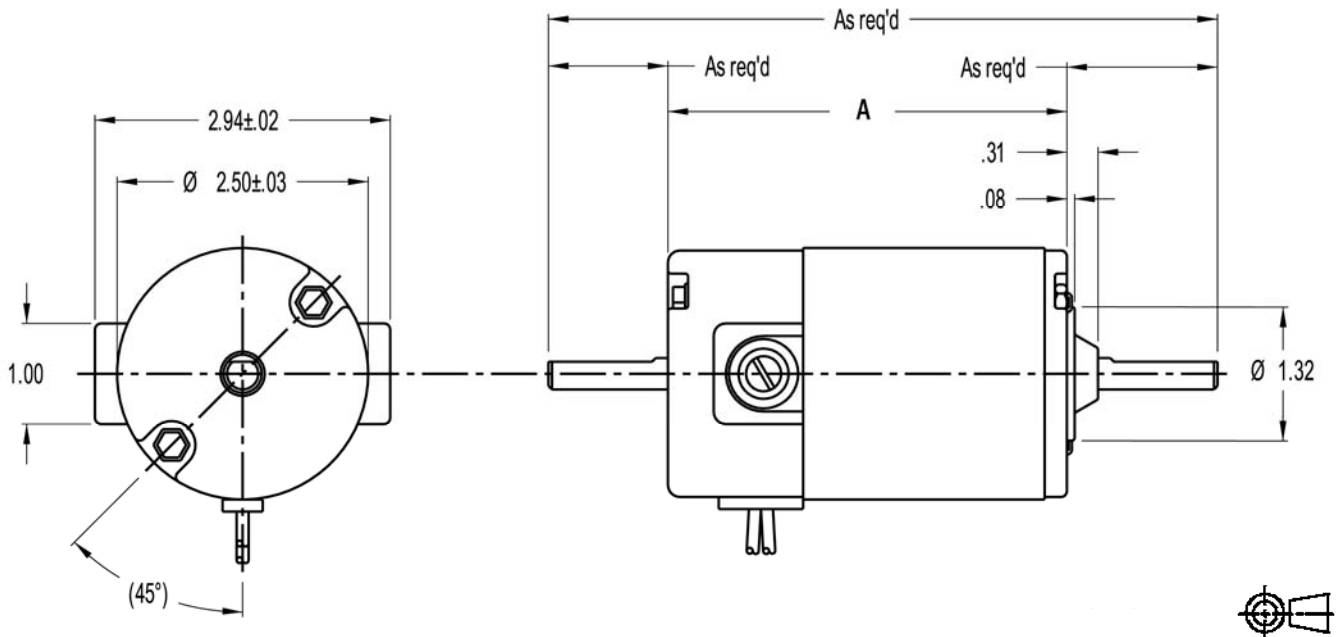
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DIMENSIONS (FIXED BRUSH)



MODEL	ENA-025Q0000	ENA-025Q2000	ENA-025Q3000	ENA-025Q4000	ENA-025Q6000	ENA-025Q7000	ENA-025Q8000
Length A in (mm)	2.97 (75.4)	3.22 (81.8)	3.47 (88.1)	3.72 (94.5)	3.97 (100.8)	4.28 (108.7)	4.47 (113.5)

DIMENSIONS (REPLACEABLE BRUSH)

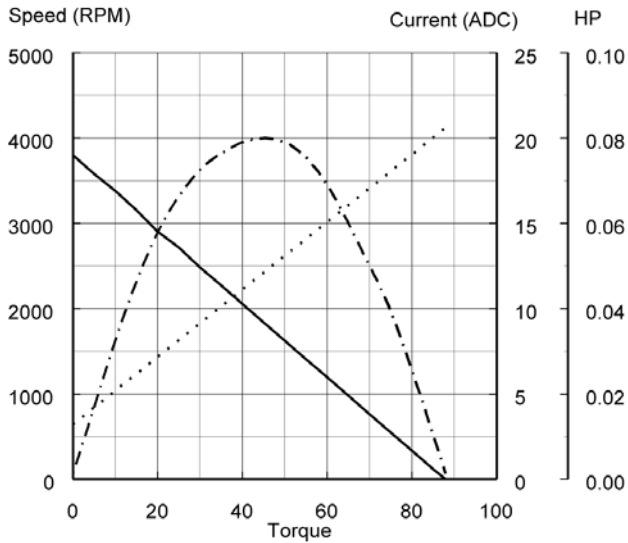


MODEL	ENA-025W0000	ENA-025W2000	ENA-025W3000	ENA-025W4000	ENA-025W6000	ENA-025W7000	ENA-025W8000
Length A in (mm)	3.47 (88.1)	3.72 (94.5)	3.97 (100.8)	4.22 (107.2)	4.47 (113.5)	4.72 (119.9)	4.97 (126.2)

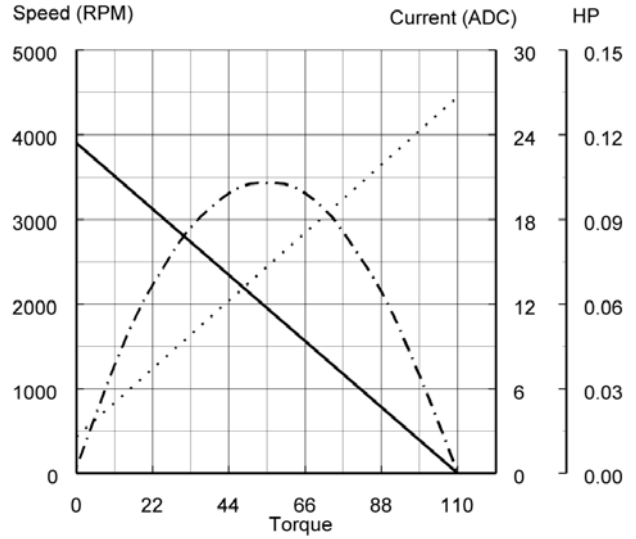
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PERFORMANCE

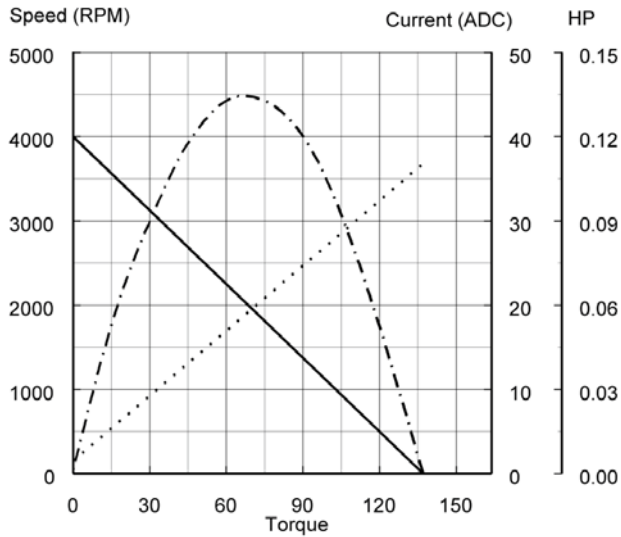
ENA-025Q0000



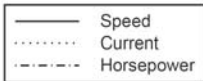
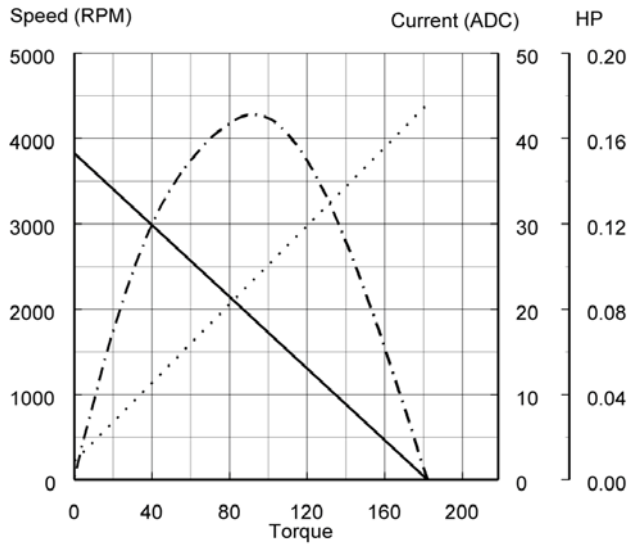
ENA-025Q2000



ENA-025Q3000



ENA-025Q4000

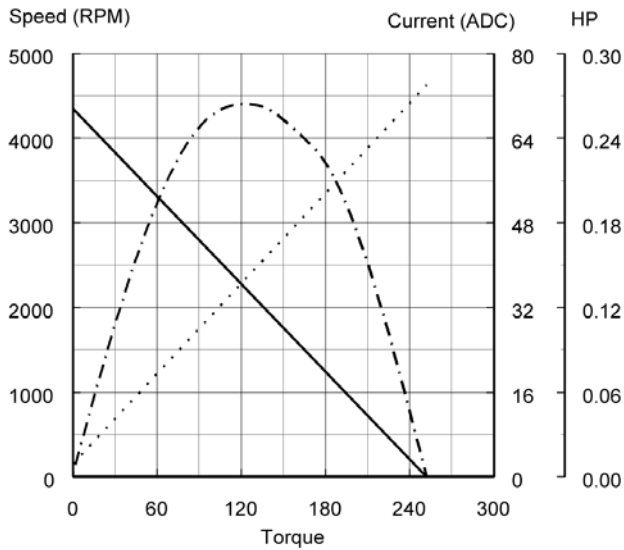


PMDC Motors

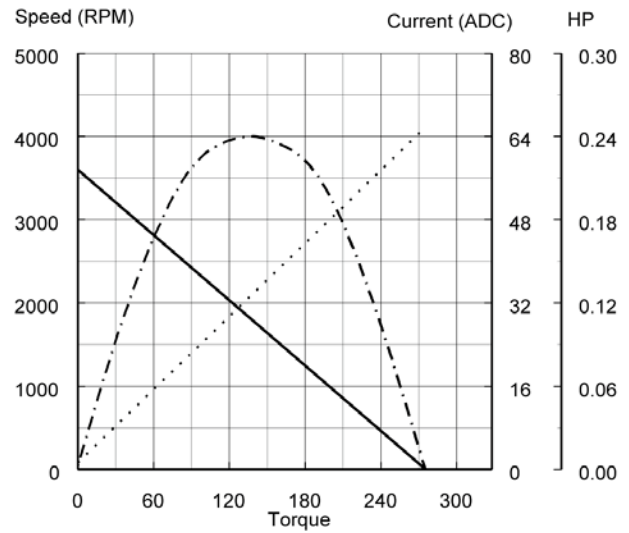
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PERFORMANCE

ENA-025Q6000



ENA-025Q7000



ENA-025Q8000

