

# FRAMELESS BRUSHLESS DC (BLDC) MOTORS

BEI Kimco’s frameless motor part set design allows for the motor to be fully integrated within the customer assembly resulting in the highest ratio of torque to volume. In this configuration the motor’s rotor and stator are housed within the customer’s “next higher” assembly utilizing a common shaft and bearing system. This results in increased coupling efficiencies, reduced system size, weight and cost. The high magnetic pole count pancake “Torquer” motor produces exceptionally low cogging for smooth low speed operation and high accuracy positioning applications.



## Features

- Highest energy product permanent magnet rotor design for improved efficiency
- High pole count rotor for smooth operation
- Proprietary magnetic circuit design for optimal efficiency
- Low torque ripple
- Encapsulated Stator assemblies for improved thermal performance

## CONFIGURATIONS

Part Number	Peak Torque (N-m / oz-in)	Continuous Stall Torque (N-m / oz-in)	Motor Constant (N-m/√watts)/(oz-in/√watts)	Weight (g/ oz)
DIP11-11-001A	0.011/6	0.03/4.58	0.014/1.97	51/1.8
DIP20-06-HPZ	0.099/14	0.029/4.2	0.012/1.7	59.5/2.1
DIP20-09-HPZ	0.3/43	0.06/9.5	0.023/3.23	127.5/4.5
DIP16-08-008A	0.14/20	0.1/14.7	0.032/4.61	68/2.4
DIP-13-09-001A	0.26/36.3	0.1/13.8	0.037/5.29	82.2/2.9
DIP13-12-012A	0.16/22.8	0.05/7.4	0.01/2	70.9/2.5
DIP13-12-004A	0.17/24	0.05/7.5	0.01/2	70.9/2.5
DIP20-19-HPZ	0.66/93	0.15/22	0.04/5	283.5/10
DIP30-07-001A	0.71/100	0.095/13.5	0.095/13.5	212.6/7.5
DIP24-11-001A	0.85/120	0.33/46	0.077/10.5	263.6/9.3
DIP37-12-024Z	1.13/160	0.35/50	0.063/8.92	1134/40
DIP21-22-002A	1.76/250	0.38/54	0.095/13.5	436.5
DIP38-18-001A	3.5/496	2.68/380	0.35/50	1134/40
DIP38-22-001A	9.18	3.05/423	0.385/54.6	2098/74

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