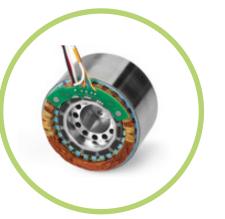


# | FRAMELESS BRUSHLESS DC (BLDC) MOTORS

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/ $\sqrt{watts}$ )/(oz-in/ $\sqrt{watts}$ )	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
				Page 1

Datasheets provided by Sensata Technologies, Inc., its subsidiaries and/or affiliates ("Sensata") are solely intended to assist third parties ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, valuation, and judgment in designing Buyer's systems and products. Sensata datasheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular datasheet. Sensata may make corrections, enhancements, improvements, and other changes to its datasheets or components without notice.

Buyers are authorized to use Sensata datasheets with the Sensata component(s) identified in each particular datasheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATASHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATASHEETS OR USE OF THE DATASHEETS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATASHEFTS OR USE THEREOR.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com. SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY, AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

Copyright © 2024 Sensata Technologies, Inc.

## CONTACT US

#### Americas

+1 (760) 597 7042 sales.beikimco@sensata.com **Europe, Middle East & Africa** +1 (760) 597 7042 support@sensata.com **Asia Pacific** sales.isasia@list.sensata.com China +86 (21) 2306 1500 Japan +81 (45) 277 7117 Korea +82 (31) 601 2004 India +91 (80) 67920890 Rest of Asia +603-5566 6001