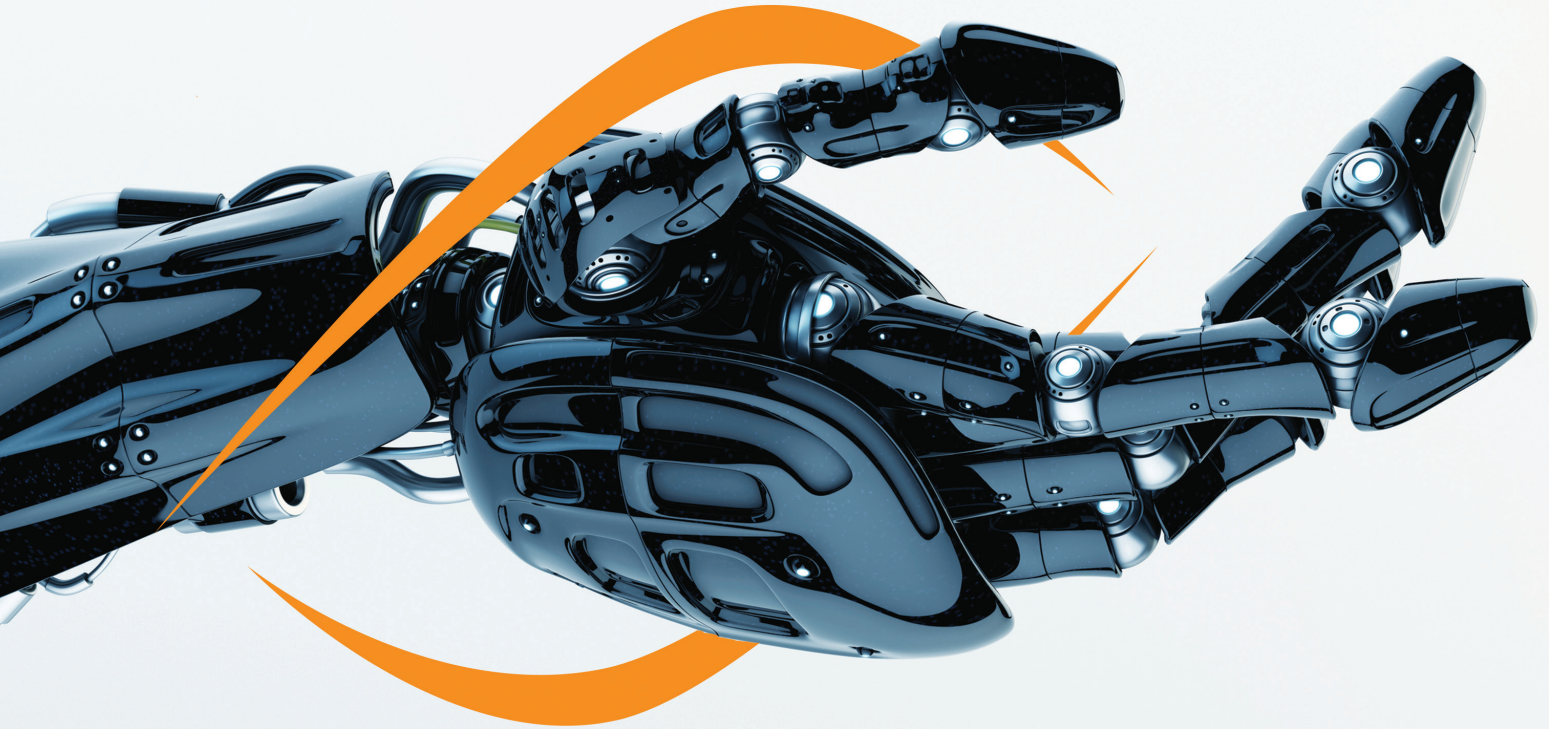
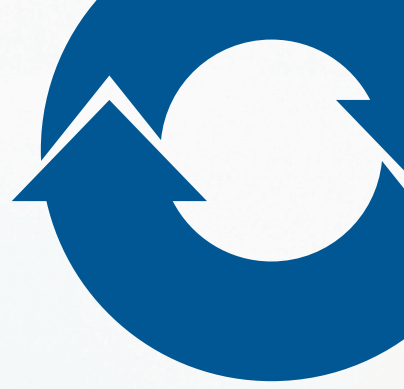


KINETIMAX BRUSHLESS



Brushless DC Motors with Integrated Drives

24 to 69 mm Diameter, 5 to 355 mNm Continuous Torque, 3 to 110 Watts Output



Allied Motion
An **Allient** Company

KINETIMAX BRUSHLESS DC

Motors with Integrated Drive



Allied Motion's KinetiMax series of brushless DC motors, along with the BL70, are brushless DC motors featuring integrated drive electronics. Available in six diameters with rated output power up to 110 W, these motors can be supplied with or without the electronics being integrated directly into the motor.

Featuring greater inertia and higher torque, which is inherent in outer-rotor designs, minimize cogging torque and maximize smoothness. High quality components ensure a reliable operating life of at least 20,000 hours.

KEY FEATURES & BENEFITS

Integrated Design:

Brushless DC motors with integrated drive electronics. Built with high-quality components, the KinetiMax 24 EB guarantees a minimum operating life of 20,000 hours.

Tachometer Output:

Two-wire version is as simple to control as a DC motor. Four-wire version for speed monitoring with tachometer output (18 pulses per rev). Five-wire version (18 pulses per rev) adds direction input.

Protection/Voltage Reversal:

IP-Rating level protection sealing. Motors includes reverse supply voltage protection, and thermal overload protection with automatic recovery.

Low EMI Compliance:

Meets EN 55014-1/2, 61000-6-1/3 (KinetiMax) / EN 55011, EN 55022, EN 50082-1 (BL70) standards.

Voltage Options:

6, 12, 24 or 42 VDC windings.

OPTIONS & ACCESSORIES

Customized Shaft/Mounting Flange:

Tailored to meet specific application requirements, including double shaft versions with front and back shafts.

Custom Leads and Connector Configurations:

Adaptable to various electrical connections.

Special Winding Configurations:

Optimized for specific performance characteristics.

Encoder and/or Gearbox Integration:

Provides additional torque and speed options, precise position and speed feedback.

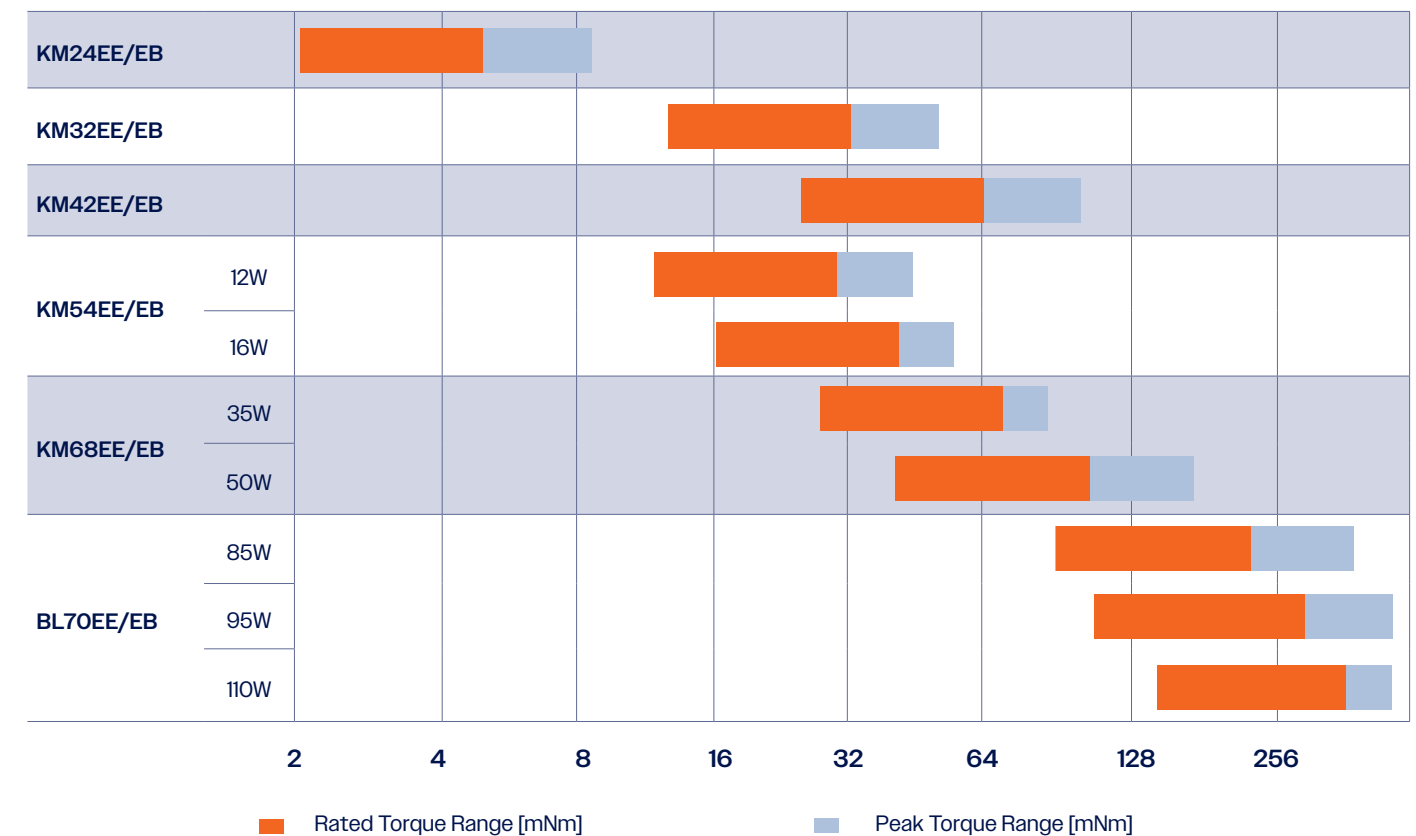
APPLICATIONS

The KinetiMax Series motors are well-suited for a variety of high-performance applications:

Including

- Agriculture Automated Guided Vehicles (AGVs)
- Actuators
- Conveyor Belt
- Document and Package Handling
- Small Pumps (membrane, gear, and peristaltic)
- Medical Equipment
- Small High-Performance Fans

PERFORMANCE COMPARISON



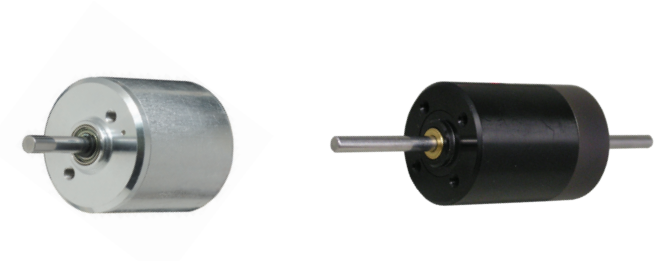
Allient.com | inquiry@allient.com

© 2025 Allient Inc. Issued: 03.06.2025
Specifications subject to change without notice

KINETIMAX

BRUSHLESS DC

Motors with Integrated Drives

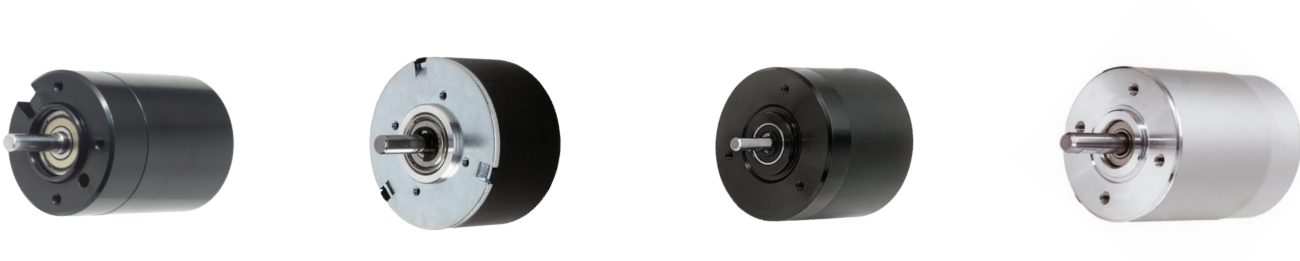


SPECIFICATIONS

Parameter	Symbol	KM24EE/EB	KM32EE/EB
Motor Voltage	Volt	6 - 24	12 - 24
Rated Output Power	Watt	2.2 - 2.7	12-16
Rated Speed	RPM	4300	4750
Rated Torque	mNm	5 - 6	32
Peak Torque	mNm	7 - 9	40 - 50
Rated Current	A	0.23 - 0.75	0.92 - 1.42
No load Speed (@ nominal supply voltage)	RPM	7150	6000
Rotor Inertia	kgm²	0.77	4.7
Operating Temperature Range	°C (°F)	0 - 90 (32 - 194)	
Weight	g	30	125
Motor diameter (D)	mm	24	32
Motor length (L)	mm	26.3	42.3
IP-Rating	mm	IP30	IP54

SERIES OPTIONS

	KM24EE/EB	KM32EE/EB	KM4EE/2EB	KM54EE/EB	KM68EE/EB	BL70EE/EB
Custom Shaft	X	X	X	X	X	X
Custom Mounting Plate	X	X	X	X	X	X
Rear Shaft	--	X	X	--	X	--
Encoder	--	X	X	--	X	--
Gearbox	--	X	X	X	X	X



KM42EE/EB	KM54EE/EB		KM68EE/EB		BL70EE/EB		
12 - 24	12 - 24		24		24 - 42		
29 - 30	12	16	35	50	85	95	110
4300	3800	3900	3650	3750	3800	3200	3000
65 - 70	30	40	70	110 - 170	215	285	355
72 - 100	45	55	90	120 - 180	300 - 400	350 - 480	380 - 480
1.75 - 3.50	0.8 - 1.45	1.05 - 1.6	2	3	2.7 - 4.3	3.2 - 5.0	3.6 - 5.5
5300	6200	6100	6000		4900	3950	3700
17.5	22	31	75	120	30	40	50
0 - 90 (32 - 194)			0 - 70 (32 - 158)		0 - 90 (32 - 194)		
225	200	250	450	550	1000	1300	1600
42	54		68		69		
53.0	30.4	37.3	49.1	62.1	95	109	123
IP54			IP55		IP67		

DIMENSIONS

