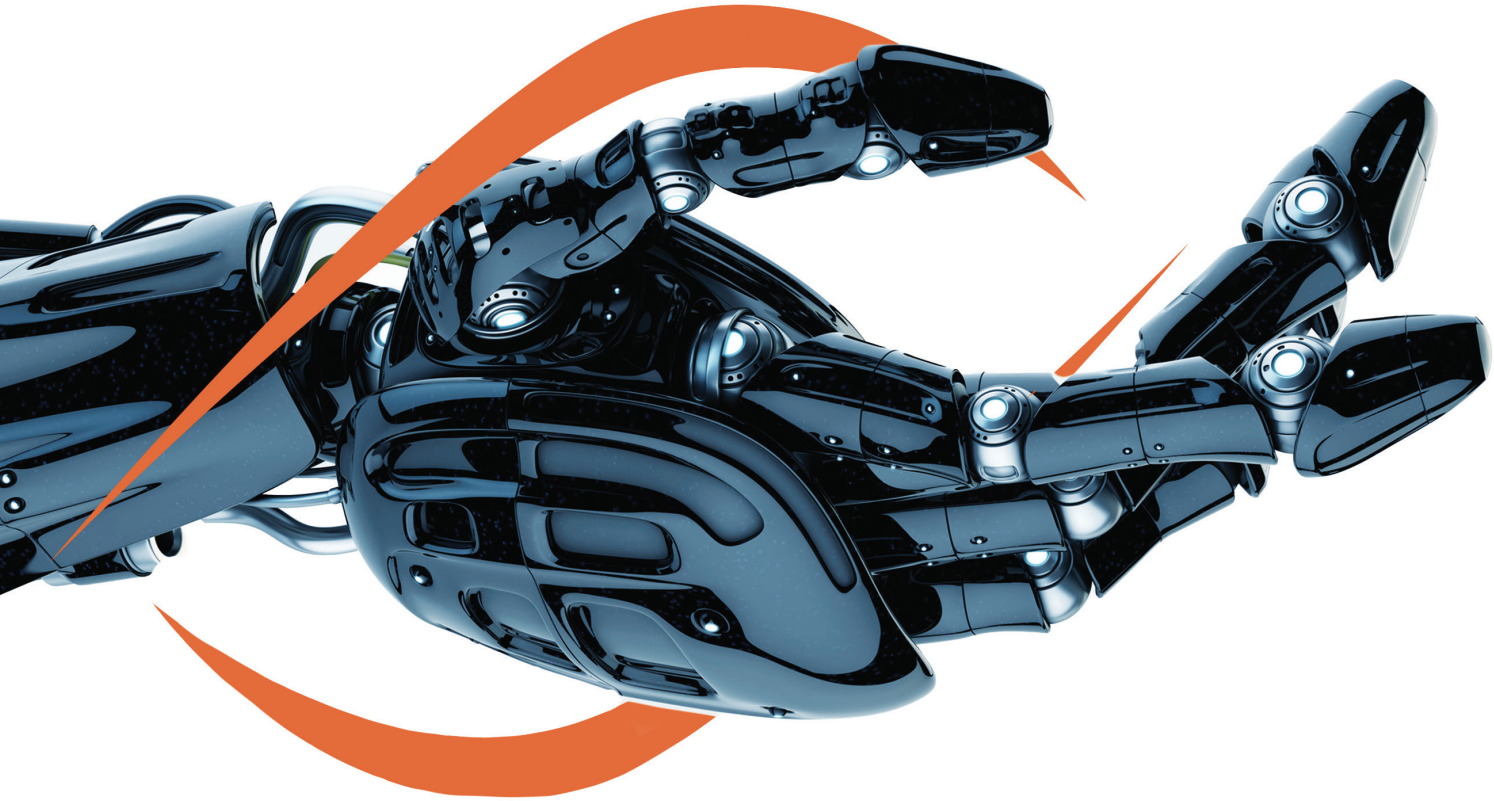
KINETIMAX HOUSED HPD



High Power Density Housed Torque Motors | Brushless DC Motors

Six diameters | Multiple power and torque configurations



Allient
DORDRECHT



450 Engineers Globally



Technology Know How Company



Innovate to Change the Game



Collaboration Enables Unique Solutions



Leverage Expertise to Solve Customers' Critical Problems



MOVING What Matters

Allient Dordrecht B.V. is part of Allient Inc., a global technology company specializing in Motion, Controls and Power Quality solutions. We are a customer-oriented specialist in the design and manufacturing of outer-rotor brushless DC motors, with or without integrated electronics, delivering tailored solutions that improve the performance and reliability of customer products and systems.

Our technologies are used in a wide range of applications. By combining engineering expertise with application-specific solutions, we help customers meet their unique technical challenges.



Material Handling
Enabling AGVs and AMRs with efficient, reliable and precise motion control, ensuring smooth navigation, safe operation and productive material flow.



Medical
Providing precision motor solutions for ventilators, respiratory devices and medical equipment, where reliability, efficiency and consistent performance are essential.



Pumps
Designed for pumps in medical, laboratory and industrial applications, delivering efficient, reliable and long-lasting performance in demanding environments.



Robotics
Empowering robotic systems and collaborative robots with accurate motion control, delivering precision, responsiveness and reliability for advanced automation applications.



Aerospace & Defense
Supporting UAVs, drones, aerospace and defense systems with lightweight, high-performance motor solutions delivering precision, efficiency and reliability.



Agriculture
Driving agricultural machinery and precision farming equipment with efficient, robust and reliable motion solutions for modern farming operations.

Our focus is on delivering innovative motion solutions and engineering excellence that help customers improve the performance, efficiency and reliability of their products and systems. Through close collaboration and a customer-centric approach, we support the industries we serve worldwide.

KINETIMAX HOUSED HPD

Brushless DC Outer-Rotor Motors



The KinetiMax™ Housed HPD (High Power Density) Series is built around the proven KinetiMax™ Frameless HPD motor, combining advanced outer-rotor technology with a fully integrated housing solution. Delivering exceptional torque-to-size ratio, these high-performance brushless DC motors provide outstanding torque density, smooth servo operation and simplified system integration.

Excellent efficiency across a speed-torque range makes them ideal for industrial and battery-powered applications. The series delivers maximum performance while minimizing system weight and installation space, enabling machine builders to achieve more in a compact footprint.

KEY FEATURES & BENEFITS

High Torque Density:
Exceptional torque and power density from a compact, lightweight motor package for space-constrained applications.

Complete Motor Solution:
Integrated housing, bearings and shaft simplify machine design, reduce assembly effort and accelerate integration.

High Efficiency & Precise Motion Control:
Excellent efficiency, low cogging torque and smooth servo performance ensure accurate, reliable operation.

Proven KinetiMax™ HPD Technology:
Built on the proven KinetiMax™ HPD platform, leveraging advanced outer-rotor technology and electromagnetic design.

Flexible Platform Design:
Six motor diameters with multiple power and torque configurations provide optimal matching for diverse applications.

European Engineering Excellence:
Designed and manufactured in Europe, backed by Allient's global expertise and industry-leading motion technology.

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Specifications subject to change without notice

OPTIONS & ACCESSORIES

Feedback Devices:
Encoders, Hall sensors and temperature sensing.

Gearboxes:
Optional gearboxes for optimized speed and torque.

Brakes:
Integrated brakes for holding and positioning.

Integrated Electronics:
Optional integrated electronics.

Connectivity:
Flexible connector options.

Mounting Options:
Flexible mounting options.

APPLICATIONS

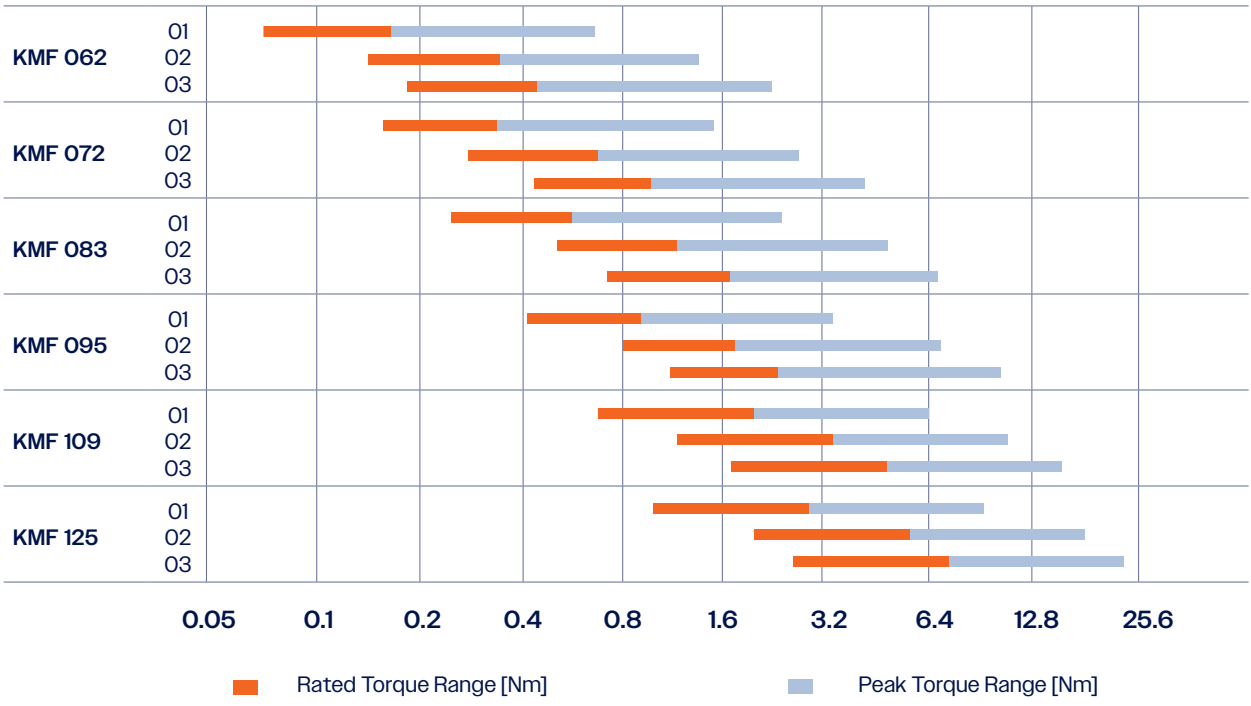
The KinetiMax™ Housed HPD Series delivers high-performance motor solutions designed to meet the demands of wide range of applications:

Including

- Industrial Automation
- Robotics & Cobots
- Medical & Life Science
- Pumps & Fluid Handling
- AGV / AMR Systems
- Material Handling
- Electronics Manufacturing
- Semiconductor Equipment
- Packaging Machinery
- Precision Motion Control

PERFORMANCE COMPARISON

Rated Torque [Nm]:



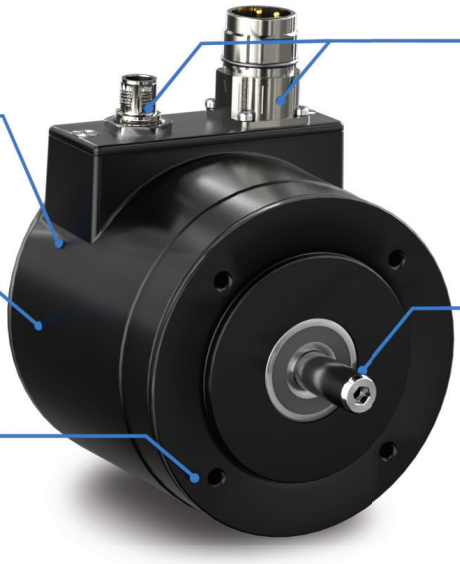
KINETIMAX HOUSED HPD

Brushless DC Outer-Rotor motors

SPECIFICATIONS

Parameter	Symbol	KMH 062			KMH 072		
		01	02	03	01	02	03
Motor voltage	Volt	48	48	48	48	48	48
Rated Output Power	Watt	100	124	134	177	210	227
Rated Speed	RPM	4000	3100	2800	3600	2600	2300
Rated Torque	Nm	0.16	0.32	0.44	0.34	0.68	0.94
Peak Torque	Nm	0.54	1.07	1.61	1.09	2.18	3.27
Rated Current	A	2.5	3.1	3.4	4.4	5.2	5.6
Rotor Inertia	kgm^2	4.6E-05	6,4E-05	8.3E-05	9.0E-05	1.3E-04	1.6E-04
Operating Temperature Range	°C	0 -90	0 -90	0 -90	0 -90	0 -90	0 -90
Weight	kg	0.47	0,56	0.64	0.74	0.87	1.00
Motor diameter D	mm	73			84		
Motor length L	mm	61	67	73	65	72	79
IP-Rating	mm	IP54	IP54	IP54	IP54	IP54	IP54

OPTIONS



Feedback signals Driverless options
Hall Sensing (Analog or Digital Halls or HES1
002 Encoder)
Temperature Sensor

Connectivity
Standard Connectors
Variations in Type Possible
Cable + Gland Options

Controls
Integrated Driver
Driverless

Shaft Options
Variation in Length
Variation in Shape

Mounting Plate
Standard Interface
Alternative Interfaces Possible

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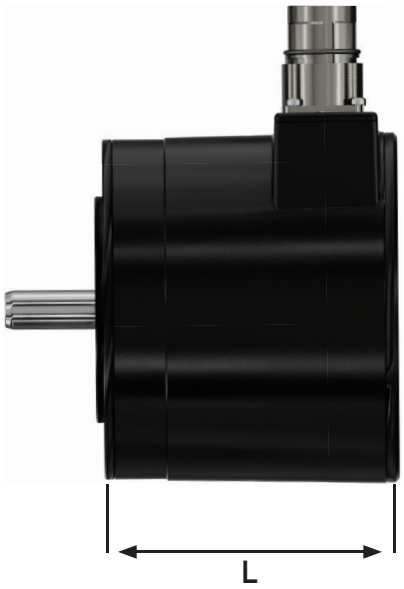
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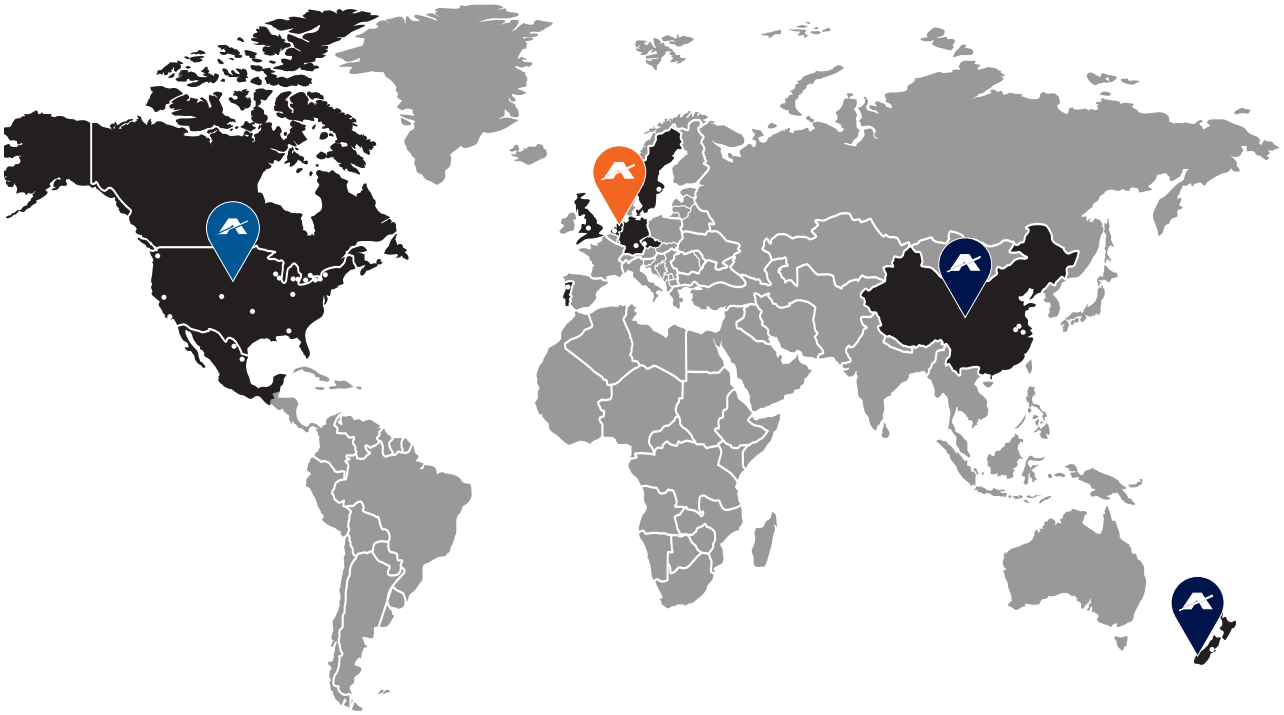
KMH 083			KMH 095			KMH 109			KMH 125		
01	02	03	01	02	03	01	02	03	01	02	03
48	48	48	48	48	48	48	48	48	48	48	48
253	290	326	347	394	430	461	523	561	624	693	748
3200	2300	2000	3000	2100	1800	2800	1900	1600	2600	1750	1400
0.58	1.13	1.63	0.92	1.80	2.52	1.43	2,83	3,90	2.29	4.40	6.30
1.67	3.33	5.00	2.50	5.00	7.50	3.78	7.55	11.33	5.70	11.39	17.09
6.2	7.0	7.8	8.4	9.4	10.3	11.0	12.5	13.3	14.8	16.4	17.6
2,2E-04	3,0E-04	3,9E-04	3.7E-04	5.1E-04	6.6E-04	8.2E-04	1.1E-03	1.5E-03	1.4E-03	2.0E-03	2.5E-03
0 -90	0 -90	0 -90	0 -90	0 -90	0 -90	0 -90	0 -90	0 -90	0 -90	0 -90	0 -90
1.13	1.33	1.53	1.70	2.00	2.30	2.57	3.02	3.47	3.87	4.56	5.24
	95			108			123			140	
69	77	85	74	83	92	79	90	100	86	98	109
IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54

DIMENSIONS





Global Presence & International Support



Allient Dordrecht, NL is part of Allient Inc.
Headquartered in Buffalo, NY, USA.

With 27 locations worldwide, including 6 in Europe, Allient Inc. designs, manufactures, and sells precision motion control components and systems.

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