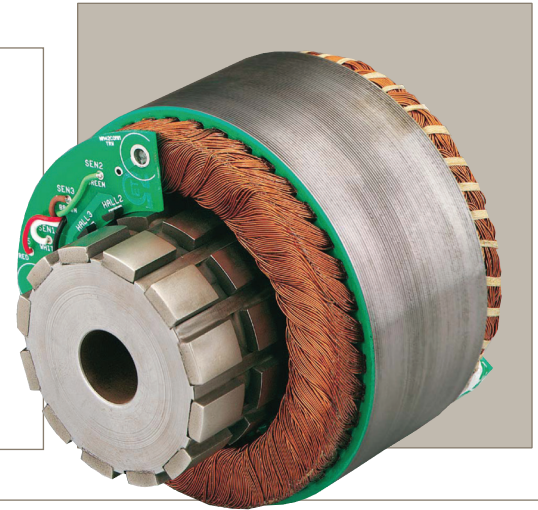


K Series Kit Motors

Frameless Kit Motors are the Reliable and Compact Approach to Build Your Own High-Performance Servo Motor



Direct drive motion construction gives equipment designers the advantages of lower costs, increased reliability and improved performance.

Frameless kit motors are the ideal solution for machine designs that require high performance in small spaces. Kit motors allow for direct integration with a mechanical transmission device, eliminating parts that add size and compliance. Using frameless kit motors results in a smaller, more reliable motor package. Direct drive motion construction gives equipment designers the advantages of lower costs, increased reliability and improved performance.



Features & Benefits:

- High torque from 0.5 in-lb (0.06 Nm) to 85.6 in-lb (9.7 Nm)
- High speeds up to 50,000 RPM
- Superior performance – high stiffness and better response
- High reliability – no mechanical transmission devices (couplings, flanges)
- Compact design – minimizes product size
- Low cogging - unique magnetic circuit design decreases cogging

Applications:

- Automotive
- Machine tool
- Material handling
- Packaging
- Robotics
- Semiconductor

When to Use:

- A significant cost savings
- Reduced mechanical complexity
- Greater design flexibility
- High performance in a compact package
- Improved dynamic response and settling
- Minimum motor size per application space
- Low cogging for smooth operation
- Low inertia for high acceleration

Contact Information:

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ENGINEERING YOUR SUCCESS.

K Series Kit Motors

Available Frameless Motors from Parker

Frame Size	Stack Length Range		Continuous Stall Torque		Peak Torque		Rotor Inertia		Core Loss	Winding-Amb Thermal Resist	Pole Count	Motor Weight	
	mm	in	Nm	in-lb	Nm	in-lbs	Kg-m ²	lb-in-sec ²				°C/W	#
	K032	12.7	0.5	0.08	0.7	0.26	2.3	3.2 ⁻⁷	2.8 ⁻⁶	0.06	3.44	4	0.07
25.4		1	0.14	1.2	0.45	3.9	6.3 ⁻⁷	5.6 ⁻⁶	0.12	3.44	4	0.12	0.27
50.8		2	0.23	2.0	0.73	6.4	1.3 ⁻⁶	1.1 ⁻⁵	0.24	3.44	4	0.26	0.57
K044	12.7	0.5	0.21	1.8	0.66	5.8	1.412 ⁻⁶	1.25 ⁻⁵	0.24	2.36	6	0.1	0.3
	25.4	1	0.36	3.2	1.16	10.2	2.9 ⁻⁶	2.6 ⁻⁵	0.49	2.36	6	0.22	0.49
	50.8	2	0.59	5.2	1.88	16.5	5.8 ⁻⁶	5.1 ⁻⁵	1.11	2.36	6	0.4	0.88
K064	12.7	0.5	0.59	5.1	1.86	16.3	9.0 ⁻⁶	8.0 ⁻⁵	0.78	1.68	8	0.29	0.63
	25.4	1	1.03	9.1	3.28	28.9	1.8 ⁻⁵	1.6 ⁻⁴	1.6	1.68	8	0.57	1.26
	50.8	2	1.73	15.2	5.48	48.2	3.6 ⁻⁵	3.2 ⁻⁴	3.23	1.68	8	1.13	2.49
K089	12.7	0.5	1.47	12.9	4.67	41.1	3.7 ⁻⁵	3.3 ⁻⁴	2.14	1.02	12	0.5	1.1
	25.4	1	2.59	22.8	8.23	72.4	7.8 ⁻⁶	6.9 ⁻⁵	4.42	1.02	12	1	2.2
	50.8	2	4.31	37.9	13.69	120.5	1.5 ⁻⁴	1.3 ⁻³	8.95	1.02	12	1.99	4.39
K178	12.7	0.5	8.44	74.2	26.77	235.5	4.7 ⁻⁴	4.1 ⁻³	9.1	0.5	18	2.4	5.29
	25.4	1	15.16	133.4	48.12	423.5	9.2 ⁻⁴	8.1 ⁻³	18.7	0.5	18	3.71	8.18
	50.8	2	25.74	226.5	81.74	719.3	1.8 ⁻³	1.6 ⁻²	37.4	0.5	18	6.34	13.98

Other stack lengths, windings and frame sizes are available. Contact Parker application engineering for more information.

Integrated Frameless Motors from Parker



Parker can review your frameless motor application to see if there is an opportunity for us to integrate your motor into a custom housing. Motor pictured includes the following features and benefits:

- High efficiency 48 volt servo (500 watts)
- Keyed hollow shaft
- Integrated 12 Nm holding brake
- Integrated incremental encoder

Applications include Automated Guided Vehicles used in:

- Warehouse retrieval
- Medical service
- Military service

