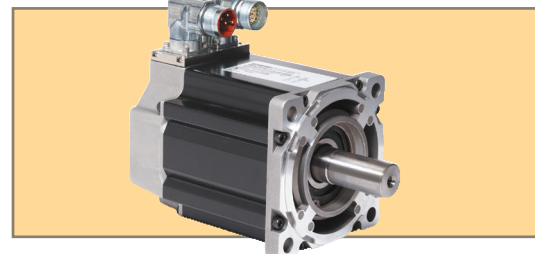


# Servo Motors

## Rotary Motor Selection Guide



This document provides a quick selection guide for Parker Servo Motors. To select the correct motor using the table below, use the columns in order going from left to right (starting with voltage). General motor descriptions are provided on page 2 of this document to assist in selecting the correct motor family. Additional information on each of the motors can be found on the product web pages. (See links in comments below)

		Voltage		Power (Watts)		Feedback										IP Rating*	Cost	Comments		
		120/240 VAC	480 VAC	Minimum	Maximum	Incremental (Up to 20,000 PPR)	Resolver, 12 bit (4096 PPR)	Heidenhain EnDat, 17bit (131,072 PPR)	BiSS-C, 20bits (1,048,576 PPR)	Stegmann Hyperface, 16bit (65,536 PPR)	Heidenhain EnDat, 19bit (524,288 PPR), 4096 turns	Stegmann Hyperface, 16bit (65,536 PPR), 4096 turns	BiSS-C, 18/19bits (262,144/524,288 PPR), 4096 turns	Sick/Stegmann Hyperface DSL, 18bit (262,144 PPR), 4096 turns						
															Single Turn Absolute					Multi-Turn Absolute
Motors	P-Series	●		50	1000											●		IP40	\$	Value priced servo motor <a href="http://bit.ly/Parker_PSeries">bit.ly/Parker_PSeries</a>
	BE	●		60	1600	●	●											IP54	\$\$	NEMA faced. Ideal for factory environment <a href="http://bit.ly/Parker_BE-Series">bit.ly/Parker_BE-Series</a>
	SM	●		60	640	●	●											IP40-IP65	\$\$	Slotless design, high inertia <a href="http://bit.ly/Parker_SM-Series">bit.ly/Parker_SM-Series</a>
	PM-DD	●		63	2513				●									IP40	\$\$\$\$	Direct Drive Rotary Table style <a href="http://bit.ly/Parker_PMDD-Series">bit.ly/Parker_PMDD-Series</a>
	K-Series	●		160	2370													n/a	\$	Frameless motor: Stator and rotor only <a href="http://bit.ly/Parker_Frameless-Series">bit.ly/Parker_Frameless-Series</a>
	EX	●		400	3900		●										●	IP40-IP65	\$\$\$\$	ATEX and UL674 Explosion Proof <a href="http://bit.ly/Parker_EX-Series">bit.ly/Parker_EX-Series</a>
	MPJ	●	●	520	7001	●	●	●		●	●	●				●		IP40-IP65	\$\$\$	High inertia version of MPP <a href="http://bit.ly/Parker_MPJ-Series">bit.ly/Parker_MPJ-Series</a>
	MPP	●	●	520	21,130	●	●	●		●	●	●				●		IP40-IP65	\$\$\$	Largest # of frame sizes. Flagship product <a href="http://bit.ly/Parker_MPP-Series">bit.ly/Parker_MPP-Series</a>
	MPW	●	●	1550	6260	●	●	●		●	●	●				●		IP69K	\$\$\$\$	Stainless motor for food & beverage apps <a href="http://bit.ly/Parker_MPW-Series">bit.ly/Parker_MPW-Series</a>
Drives	Compax3	●	●	850	87,500	●	●	●		●	●	●						IP20	\$\$\$	Controller. RS232/RS485, EthernetPow-erlink, EtherCAT, Profibus, CANopen, Devicenet, Profinet <a href="http://www.parker.com/emn/drives">www.parker.com/emn/drives</a>
	IPA	●		400	1500	●		●	●		●			●	●			IP20	\$\$	Controller. Ethernet 100 TCP, Ethernet/IP <a href="http://www.parker.com/emn/drives">www.parker.com/emn/drives</a>
	P-Series	●		400	3500	●		●	●		●							IP20	\$	USB, RS422. Fieldbus: EtherCAT, Modbus RTU, Step/Direction, Indexer <a href="http://www.parker.com/emn/drives">www.parker.com/emn/drives</a>
	PSD	●	●	680	17,000		●									●		IP20	\$\$	EtherCAT, Ethernet/IP, PROFINET <a href="http://www.parker.com/emn/drives">www.parker.com/emn/drives</a>

\*IP Ratings:  
 IP20 - Not protected from liquids or dust.  
 IP40 - Not protected from liquids.  
 IP54 - Protected from limited dust, water spray from any direction.  
 IP65 - Dust-tight, high pressure water jets.  
 IP69K - Dust-tight, high pressure & temp wash down.

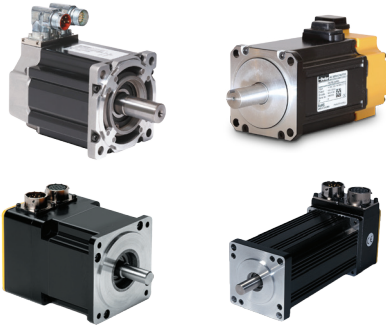


ENGINEERING YOUR SUCCESS.

## New Ulm, MN - Motor and Gearhead Business Unit



For 25 years, our New Ulm location has delivered high quality rotary servo motors, gearheads, and gearmotors. Standard products and core expertise support customer application development through the custom engineered solutions process. With a focus on providing a superior customer experience, the business unit has grown in industries such as automotive, aerospace, semiconductor, packaging, robotics, and more recently vehicle electrification. The New Ulm location has a strong foundation and is ISO 9001:2008 certified and AS 9001/TS16949 compliant.



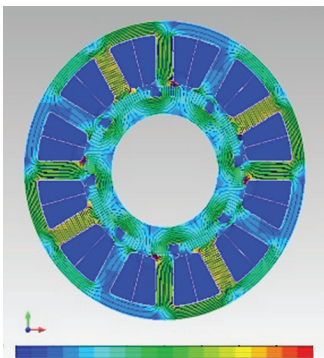
### Industrial Motors

Parker offers a wide variety of motors to meet the needs of many applications. Motor technologies that provide high power density, or better inertia matching. Motors that provide rapid acceleration or zero cogging. And still others offer the most competitive solution for high volume OEM opportunities. All are high performance brushless servo motors offering a wide range of power starting at 50 watts and going all the way up to 22 KW. Feedback options such as incremental and absolute encoders, resolvers and fail safe brakes are offered across the product lines.



### Standardized to Fit Your Environment Needs

Parker provides a variety of motors to meet unique application requirements. Motors that are designed to be explosion proof or are to be used in harsh washdown environments (**IP69k**) found in the food and beverage industry. Motors that can be directly coupled to what they are driving with a very high degree of positional accuracy as well as others that can be directly built into equipment to save space and to improve performance. All are high performance brushless servo motors with options such as incremental and absolute encoders, resolvers, and failsafe brakes.



### “Tailor-made” Motor Solutions

Parker’s ability to offer specialized motors is unmatched. Many of our standard motors can be customized to meet specific needs. Examples include unique windings to optimize power management, high speed motors up to 30,000 rpm, and special environments such as high/low temperature, clean room, or vacuum and mechanical modifications such as modified shafts or special connectors - even special coatings such as mil-spec paint or nickel plate. For the right opportunity, Parker will even design a motor from scratch such as one that powered an electric motorcycle for the commercial market. With a full team of design engineers under the roof of about 100,000 sq-ft manufacturing facility, Parker has the core competency to put the most demanding applications into motion.