



New Servo Motors and Options

Introducing higher inertia and a better solution for industrial applications.

Designed for the demanding applications found in today's high-performance servo systems, the new MaxPlus-J (MPJ) motors from Parker Hannifin offer the same design specifications as our popular MPP (MaxPlusPlus) motors but give users even higher inertia.



The secret to the MPJ's extra boost of inertia is its special inertia flywheel, which adds from three to 10 times the inertia of a standard MPP servo motor. This flywheel replaces the more expensive gearbox we traditionally added to the motor for applications where the customer has a high load-to-rotor inertia mismatch. Now, on applications where you would normally add a gearhead, you can just supply the customer with an MPJ motor – they'll save money and won't have to worry about the speed constraints normally associated with a gearhead.

The length of an MPJ is one stack longer than the standard MPP to which we are adding the inertia. For example, the length of the MPJ1152 motor is equivalent to that of an MPP1153. We take the stator and magnet stack of an MPP1152, and insert it into an MPP1153 housing, with an 1153 shaft. The "extra" rotor space on the motor shaft is now filled with an inertia flywheel.

MPJ motor features include:

- Segmented core technology - 40% higher torque
- Potted stator design - improved thermal efficiency
- Sizes 92, 100, 115 and 142
- Continuous torque: 1.3 Nm (12 lb-in) to 20 Nm (173 lb-in)
- Continuous stall torque: 1.5 Nm (14 lb-in) to 26 Nm (230 lb-in)
- Peak torque: 5 Nm (44 lb-in) to 82 Nm (726 lb-in)
- Brushless construction
- High-performance neodymium magnets
- Thermistor protection
- Resolver, incremental encoder, or absolute encoder (single or multi-turn)
- 24-volt failsafe brake (optional)
- Rotatable right-angle PS-style connectors
- Optional IP65 shaft seal
- Two-year warranty

Common customizations include:

- Shafts (longer, shorter, diameter change, hollow shafts)
- Front flange (bolt circle, pilot, NEMA dimensions)
- Motors coatings (white, PTFE, steel-it grey)
- Non-standard feedback devices
- Special connectors
- Special stator windings

More Motor News: Introducing the SM with FO connector option

For years, the SE16 and SE23 have been the motors of choice when space is at a premium. These motors were the shortest motors available, thanks to an exposed encoder, meaning there was no rear housing on this motor – the flying leads would come directly out of the encoder. Although the SE was a perfect motor for lab-type applications where it was dry, with no IP65 requirement, it had a strange rear-end cap design that was difficult to manufacture.

Parker now has a new flying lead solution: the SM with the FO connector option. This was made possible with a new style of encoder from Renco, which is mounted on the back of an SM motor with flying leads. The result is a superior solution that is actually shorter than the comparable SE motor.

Note: The SM with this new encoder uses wires that are smaller and of a different color than wires on the SE motors. If you want a higher quality motor with flying leads, the SM with FO connector option is the way to go.

For more information about Parker's entire family of motors, please visit www.parkermotion.com/motors/

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