Media Release

GP 22 S and GP 32 S linear actuators

Modular DC Servo Motor, Planetary Gearhead and Actuator systems.

Mechanical engineering often faces the task of converting rotational movements into powerful linear movements. The associated development costs can now be cut dramatically by using modular spindle drives in maxon motor’s linear actuator system. The GP 22 S and GP 32 S planetary gearheads, specifically adjusted for actuators, are designed to withstand high loads, and the special spindle intake means that customer-specific spindle, DC motor, gearhead combinations can be assembled easily which shortens supply times. There are three different standard spindle types to choose from: metric spindles, trapeze spindles and spherical rotating spindles. The range of DC motor actuator combinations are available as steel or ceramic variations and in any length up to 200 mm. Spindle nuts to match are supplied.

Gearheads, DC servo motors, encoders and DC motor controllers from maxon’s standard program are used to drive the spindles. The individual components of the spindle drives are all compatible to help create highly effective linear motor drive solutions. For the time being, modified planetary gearheads are available in two different sizes, with diameters of 22 mm and 32 mm. Reduction ratios of 3.7:1 to 1093:1 provide maximum torques of 6 Nm and speeds of up to 1600 min-1. The additional axial bearings of these gearheads can also withstand powerful axial forces from the spindles.

maxon brushed DC motors or brushless DC motors can be used to drive the system, depending on the application. Compatible motor encoders which are critical for accurate positioning can be fitted to the servo motors. The EPOS positioning controller, with its impressively wide function range and CANopen connection, is recommended to control the motor-encoder combination. It can also directly evaluate end-switches and other sensors. The programmable EPOS P variation can be used to help create standalone systems. maxon motor’s knowledge of motor drives is reflected in the selection of all components. Key features of the spindle drives are their robustness, flawless operation and long service life.

This media release is available on the internet at www.maxonmotor.com.au

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