Linear actuator combines mechanical drive, guidance, and control

Haydon Kerk Motion Solutions introduces the Programmable Motorized SplineRail Linear Actuator. The Programmable SplineRail combines mechanical drive, guidance, and control in a single, compact component. The system uses a Size 17 single stack or double stack stepper motor with the integrated Haydon IDEA Drive.

The IDEA Drive technology incorporates a custom designed graphic user interface for easy programming through the use of on-screen buttons instead of complicated command sets typically seen in programmable drive architectures. The graphic user interface also allows the program to be “tested” using a line by line execution feature for easy troubleshooting and modification.

The SplineRail technology utilizes a Kerk precision rolled lead screw, supported by bearings and contained within a concentric aluminum spline, driving an integrated Kerkite composite polymer nut/bushing. The extruded aluminum spline offers excellent torsional stability. KerKote TFE coating and self-lubricating Kerkite nut/bushing material ensure long life and zero maintenance.

When mounted vertically, the programmable SplineRail can also be used to simultaneously lift and rotate (Z-theta motion). With one motor driving the screw and a second rotating the rail, a compact, self-supporting pick and place mechanism can be created. Screw leads are available from 0.05” to 1.2” per revolution providing a wide range of performance profiles, including self-locking threads that can support a load without external power or breaks. Haydon Kerk specializes in custom solutions and the SplineRail is a versatile platform to build upon.

Typical applications include pick-and-place mechanisms and robotic assemblies in life sciences instrumentation, semiconductor equipment, business machines, packaging and assembly, and a wide range of factory automation applications. Combined with Haydon Kerk's broad offering of motion control components, the programmable SplineRail can be used to create custom systems for many types of motion.

For more information, visit www.HaydonKerk.com or call direct at 203-756-7441.

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