



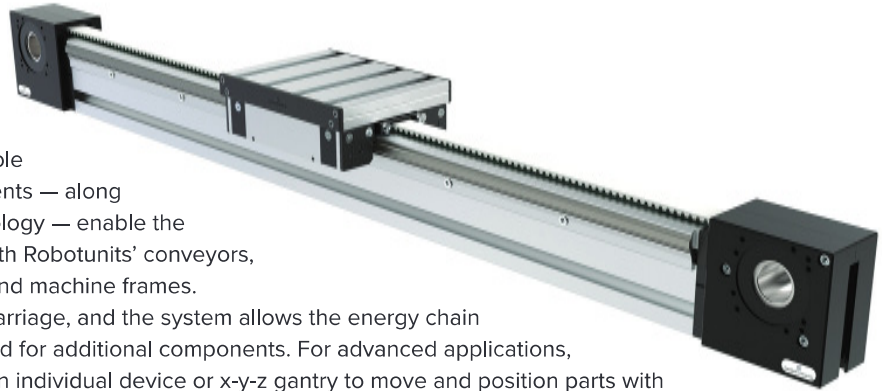
## Modular linear motion units

### Robotunits

[robotunits.com](http://robotunits.com)

The standard Linear Motion Unit includes 50-millimeter aluminum extrusions and a common 14-millimeter T-slot, making it compatible with other Robotunits systems. These key elements — along with the company's proprietary fastening technology — enable the Linear Motion System to work in combination with Robotunits' conveyors, material handling components, safety fencing, and machine frames.

The unit is available with a single or double carriage, and the system allows the energy chain to attach directly to the carriage without the need for additional components. For advanced applications, the Omega Linear Motion Unit can be used as an individual device or x-y-z gantry to move and position parts with precision.



#### Features:

- An integrated belt return inside the extrusion. Three sides of the extrusion can accommodate additional attachments.
- The use of single or double idlers, depending on the load. The idler extrusion has a special captive design for high strength.
- Durable construction, including large rollers.
- Single and multiple guide rails are available.
- Limitless combinations and complexity.

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## Slit couplings for robotic systems

### Ruland

[ruland.com](http://ruland.com)

These slit couplings for robotic systems are zero-backlash, lightweight, and manufactured with intermittent slit cuts, making them a suitable starting point for designers of robotic systems. While they are visually similar to Ruland multiple-beam couplings, the slit cut design gives them higher torque and torsional stiffness capabilities and multiple length options in the same outer diameter, allowing coupling performance to be tailored to system requirements.

Slit couplings have torque comparable to a single disc coupling, torsional stiffness similar to a stainless-steel beam coupling, and misalignment consistent with an aluminum beam coupling. This combination of features allows a slit coupling to be used in place of one of these styles, which all have limitations such as no parallel misalignment in a single disc coupling. The proprietary slit pattern with radiused (as opposed to squared) edges reduces stresses that build up during misalignment and under torque loads, increasing effective service life and allowing for better performance when compared to other slit couplings available in the market. Along with low mass and inertia, these characteristics make slit couplings a good choice for robotic systems.

