MAXIMUM SOLUTIONS

Mill-Max Expands the Omniball® Spring-Loaded Contact Family

Two new rolling contact spring-loaded pins designed to address divergent applications.



Mill-Max is pleased to present two new Omniball[®] spring-loaded pins, one for low profile purposes and one that provides greater stroke and higher current carrying capacity. These new pins expand our lineup of Omniball[®] spring-loaded products, broadening their scope of use for interconnect opportunities.

Since the introduction of the patented Omniball[®] spring-loaded contacts three years ago, designers have been finding new and novel ways to incorporate them into electro-mechanical devices for making consistent, reliable connections. Using feedback, we have received on the product, Mill-Max has designed two new versions: the 0945-1-15-20-06-14-11-0, a low-profile version featuring an 18% reduction in height from the original 0945 Omniball[®]; and the 0845-0-15-20-52-14-11-0, a larger style contact providing twice the stroke of the original product and a 40% increase in current carrying capacity.

Omniball[®] contacts are spring-loaded pins in which the traditional plunger has been replaced by a gold plated, brass ball. They are designed to simplify and improve the connections made between components which are mated together in a sliding or rotational motion rather than in an axial or vertical orientation. When engaged, the ball compresses and rolls, allowing the mating surfaces to make contact and then easily slide parallel to each other while spring force acts to ensure consistent electrical contact is maintained. This rolling action alleviates the concerns of connector damage such as binding, premature wearing and structural failure that may occur when using traditional plunger style spring pins in these types of applications.



Mill-Max Manufacturing. Corp. 190 Pine Hollow Road, Oyster Bay, NY 11771 516-922-6000 • www.mill-max.com Both the 0945-1 and the 0845 have surface mount termination and a barb press-fit feature on the body for assembling into plastic insulator housings or non-plated through-holes in printed circuit boards. The 0945-1 features .030" (.762 mm) maximum stroke, an overall height of .218" (5.54 mm), a max current carrying capacity of 8 amps¹, and a low contact resistance of 20 milli-ohms max. The 0845 also boasts a contact resistance of 20 milli-ohms max, along with providing .060" (1.52 mm) maximum stroke, and a max current carrying capacity of 13 amps¹.

These pins are made with precision machined components and stainless springs, all gold plated to ensure the highest conductivity, corrosion resistance and durability. They have been tested to 1,000,000 cycles at half stroke and evaluated to maintain their electrical and mechanical specifications. Complete performance specifications and technical details can be found on our website.

Contact our technical services staff to discuss your application and how we may be able to address your needs.

¹Current rating @ 30^o C temperature rise, per IEC 60512-5. Derated current is 6.4A for 0945-1; 10.4A for 0845.

For more information, please visit <u>www.mill-max.com/PR708</u>.

