

## **Micro-Diaphragm Pumps for High-Volume and Low-Cost Production**

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For many years miniature pumps have been on the shopping list of numerous companies, but until recently all they got was that each month a new prototype made it to the headlines. As much as this may indicate how tricky the development of a veritable micropump is, the situation must have been frustrating for those who were holding out for one. With the launch of the MDP1304, a piezo-actuated microdiaphragm pump for original equipment manufacturer (OEM) applications has become available. Made of plastic, it reliably delivers small amounts of liquids or gases. Barely larger than a coin of one-inch diameter, the pump weighs just three grams and is self-priming. These features and its low power consumption make the pump suitable for a wide scope of application fields ranging from diagnostics, drug discovery, and environmental monitoring to household appliances and miniaturized fuel cells. Because of its modular setup, the pump may be adjusted to changing specification requirements. The wetted parts are micro molded from COC (cyclo-olefin co-polymer), a plastic material with good chemical resistance, and assembled by laser welding.