

3M Introduces New Mini-Clamp II Connectors

3M recently announced two new additions to the 3M Mini-Clamp Connector family of products, the Mini-Clamp II Wiremount Plug, 371 Series and Wiremount Socket, 373 Series. The new connectors provide durable, reliable and easy field termination interconnection for I/O applications commonly found in a wide range of sensor control systems – including factory automation and industrial controls.

The 3M Mini-Clamp products are designed to provide a safe and reliable electrical connection between sensors, drives and control units without special tooling or wire preparation. The 3M insulation displacement technology (IDC) provides a simple installation process without material debris or waste.

The 3M Mini-Clamp II connectors are part of 3M's field bus system offering which is designed to reduce the amount of wire usage while saving space in factory automation installations. These connectors provide an easy and simple wire termination process which helps reduce the total overall cost of wiring installations. Using 3M insulation displacement technology (IDC), the connectors are designed to reduce maintenance work by providing higher connection reliability while alleviating the need for cable preparation (such as stripping and tinning) and the need for repetitive screw-type wire terminations. The IDC wire termination requires standard pliers, making the process simple and easy to complete in the field.

In addition, the 3M Mini-Clamp II connectors have an integrated guiding and alignment feature built into the cover, which provides reliable positioning of the individual wires. Semi-transparent covers allow for visual inspection for proper wire positioning prior to the simple wire termination. Polarizing tabs help provide proper mating while latching features help provide a secure connection, even under severe conditions such as mechanical stress and vibration in industrial environments.

Among the typical applications and industries in which the connectors are used are semiconductor and LCD manufacturing machines; medical, packaging systems, conveyor systems, elevators and lift systems; flowmeters; motion test and measurement systems; traffic light and control systems; base press control electronics; food and packaging industries; automotive and metal industries, and sensors.

The new Mini-Clamp II Connectors by 3M are available in 2 mm pitch that use color coding (red, yellow, orange, green, blue and gray) to provide for the proper wire usage, wire alignment and retention in the cover. The 3M Mini-Clamp II Connectors are available in 3- and 4-pin wiremount configurations in socket, panelmount socket, and plug versions. It is also available in boardmount socket configurations: a 3- and 4-pin single row socket connectors; and a 6-pin (2 x 3 pins), a 8-pin (2 x 4 pins), a 12-pin (4 x 3 pins) and a 16-pin (4 x 4 pins) multi-row socket connector. Dust caps are available for more harsh and dusty environments.

Learn more about this product family and other 3M Interconnects at <http://www.3M.com/interconnects>.

About 3M Electronic Solutions Division

3M Electronics Solutions Division offers innovative solutions to the electronics market, such as copper interconnect systems; cables and cable assemblies; carrier and cover tapes and trays; flexible circuits; embedded capacitor materials; static control products, and Textool brand test and burn-in sockets.

About 3M

A recognized leader in research and development, 3M produces thousands of innovative products for dozens of diverse markets. 3M's core strength is applying its more than 40 distinct technology platforms – often in

combination – to a wide array of customer needs. With \$24 billion in sales, 3M employs 75,000 people worldwide and has operations in more than 60 countries. For more information, visit <http://www.3M.com>.

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