



For more information contact:

Omron Electronics LLC

Mark Traxler, Public Relations Manager

847-285-7176 Fax 847-285-8176 mark.traxler@omron.com

Omron's E3Z Photoelectric Sensor Family Expands with Models for General Purpose, Condition Monitoring and IP69K-Rated Washdown Applications

SCHAUMBURG, IL (February 1, 2010) – The compact E3Z photoelectric sensor family from Omron Electronics LLC (www.omron247.com) now offers both general purpose and special application models in a single size to meet the need for an economical, global and easy-to-apply sensing solution. The unified design allows simpler installation and servicing for every sensing task in an industrial automation system. New additions include an advanced Condition Monitoring series designed to detect and warn of operational problems before they become critical; 30-meter through-beam models for pallet alignment over long warehouse shelving spans; oil-resistant series for machine tool and automotive applications; stainless steel sensors for food/pharmaceutical processing that reduce replacement frequency in high-pressure chemical wash-down applications.

Measuring just 31 H x 10.8 W x 20 D mm, Omron E3Z DC sensors have a built-in amplifier with advanced pulse synchronization to ensure continuous operation even in changing light conditions, such as artificial light and bright backgrounds. Intensive shielding prevents malfunctions due to inverter noise or wireless communications equipment. The precision optical system with high-power LED minimizes the risk of malfunctions due to dirt or misalignment. The electronics are fully potted to resist dust and high pressure water spray up to 1200 psi. Stainless steel E3ZM series are rated IP69K to match 1450 psi wash-down applications and have a smooth shape for easier cleansing with few seams and laser marked labels to eliminate contamination. The E3Z is one of the commonly used sensor formats worldwide, even for special applications like the detection of PET bottles, structured objects or print marks. This wide range of sensors in one format simplifies the machine design and reduces the variety of required mounting brackets significantly.

The E3Z Condition Monitoring series supports preventative maintenance to minimize maintenance and servicing costs. These sensors have a special output function to signify potential malfunctions at an early stage. Four types are available:

- “Machine Stop” or “Sensor Defect” alarm output if beam interruption is too long (model E3Z--J0).
- Detection of dirt covering the lens by power reduction (model E3Z -G2).
- Active sensor check by test input (model E3Z-G0).
- Anti-tampering, non-adjustable (model E3Z-H).

The E3Z-T Long Distance sensor for material handling and logistics provides a 30m sensing distance that eliminates aligning and maintaining two sets of through-beam sensors to cover the same space.

Oil-resistant E3Z-K plastic body and E3ZM-C stainless steel body sensors resist high pH oil mists, coolants and medium pH detergents that aggressively attack sensors.

-more-

E3ZM chemical-resistant sensors in food-grade 316L stainless steel body resist detergents and disinfectants used for in-situ cleaning of food-processing or beverage filling machinery up to 200 times the longer than a plastic body sensor, reducing downtime for replacement. Rated IP69K, they withstand frequent high pressure, high temperature jet water spray wash down. Models are available for through-beam, retroreflective, diffuse, and background suppression sensing.

E3Z and E3ZM models are available in:

- Through-beam sensors that provide 10 m (visible red) or 15 m (infrared) sensing distance
Polarized retroreflective models with mirror surface rejection function provide 4 m detection
Diffuse models with 1 m sensing distance.
- Background suppression sensing models with up to 200 mm sensing distance.

All sensors in the E3Z family have a wide connection range. Models include pre-wired, connector versions (M8 4-pin) or pigtail versions (M8 or M12 connectors). Advanced circuit design gives outstanding stability under all operating conditions worldwide - even in floating ground conditions. Omron's stringent quality-control procedures during manufacture ensure reliable performance with an exceptionally low return rate of E3Z sensors. This lowers both commissioning costs for new industrial installations and maintenance costs during operational life. The production of the E3Z family meets the highest ecological standards and complies with RoHS.

See E3Z sensors in these demos:

Food/Beverage – detects liquid in paper cartons

http://www.omron-ap.com/application_solutions/category_details.asp?app_id=E105

Conveyors/Automated warehouses - Detects cardboard boxes

http://www.omron-ap.com/application_solutions/category_details.asp?app_id=E235

Automotive/Machine Tools/Robotics - Inspects engine blocks

http://www.omron-ap.com/application_solutions/category_details.asp?app_id=E174

For further information, contact: Omron Electronics LLC, 1 Commerce Drive, Schaumburg, IL 60173. Tel.: 866-88-OMRON. Fax: 847-843-8081. Internet: www.omron247.com. In Canada, Tel.: 866-98-OMRON.

Omron Electronics LLC and Omron Canada, Inc. provide scalable machine automation solutions and offer a wide range of industrial control components to support customers throughout the Americas. Designed for complete automation connectivity, Omron delivers solutions that integrate programmable controllers, motion control, operator interfaces, machine vision and RFID systems using a single software package. Omron is a global leading manufacturer of industrial sensors, temperature controllers, power supplies, relays, switches and metering devices that support a complete automation solution. Omron Electronics LLC is the Americas subsidiary of Omron Corporation, a \$6.3 billion diversified company with business units producing industrial automation, electronic components, healthcare equipment and ticketing systems.

#