# Vertical starters with new performance levels

W16 and W26: the new generation of photoelectric switches for intralogistics

Waldkirch, March 2018 – SICK is presenting its new W16 and W26 photoelectric switches at LogiMAT 2018 (Hall 1, Stand F51). The first two representatives of a new generation of optoelectronic sensors offer a range of innovative features for use in handling and warehousing systems to further enhance detection performance, ensure maximum robustness, increase sensor availability, and considerably improve ease-of-integration and user-friendliness.

The W16 and W26 product families have been designed for different operating distances – within their robust and laser-printed VISTAL® housings, however, both offer the same innovative technologies and integration features. The QR code on the housing allows all sensor-relevant information to be called up rapidly at any time.

**New operating concept permits definition of sensor settings in seconds**

For the first time a completely new operating concept, **BluePilot**, is used in the W16 and W26 product families. This is an assistant that enables the definition of simple sensor settings within seconds. In the case of the through-beam photoelectric sensors, the alignment aid with blue LEDs visualizes the optimum alignment of transmitter and receiver. With the photoelectric reflex switches it shows the best possible orientation of the light beam to the reflector, while for proximity switches it signals the ideal operating distance. Whereby the combined push-turn control button enables rapid and precise adjustment in a single step.

The sensors provide a variety of diagnostic information during operation, for example while monitoring clearance on storage and retrieval devices or fine positioning load-carrying equipment at shelving. The blue LEDs visualize problems caused by vibrations or incipient contamination by gradually switching off with increased impairment. The plant operator on site can react early, before machine stoppage, by readjusting or cleaning the sensor. Status and diagnostic messages can also be sent via Bluetooth in the form of information to mobile end-devices. With their serial IO-Link connection, the W16 and W26 smart sensors are I4.0-ready: they can thus exchange any desirable data with a vehicle or plant control system.

**Maximum detection reliability even with difficult objects**

Dazzle, reflections, uneven surfaces, strong contrasts and reflectivity differences – in intralogistical processes pallets, boxes, reusable containers or laminated packages can exhibit different properties. The W16 and W26 product families master these challenges. Thus their **TwinEye technology** offers maximum functional reliability because detection takes place with the help of two logically linked reception element in the sensors. The sensors only change their switching state when both ‘eyes’ make the same evaluation, reliably preventing spurious switching due to uneven or highly reflective surfaces that deflect the light beams in differing directions.

The photoelectric proximity switches of both product families are also equipped with the new **OptoFilter**. Spurious switching in strongly reflective environments, such as are found during fine rack positioning in steel shelving, is now a thing of the past. Sensors for handling and warehousing systems must also master depolarizing effects such as those that can be produced by packing tape or pallets wrapped with foil for load security. The photoelectric reflex switches of the new W16 and W26 can geometrically filter the reception signal and thus differentiate between the reflector and a depolarizing object.

In order to prevent detection in the empty spaces of structured or perforated containers, the W16 operates with a light spot expanded to a line. So if there are any empty spaces this **LineSpot technology** means that the sensors also always detect part of the container or object surface – and thus generate a dependable switching signal.

**Constant vision: with transparent objects or those with deposit formation**

Whether bottles, petri dishes, blister packs or thermoformed containers – the **ClearSens technology** of the W16 and W26 guarantees maximum detection reliability when transparent objects are transported on a conveyor system or transparent shrink-wrapping foils have to be detected. For this purpose, the sensors offer intuitively adjustable mode selection on the devices themselves, depending on the type of object. Different detection tasks can therefore be covered with a single sensor. The AutoAdapt process compensates for impairment of the sensor’s view by dust, cardboard wear or other deposits over the course of time. It automatically regulates the switching threshold and thus ensures sensor availability.

TwinEye, LineSpot and ClearSens with AutoAdapt – three technologies that turn the W16 and W26 into optical experts.

Picture: W16\_W26.jpg
The new W16 and W26 photoelectric switches from SICK are the first two representatives of a new generation of optoelectronic sensors and offer innovative features especially for use in handling and warehousing systems.

Picture: W16\_W26\_BluePilot.jpg
For the first time a completely new operating concept, BluePilot, is used in the W16 and W26 product families. It permits simple sensor adjustment in seconds via the combined push-turn button.

SICK is one of the world’s leading producers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. e. h. Erwin Sick, the company with headquarters in Waldkirch im Breisgau near Freiburg ranks among the technological market leaders. With more than 50 subsidiaries and equity investments as well as numerous agencies, SICK maintains a presence around the globe. In the fiscal year 2016, SICK had more than 8,000 employees worldwide and achieved Group sales of just under EUR 1.4 billion.
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