

## PRESSE RELEASE

Distance – Speed – Precision – Small

### **PowerProx MultiTask photoelectric proximity sensors: The fantastic four**

**Waldkirch, September 2015 – The new standard for reliable detection with an extended sensing range cannot be measured with a conventional yardstick. After all, with sensing ranges from 5 cm to 3.8 m, no object goes undetected by the PowerProx MultiTask photoelectric sensor. To achieve this, not only has SICK packed all the advantages of time-of-flight technology into the world's smallest housing, they have also increased detection speed. Thanks to PowerProx, now even objects being conveyed at high speed, small and flat objects, and jet black and shiny objects can be reliably detected over a high sensing range. The photoelectric sensor also provides stable detection results over a large detection angle and is immune to ambient light.**

The small PowerProx MultiTask photoelectric sensor housing combines time-of-flight technology, eye safety at the level of laser class 1, outstanding optics, and fast signal processing. The MultiTask photoelectric sensor is adjusted by means of a potentiometer or teach-in button. There are versions available with either one or two separately adjustable switching thresholds, depending on the application. IO-Link can be used to define up to eight switching points and to make use of the smart sensor functions. The VISTAL® housing ensures the device is sufficiently rugged.

#### **PowerProx Distance for reliable detection with unrivaled range**

Thanks to its extended sensing range of up to 3.8 m and two separately adjustable switching points, the PowerProx Distance is the ideal solution for occupied bay and clearance detection, pallet handling, and collision protection in storage and conveyor technology.

An extended sensing range is also essential for a system which is used to protect doors and gates. Photoelectric retro-reflective sensors and through-beam photoelectric sensors always require a reflector or a receiver system, while PowerProx works by monitoring the returned light from the target, with reflectors and receivers not being required. With its extended sensing range of up to 3.8 m and high ambient light immunity, this photoelectric proximity sensor is therefore ideal for protecting doors and gates.

#### **PowerProx Speed for high speed detection**

Quick response times, high switching frequencies, and reliable object detection at extended sensing ranges of up to 2.5 m make the PowerProx Speed variant ideal for use in the packaging industry or in any application that relies on detection at top speed, such as high-speed counting. Accurate edge detection for wooden boards is one of many other applications made possible by the quick response time, high switching frequency and high-precision laser beam.

#### **PowerProx Precision for detection of the smallest of objects and object properties**

With a sensing range of up to 1.8 m, PowerProx Precision detects even the smallest of objects, cutouts and recesses from a considerable distance. It handles changing materials and surfaces with ease, even in front of shiny or reflective backgrounds, which is ideal for quality control within the automobile and components industry, or for checking the pick-up point on a robot within handling and assembly.

### **PowerProx Small for a great sensing range in a small package**

The PowerProx Small combines time-of-flight technology, sensing ranges of up to 2.5 m, and high switching frequencies of up to 1,000 Hz in the world's smallest housing. The laser technology is classified as laser class 1, ensuring that there is no danger to eyes during operation.

This MultiTask photoelectric sensor is adjusted by means of a potentiometer. There are versions available with either one or two separately adjustable switching thresholds, depending on the application. Thanks to its versatile connection options, the PowerProx Small is extremely flexible and can be used in a wide range of different fields.

Every member of the PowerProx product family is also available with two adjustable switching points. This means that control tasks, such as slack control in the printing industry, the tire industry, or during sheet steel processing, can be carried out efficiently and easily. Depending on additional requirements relating to speed, precision, sensing range, or size, all four PowerProx photoelectric sensor variants are ideal for this.

Not only does the PowerProx pack time-of-flight technology into the world's smallest housing for the first time, its improved optics and electronics, high level of ruggedness, and smart sensor functions also offer a range of advantages, including outstanding detection properties over extended sensing ranges, high switching frequencies, and a low minimum distance between object and background.

### **MultiTask photoelectric sensors: Specialists in efficient automation**

Resolving special applications without any special effort – that's the philosophy that SICK has been pursuing with its innovative MultiTask photoelectric sensor cluster.

The solutions can be characterized both as further developments of existing opto-electronic sensor designs offering even greater safety, reliability and strength, as well as being of a type that, through a new detection or evaluation approach, influences implementation and machine design – that is, that represents an evolutionary paradigm shift. In this way, the MultiTask family deals with a range of application types, ensuring compact, elegant and economically efficient solutions, often extending well beyond their original industry sector.

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PowerProx von SICK – reliable detection over large sensing ranges

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 representative offices, SICK maintains a presence around the globe. In the 2014 fiscal year, SICK had about 7,000 employees worldwide and achieved Group sales of EUR 1,099.8 million.