

New Products

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Performance Upgrade for R Design Photoelectronic Sensors

New standards for reliable object detection

The latest generation of wenglor's R design photoelectronic sensors sets new standards in reliable object detection with proven performance features and simple installation options. The updated product portfolio includes retro-reflex sensors and reflex sensors. In addition to a new teach-in control panel, the new models P1RH reflex sensors with background suppression, P1RK retro-reflex sensors for transparent objects and P1RL retro-reflex sensors universal were equipped with modernized electronics including an IO-Link interface.

The updated portfolio scores points with a simplified operating concept: The sensor housing in R design has been optimized by integrating a central teach button and two LEDs on the top of the sensor. In addition to the visual innovations, the sensors also feature modernized electronics including an IO-Link interface. This communication interface allows easy configuration of parameters, output of signal values, condition monitoring and setting of on- and off-delays. The technology is integrated into wenglor's tried-and-tested R design (56.5 × 26 × 24 mm). This is characterized by an integrated M18 thread, which enables easy installation.

Universal retro-reflex sensors have a range of up to 12,000 mm and retro-reflex sensors for transparent objects reach widths of up to 4,000 mm. The retro-reflex sensors have integrated single-lens optics and enable switching frequencies of up to 2,000 Hz. In contrast, reflex sensors with background suppression work in combination with two-lens optics and a detection range of up to 120 mm. The reflex sensors achieve a switching frequency of up to 1,000 Hz.

Three Different Models and Operating Principles

Reflex sensors with background suppression use red light for contactless and reliable object detection in front of any defined background. Thanks to the principle of angle measurement, the color, shape and surface of the object have no influence on the switching behavior of the sensors. Retro-reflex sensors work with different light sources, whereby the emitter and receiver are located in one housing. If the light beam between the sensor and the reflector is interrupted, this generates a switching signal.

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The Highlights at a Glance:

- Easy configuration via teach-in button, wTeach2 software or via IO-Link
- Range up to 4,000 mm for retro-reflex sensors for transparent objects
- Large range of up to 12,000 mm with universal retro-reflex sensors
- Up to 120 mm detection range with reflex sensors with background suppression
- Compact R design (56.5 × 26 × 24 mm) with M18 thread
- New teach-in control panel
- Connection type M12 × 1, 4-pin
- PNP/NPN variants
- IP67/IP68 degree of protection

Approximately 2,800 characters

Text: wenglor Public Relations Office

Image: wenglor

Captions

New generation, new features: With modernized electronics including IO-Link interface and a new teach-in control panel, the R designs of the photoelectronic sensors have two strong features.

About the wenglor sensoric group

The wenglor sensoric group develops innovative sensors, safety systems and machine vision products with intelligent interfaces and software for industry all over the world. Founded in 1983, wenglor is one of the world's key high-tech providers for the automated industry. The solutions of the wenglor sensoric group enable the trends of Industry 4.0 as well as the Internet of Things, 3D technologies, robotics and artificial intelligence (AI). In doing so, they conserve resources and increase the quality and safety of the manufactured products. The second-generation owner-managed family business is represented worldwide with 28 subsidiaries in 53 countries. In addition to the company headquarters in Tett nang, the group of companies with over 1,100 employees also develops and produces its multi-patented products in Munich, Berlin, Sibiu (Romania), Perth (Scotland), La Chevrolière (France) and Belgrade (Serbia).