Photoelectric sensors

**The eagle eye among sensors: BOS 6K**

**With a new generation, the sensor and automation specialist Balluff has re-engineered one of its largest photoelectric sensor families while also adding new product variants. The entire BOS 6K range is now also available with the IO-Link communication standard.**

In addition to the standard variants with red light and laser, the sensors are now also available with blue light and time-of-flight (TOF) as well as contrast sensors. “Versatility is clearly the focus of this portfolio," says product manager Stefan Hornung, who is responsible for photoelectric sensors at Balluff. "With this expansion, we are offering our customers numerous new options for successfully implementing their applications."

Photoelectric sensors reliably detect the presence of objects and check their shape, contrast, distance, or thickness. Due to their high accuracy and significantly larger detection range compared to inductive or capacitive proximity switches, they are considered the "eagle eye" among sensors. This makes them particularly valuable in many industrial applications. The BOS 6K New Generation is used in various automation applications such as distance detection or the detection and positioning of various objects. Customers are primarily original equipment manufacturers (OEMs), but also end users from the automotive, packaging, and food industries.

**Conveniently switching between operating principles**

“The product family plays a central role in our portfolio of photoelectric sensors. It includes a variety of operating principles that customers can easily switch between because they all use the same housing,” Stefan Hornung summarizes. The goal: “There is a suitable solution for every challenge.”

Consequently, despite its small housing, the TOF version offers a very long range and precise detection; the blue light version is particularly suitable for dark, shiny, or transparent objects. The variants for contrast detection are also reliable in fast and difficult processes, especially when detecting print marks, for example on packaging films. "The color sensor, which will be available from October, will further expand the range of applications for the sensor series," says Stefan Hornung, offering a sneak peek.

**Guaranteed compatibility with previous models**

As the first photoelectric range from Balluff, the entire BOS 6K New Generation is also available with the IO-Link communication standard. Compatibility with previous models is still guaranteed with this family, which can be used worldwide. In addition, the sensor family also offers user-friendly installation, a wide range of connection options with plugs and cables and is very robust with IP code ratings of IP67 and IP69.

Ein Bild, das Vogel, Licht enthält.

Automatisch generierte Beschreibung

***Caption:***

*Due to their high accuracy and large detection range, photoelectric sensors are considered the "eagle eye" among sensors.*

  
***Caption:***  
*Versatility is the focus of the portfolio. Users can conveniently switch between operating principles. Pictured: the BOS 6K blue-light variant.*

Ein Bild, das Maßstabsmodell, Spielzeug, Im Haus enthält.

Automatisch generierte Beschreibung

***Caption:***  
*Using different operating principles, photoelectric sensors from the BOS 6K family reliable detect objects in a variety of industrial applications.*



***Caption:***  
*Blue-light sensors also safely and reliably detect difficult objects at all times.*

*Ein Bild, das Nähmaschine, Gerät, Im Haus, Design enthält.

Automatisch generierte Beschreibung*

***Caption:***  
*With time-of-flight (TOF) sensors, it is possible to precisely detect objects even at greater distances.*

**About the company Balluff**Founded in 1921 in Neuhausen a. d. F., Balluff with its 3900 employees worldwide stands for innovative technology, quality and cross-industry experience in industrial automation. As a leading sensor and automation specialist, the fourth-generation family-owned company offers a comprehensive portfolio of high-quality sensor, identification, network and software solutions. In 2022, the Balluff Group recorded sales of around 567 million euros. In addition to its central headquarters in Neuhausen a. d. F., Balluff has sales, production and development locations around the globe and is represented by 38 subsidiaries and other agencies in 61 countries. This guarantees customers fast worldwide availability of products and a high quality of advice and service directly on site.