

the **sensor** people

## 5 Series –

Photoelectric sensors and  
light scanners designed especially  
for standard detection tasks



**High** performance, **compact** housing.



The 5 Series photoelectric sensors are designed to make use of our sensors as easy as possible for you. They are always the right choice when a powerful and robust standard detection task, for example in transport systems or packaging technology, is required. The integrated M3 metal threaded sleeves, the cable outlet at the bottom or rear of the device available as an alternative and the compact construction provide extremely diverse installation options in very limited spaces.

On scanners the innovative teach button for optimum adaptation of the sensitivity reinforces this simple concept.

## **Best service**

- Convenient **online product selector** for easy comparison and selection of the right product using technical features
- **Global production concept** guarantees worldwide availability of products, even on short notice
- **Global price guarantee** increases planning security in worldwide markets
- **Competent customer service center** and **technical support** aid in the selection of suitable products and the right implementation

## Very simple operation

- Large **brightVision®** light spot without blind area for easy alignment and reliable detection of even the smallest objects
- Bright **yellow/green LED status display** for easy function state check
- **A²LS** active **suppression of extraneous light** for reliable detection and low susceptibility to ambient and stray light
- Integrated **teach button** for easy and convenient sensitivity adjustment



## Flexible integration options

- Sturdy, warp-resistant, **plastic housing** in **IP 67** for sensor use even in rough industrial environments
- Two **complementary switching outputs** for either light or dark switching operation
- Innovative fastening concepts for flexible mounting and easy alignment
- **Large temperature range** from -40 to +60 °C makes possible a broad range of applications

## Reliable object detection in standard applications.



**Throughbeam photoelectric sensor –  
L5**

Light source	highly visible red light
Operating range limit	0...15 m
Switching frequency	500 Hz

- High performance reserve enables reliable detection even in extreme situations and reduces the risk of a system standstill
- Simple alignment by means of optimized beam geometry
- Simple detection of flat objects
- Transmitter deactivation for testing and networking



**Retro-reflective photoelectric sensor –  
PRK5**

Light source	highly visible red light
Operating range limit	0.02...6.0 m
Switching frequency	500 Hz

- Homogeneous light spot for safe switching behavior and easy alignment
- Safe suppression of direct reflection due to polarization filter
- Warp-resistant housing with reliably strong mount prevents depolarization effects

**Detection of flat, glossy objects**



**Object detection on the transport system**



Universal, robust  
and **versatile**.



Reflection light scanner –  
**ET5, energetic**

Light source	highly visible red light
Operating range limit	0.03...1.0 m
Switching frequency	500 Hz

- High performance reserves ensure reliable detection
- Simple alignment by means of optimized beam geometry
- Optimum adaptation with teach button and 2 levels (object or background)



Reflection light scanner –  
**FT5, with fading**

Light source	highly visible red light
Operating range limit	0.03...0.25 m
Switching frequency	500 Hz

- Homogeneous light spot for safe switching behavior and easy alignment
- High sensitivity for precise switching behavior
- Optimum adaptation with teach button and 2 levels (object or background)

#### Object detection on transportation systems



#### Detection of glossy objects





## Very easy integration and alignment.

### brightVision® light spot

The bright, full surface light spot without blind area allows simple alignment and reliable detection of even the smallest objects.



### Cable outlets

Integration even in extremely limited installation spaces thanks to flexible cable outlet at the bottom or rear of the device.



### Robust mounting

Metal threads integrated into the sensor housing enable quick mounting even in extremely limited installation spaces and do not give out even with high tightening torques.



### Versatile selection of connections available:

Cable, M8, M12 Pigtail



### Extremely user-friendly with one-point teach feature.

Teach-in for similar objects:

Press teach button for approx. 2 sec. – LEDs flash together.

Teach-in, when background is darker than object:

Press teach button for approx. 7 sec. – LEDs flash alternately.



### Selection of mounting devices ensures comprehensive mounting possibilities:

BTP 200M: Sensor protective covers for rod mounting

BTU 200M: Sensor mounting brackets for rod mounting

BT 200M.5: Sensor mounting bracket




BTP 200M



BTU 200M



BT 200M.5



### **Switching Sensors**

Optical Sensors  
Ultrasonic Sensors  
Fiber Optic Sensors  
Inductive Switches  
Forked Sensors  
Light Curtains  
Special Sensors

### **Measuring Sensors**

Distance Sensors  
Sensors for Positioning  
3D Sensors  
Light Curtains  
Forked Sensors

### **Products for Safety at Work**

Optoelectronic Safety Sensors  
Safe Locking Devices and Switches  
Safe Control Components  
Machine Safety Services

### **Identification**

Bar Code Identification  
2D-Code Identification  
RF Identification

### **Data Transmission/ Control Components**

MA Modular Interfacing Units  
Data Transmission  
Safe Control Components

### **Industrial Image Processing**

Light-Section Sensors  
Smart Camera

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