



Best in Class.

## **P3 Laser Distance Sensors Triangulation**



# Maximum Power with Laser



## Micrometer Precision

- Reliable detection of the smallest objects with reproducibility to  $0.8 \mu\text{m}$
- Highly accurate results due to a linearity deviation of just 0.08% from the measuring range
- Detection of very flat objects directly in front of the background



## Material Independence

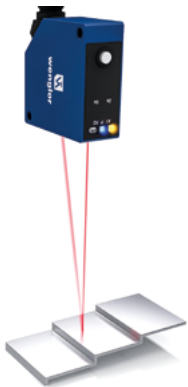
- Reliable measurements on dark, light or low reflecting objects
- Versatile use on different surfaces and shapes regardless of the degree of reflection
- Highly accurate switching to objects



## Temperature Stability

- Temperature-stable aluminum housing and high-quality glass lenses in the housing
- Extremely fast availability of stable measured values thanks to built-in temperature sensors
- High temperature stability due to low temperature drift of up to  $2.5 \mu\text{m/K}$

# Innovative Features



## Dynamic Jump Detection

The P3 sensors are equipped with built-in jump edge detection. They detect automatic measured value jumps and thus ensure reliable scale counting.



## Width and Thickness Measurement without an Analysis Module

Two P3 sensors are mounted opposite each other and connected. They calculate the thickness of objects automatically without an analysis module.



You can find these and other P3 features on our website!





## Impresses Threefold: TripleA Technology

The P3 series triangulation laser distance sensors unleash their inimitable performance threefold, wherever complex shapes are measured, object surfaces and colors vary, maximum precision in the micrometer range and temperature-stable measured values are required.

### **A Adaptive Autoexposure**

Intelligent exposure control for optimal detection of challenging surfaces with changing reflections.

### **A Active Temperature Control**

Several temperature sensors built into the housing guarantee optimal temperature monitoring, resulting in faster sensor availability.

### **A Aspheric Dual Lens**

Two aspheric glass lenses integrated in the sensor offer a clear advantage in terms of optical precision.



## Superior Laser Expertise

The P3 series laser distance sensors feature a small laser light spot measuring just 0.5 to 1.5 mm in size and come with both red and blue laser light.

- ✓ Increased power for very dark objects and extremely high speeds by enabling laser class 1 to 2
- ✓ Suitable for measurement on polished metals, shiny plastic surfaces and dark paints
- ✓ Short-wave blue laser light for high accuracy and ideal for shiny, organic and red-hot surfaces

## High User-Friendliness and Easy Operation

The various models can be configured directly via teach-in, button actuation or OLED display. The weCon app also enables mobile setting and data transfer to the P3 distance sensors. Parametrization can be carried out easily via Bluetooth app.






- ✓ Intuitive operating concept via two- or five-second button actuation
- ✓ Time savings thanks to easy initial start-up
- ✓ Display of distance value via the OLED display



Download the free **weCon** app now!



# Product Overview

| Product   | Working range   | Property  | Output                      |
|---|-----------------|---|-----------------------------|
|  P3PC0xx | 30 to 80 mm     | Laser (red), OLED display / teach-in<br>Laser (blue), OLED display            | Analog /<br>2 x NO contacts |
|  P3PC1xx | 40 to 240 mm    | Laser (red), OLED display / teach-in<br>Laser (blue), OLED display            | Analog /<br>2 x NO contacts |
|  P3PC2xx | 50 to 350 mm    | Laser (red), OLED display / teach-in<br>Laser (blue), OLED display            | Analog /<br>2 x NO contacts |
|  P3PC3xx | 60 to 660 mm    | Laser (red), OLED display / teach-in<br>Laser (blue), OLED display / teach-in | Analog /<br>2 x NO contacts |
|  P3EC4xx | 150 to 1,000 mm | Laser (red), OLED display / teach-in<br>Laser (blue), OLED display            | Analog /<br>2 x NO contacts |

All models are equipped with the IO-Link interface.



More information on the portfolio is available on our website.





**wenglor**  
the innovative family



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