

# High-Performance Distance Sensor

**P1KY011**    **LASER**

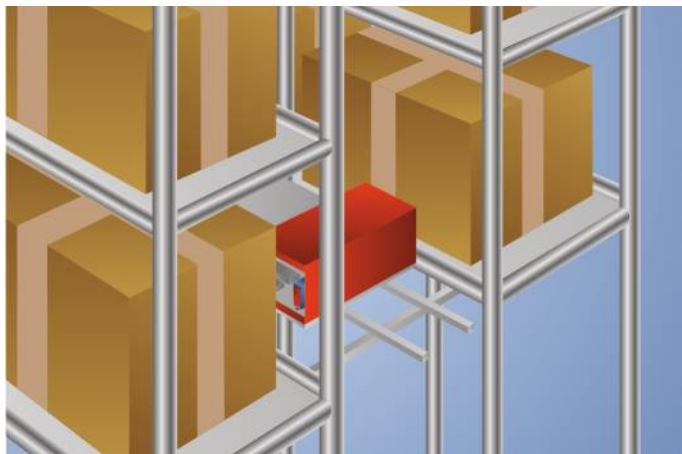
WinTec



- Interference-free towards gloss in the background with WinTec
- Miniature design
- No mutual interference with WinTec
- Reliable in case of glossy objects with WinTec

These miniature sensors determine distance between the sensor and the object by means of transit time measurement.

wenglor's interference-free technology (WinTec) is revolutionizing sensor technology: it prevents numerous sensors arranged directly opposite or next to each other from interfering with one another. The sensors reach a very high switching frequency and use laser class 1, which is safe for the human eye.



## Optical Data

|                           |              |
|---------------------------|--------------|
| Working Range             | 0...200 mm   |
| Adjustable Range          | 100...200 mm |
| Switching Hysteresis      | < 40 mm      |
| Light Source              | Laser (red)  |
| Wavelength                | 680 nm       |
| Service Life (T = +25 °C) | 100000 h     |
| Laser Class (EN 60825-1)  | 1            |
| Beam Divergence           | < 16 mrad    |
| Triple Dot Laser          | yes          |

## Electrical Data

|                                             |              |
|---------------------------------------------|--------------|
| Supply Voltage                              | 10...30 V DC |
| Current Consumption (U <sub>b</sub> = 24 V) | < 30 mA      |
| Switching Frequency                         | 1000 Hz      |
| Response Time                               | 0,5 ms       |
| Temperature Drift                           | < 2,5 %      |
| Temperature Range                           | -40...60 °C  |
| Number of Switching Outputs                 | 2            |
| Switching Output Voltage Drop               | < 2,5 V      |
| PNP Switching Output/Switching Current      | 100 mA       |
| Short Circuit Protection                    | yes          |
| Reverse Polarity Protection                 | yes          |
| Overload Protection                         | yes          |
| Protection Class                            | III          |
| FDA Accession Number                        | 1620293-001  |

## Mechanical Data

|                      |                |
|----------------------|----------------|
| Setting Method       | Potentiometer  |
| Housing Material     | Plastic        |
| Optic Cover          | PMMA           |
| Degree of Protection | IP67           |
| Connection           | M12 × 1; 4-pin |
| Cable Length         | 200 mm         |

## Safety-relevant Data

|                        |          |
|------------------------|----------|
| MTTFd (EN ISO 13849-1) | 996,97 a |
|------------------------|----------|

PNP NO/NC antivalent

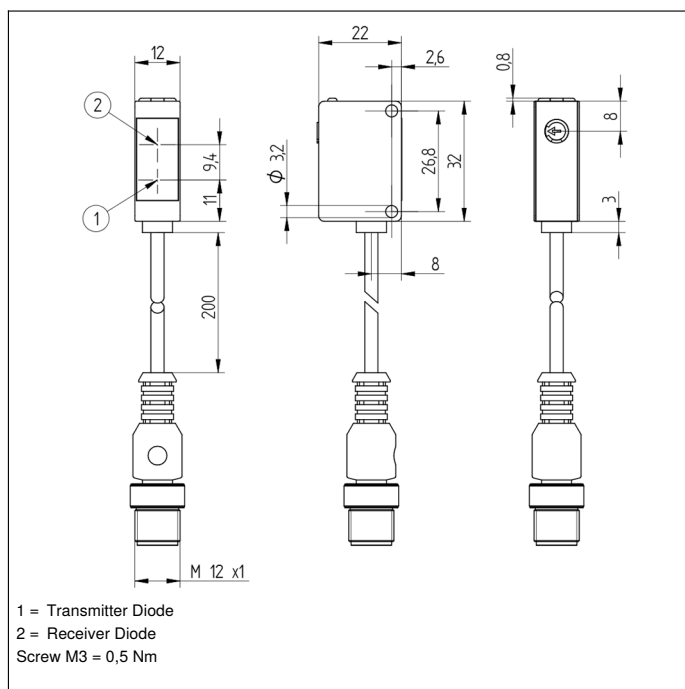
|                                   |     |
|-----------------------------------|-----|
| Connection Diagram No.            | 101 |
| Control Panel No.                 | 1K1 |
| Suitable Connection Equipment No. | 2   |
| Suitable Mounting Technology No.  | 400 |

\* Temperature range with permanently installed cable, bending radius: > 20 mm

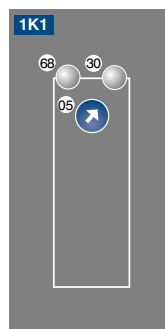
Actual product not similar

## Complementary Products

PNP-NPN Converter BG2V1P-N-2M



## Ctrl. Panel



05 = Switching Distance Adjuster  
30 = Switching Status/Contamination Warning  
68 = Supply Voltage Indicator

