

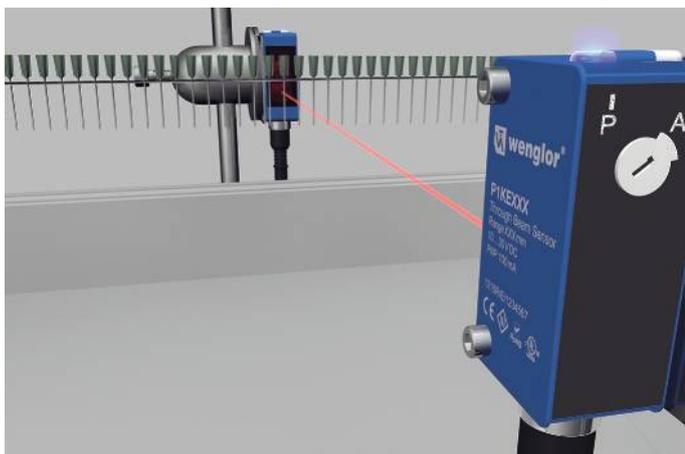
Through-Beam Sensor

P1KS006 LASER



- Detect smallest parts until 0,6 mm
- IO-Link 1.1
- Test input for high operational reliability
- Very high switching frequency

The through-beam sensor works with a fine laser beam as well as a transmitter and a receiver. The collimated laser beam of laser class 1 detects objects, for instance, when conducting installation, feed or presence controls, starting at a size of just 0,6 millimeters. The transmitter can be deactivated using test input in order to test the functionality of the through-beam sensor. The IO-Link interface can be used to configure the sensor (PNP/NPN, NC/NO, switching distance), as well as for reading out switching statuses and signal values.



Optical Data

Range	10000 mm
Light Source	Laser (red)
Wavelength	680 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Light Spot Diameter	see Table 1

Electrical Data

Sensor Type	Emitter
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 15 mA
Temperature Drift (-10 °C < T _u < 40 °C)	10 % *
Temperature Range	-40...60 °C
Reverse Polarity Protection	yes
Test input	yes
Protection Class	III
FDA Accession Number	1710976-001

Mechanical Data

Housing Material	Plastic
Degree of Protection	IP67/IP68
Connection	M12 × 1; 4-pin
Cable Length	200 mm
Optic Cover	PMMA

Safety-relevant Data

MTTFd (EN ISO 13849-1)	2993,84 a
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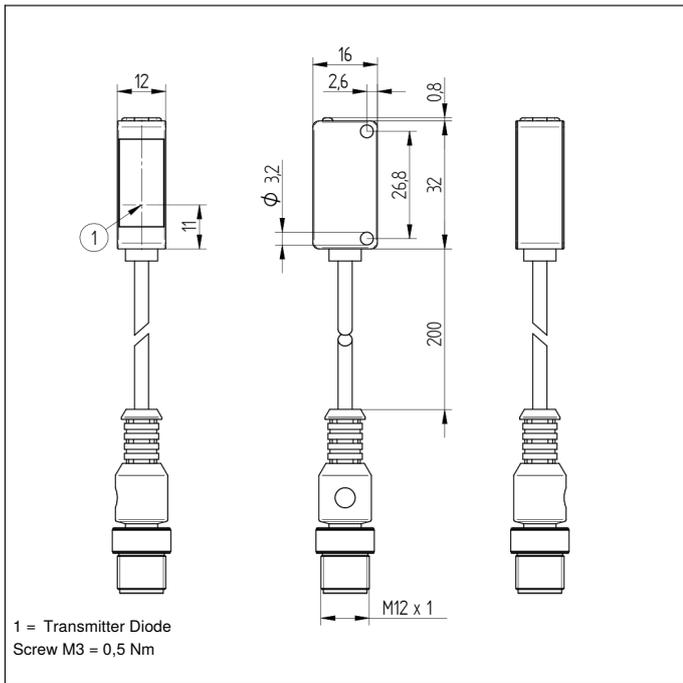
Connection Diagram No.	1018
Control Panel No.	1K2
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	400

Suitable Receiver

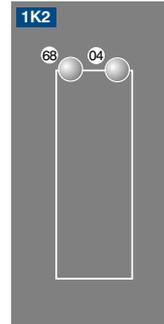
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* See operating instructions for further information

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



Ctrl. Panel



04 = Function Indicator
68 = Supply Voltage Indicator

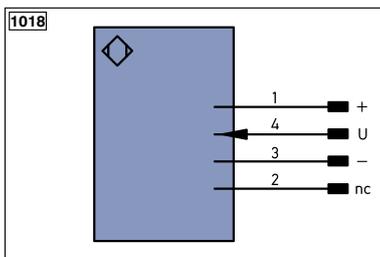


Table 1

Working Distance	1 m	6 m	10 m
Light Spot Diameter	2,5 mm	25 mm	40 mm