Reflex Sensor
with Background Suppression

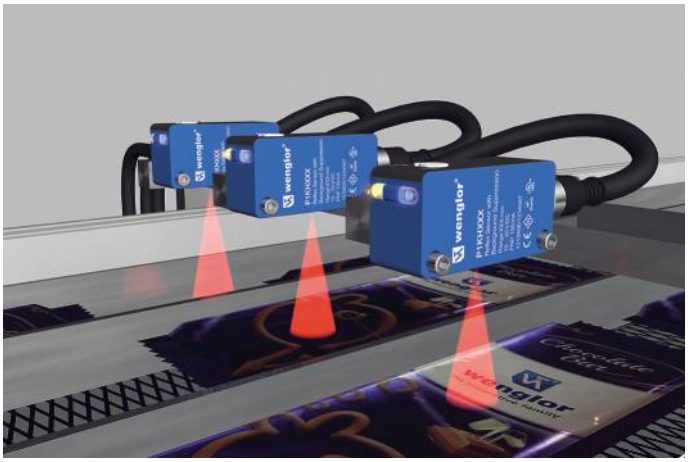
P1KH034

PNG smart



- **Data storage**
- **High-end**
- **IO-Link 1.1**
- **Teach-in**
- **Two independent switching outputs**

The reflex sensor with background suppression works with red light according to the angle measurement principle. It has a IO-Link interface with a data storage function as well as additional configuration and diagnostic options. The interface can also be used to configure the sensors (PNP/NPN, NC/NO, switching distance, error output), as well as for reading out switching statuses and distance values. The teach-in function also provides another configuration option. Two independent switching outputs can be used, for instance, to monitor minimum and maximum values of distances or fill levels and stack heights.



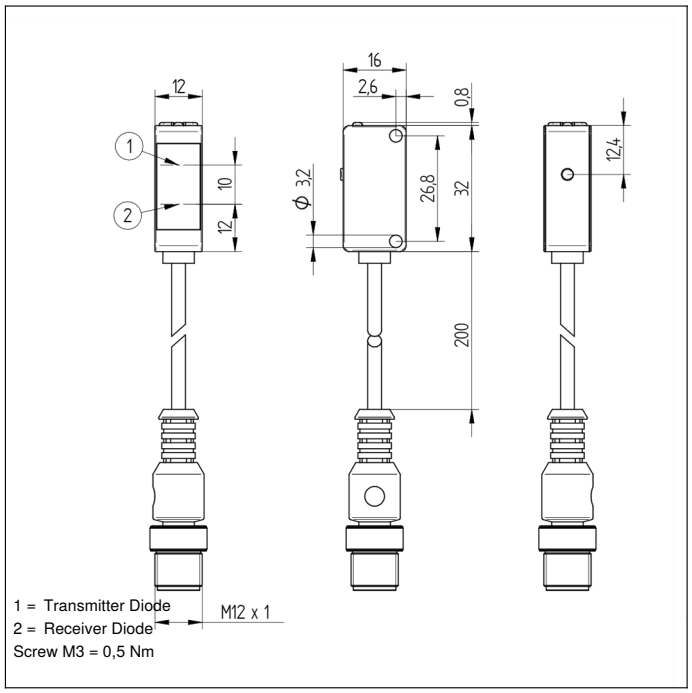
Optical Data	
Range	200 mm
Adjustable Range	30...200 mm
Switching Hysteresis	< 10 %
Light Source	Red Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Light Spot Diameter	see Table 1
Electrical Data	
Supply Voltage	15...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (Ub = 24 V)	< 20 mA
Switching Frequency	100 Hz
Switching Frequency (1 Switching Output)	1000 Hz
Response Time	5 ms
Response time (1 switching output)	0,5 ms
Temperature Drift	< 5 %
Temperature Range	-40...60 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	< 2 V
Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 µA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Lockable	yes
Interface	IO-Link V1.1
Data Storage	yes
Protection Class	III
Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic
Degree of Protection	IP67/IP68
Connection	M12 × 1; 4-pin
Cable Length	20 cm
Optic Cover	PMMA
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	1511,45 a
PNP NO	●
IO-Link	●
Connection Diagram No.	221
Control Panel No.	A23
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	400

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

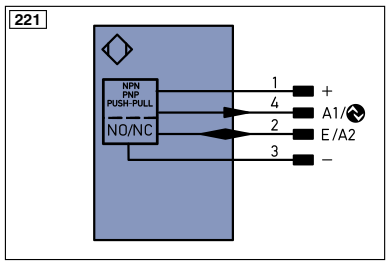
Actual product not similar

Complementary Products

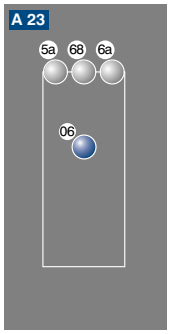
IO-Link Master
Software



1 = Transmitter Diode
2 = Receiver Diode
Screw M3 = 0,5 Nm



Ctrl. Panel



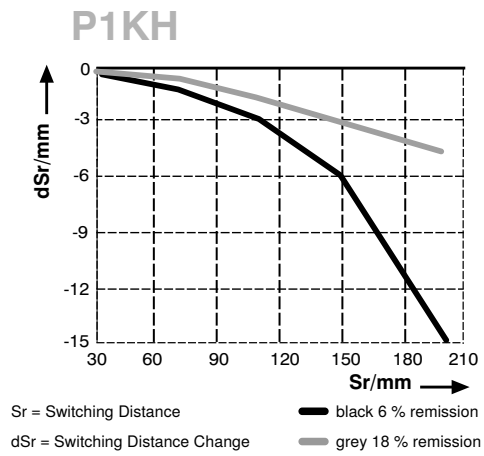
06 = Teach Button
5a = Switching Status Display, O1
68 = Supply Voltage Indicator
6a = Switching Status Display, O2

Table 1

Detection Range	30 mm	120 mm	200 mm
Light Spot Diameter	9 mm	7 mm	10 mm

Switching Distance Deviation

Typical characteristic curve based on white, 90 % remission



Sr = Switching Distance
dSr = Switching Distance Change
black 6 % remission
grey 18 % remission