

Reflex Sensor with Background Suppression

OHKS934



- Electronic background suppression
- Miniature design
- Red light
- Switching distance adjuster

Optical Data

Range	200 mm
Adjustable Range	35...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	10...30 V DC
Current Consumption (U _b = 24 V)	< 25 mA
Switching Frequency	600 Hz
Response Time	833 µs
Temperature Drift	< 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

Mechanical Data

Setting Method	Potentiometer
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
Cable Length	200 mm

Safety-relevant Data

MTTFd (EN ISO 13849-1)	a
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PNP NO/NC antivalent



Connection Diagram No.

101

Control Panel No.

K4

Suitable Connection Equipment No.

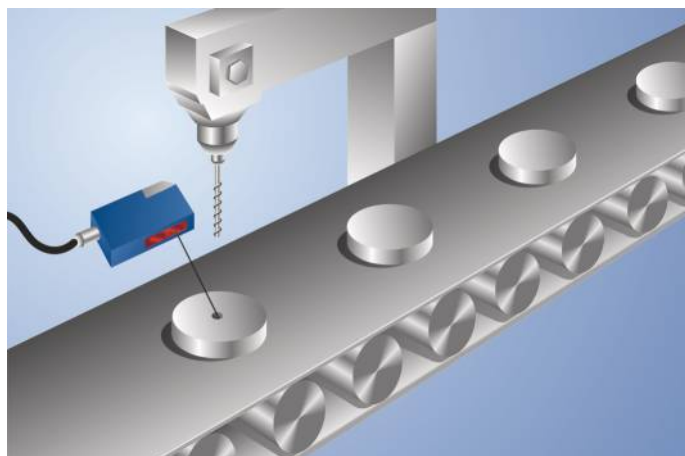
2

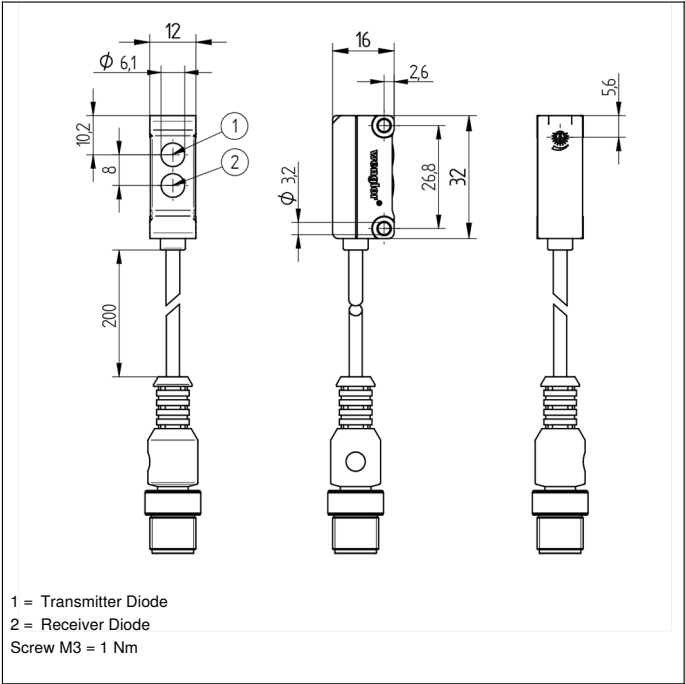
Suitable Mounting Technology No.

400

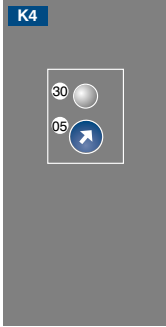
* Temperature range with permanently installed cable, bending radius: > 20 mm

These sensors detect distance by measuring angles. They are particularly good at recognizing objects in front of any background. The color, shape and surface characteristics of the object have practically no influence on sensor switching performance.





Ctrl. Panel



05 = Switching Distance Adjuster
30 = Switching Status/Contamination Warning

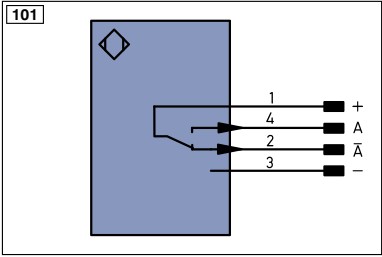


Table 1

Detection Range	30 mm	115 mm	200 mm
Light Spot Diameter	4 mm	6 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