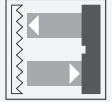




Retroreflective sensor OBR5500-18GK40-E1



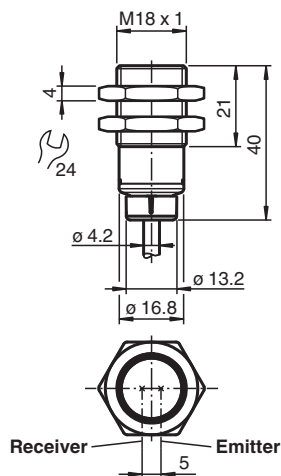
- Short design in M18 plastic housing
- Not sensitive to ambient light
- Degree of protection IP67
- Very high detection range



Function

The optical sensors of this series have an M18 threaded housing that is optionally available in plastic or metal. The sensors are robust and versatile. Focusing on the essential requirements simplifies selection and commissioning, saving time and costs.

Dimensions



Technical Data

General specifications

Effective detection range	0 ... 5.5 m
Reflector distance	0 ... 5.5 m
Threshold detection range	7.8 m
Reference target	reflector C110-2
Light source	LED
Light type	modulated visible red light
Polarization filter	yes
Diameter of the light spot	approx. 350 mm at 5.5 m
Opening angle	approx. 2.6 °
Optical face	frontal
Ambient light limit	EN 60947-5-2 40000 Lux

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PEPPERL+FUCHS

Technical Data

Functional safety related parameters

MTTF _d	1552 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Operation indicator	LED green: on - power on flashing (4 Hz) - short circuit
Function indicator	Yellow LED: Permanently lit - light path clear Permanently off - object detected Flashing (4 Hz) - insufficient operating reserve

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	I ₀	< 25 mA
Protection class		III

Output

Switching type	Q - BK: NPN normally closed / light-on	
Signal output		1 NPN output, short-circuit protected, reverse polarity protected, open collector
Switching voltage	max. 30 V DC	
Switching current		max. 100 mA , resistive load
Voltage drop	U _d	≤ 1.5 V DC
Switching frequency	f	500 Hz
Response time	≤ 1 ms	

Conformity

Product standard	EN 60947-5-2
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Approvals and certificates

UL approval	E87056 , cULus Listed , class 2 power supply , type rating 1
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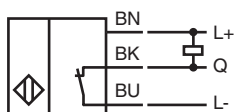
Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

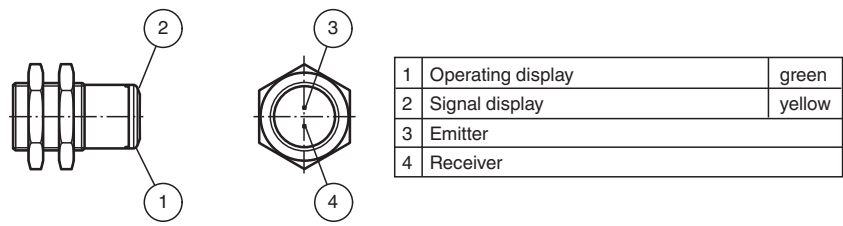
Mechanical specifications

Degree of protection	IP67
Connection	2 m fixed cable
Material	
Housing	PC (Polycarbonate)
Optical face	PMMA
Cable	PVC
Mass	approx. 54 g
Dimensions	
Length	40 mm
Diameter	18 mm
Thread size	M18

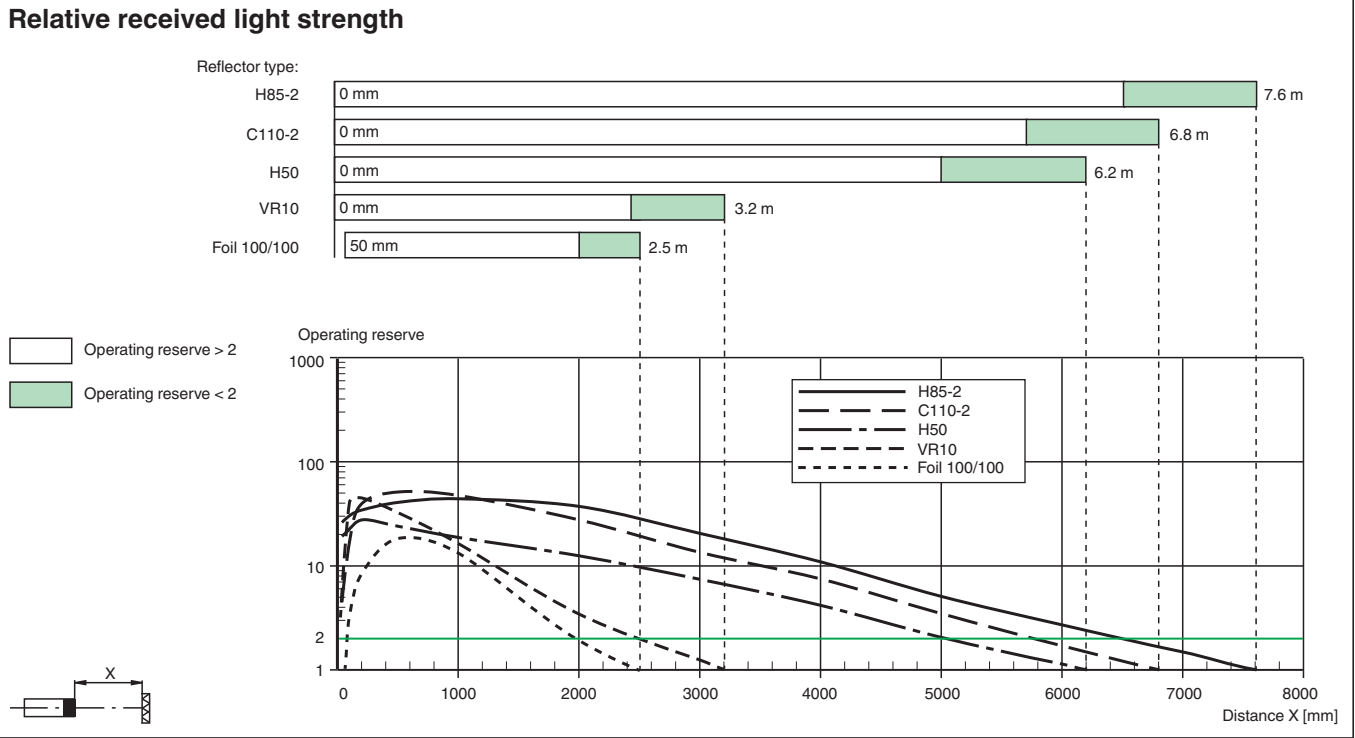
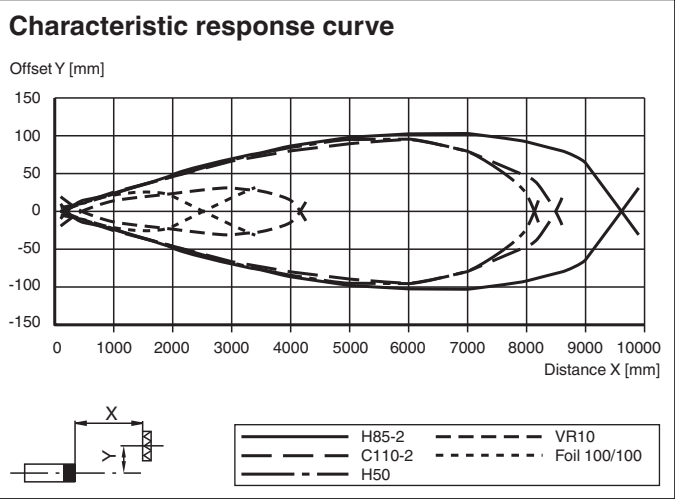
Connection



Indication



Characteristic Curve



Release date: 2024-10-16 Date of issue: 2024-10-16 Filename: 70113328-100164_eng.pdf