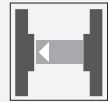


# Thru-beam sensor (pair)

## OBE25M-18GK40-SE0-V1



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

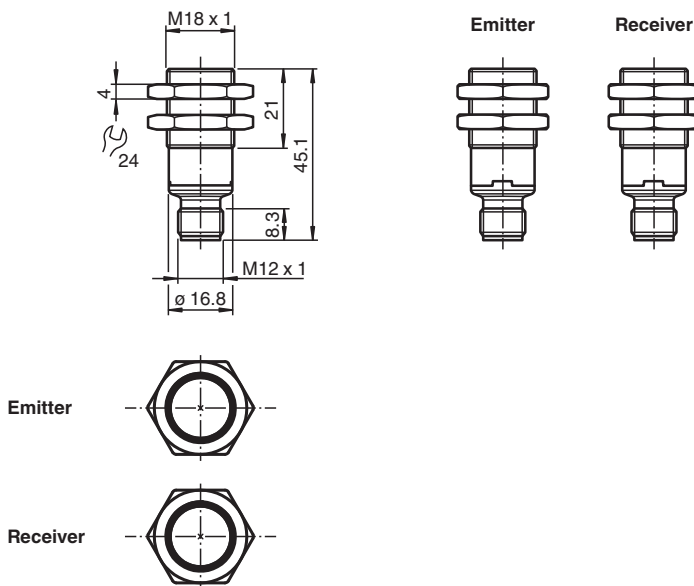
### Thru-beam sensor (pair)



### 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 ... 25 m
Threshold detection range	35 m
Light source	LED
Light type	modulated visible red light

Release date: 2021-06-28 Date of issue: 2021-06-28 Filename: 70127714\_eng.pdf

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

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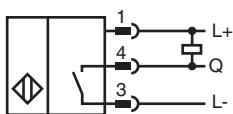
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

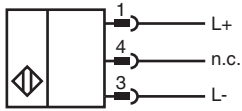
**PF** PEPPERL+FUCHS

## Technical Data

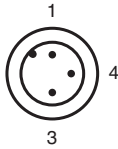
Diameter of the light spot	approx. 110 mm at 1 m	
Angle of divergence	approx. 2.9 °	
Optical face	frontal	
Ambient light limit	EN 60947-5-2 10000 Lux	
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>	838 a	
Mission Time (T <sub>M</sub> )	20 a	
Diagnostic Coverage (DC)	0 %	
<b>Indicators/operating means</b>		
Operation indicator	LED green: on - power on flashing (4 Hz) - short circuit	
Function indicator	Receiver: Yellow LED: Permanently lit - light path clear Permanently off - object detected Flashing (4 Hz) - insufficient operating reserve	
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Ripple	max. 10 %	
No-load supply current	I <sub>0</sub>	< 25 mA
Protection class	III	
<b>Output</b>		
Switching type	Q - Pin4: NPN normally open / dark-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 <sub>d</sub>	≤ 1.5 V DC
Switching frequency	f	500 Hz
Response time	≤ 1 ms	
<b>Conformity</b>		
Product standard	EN 60947-5-2	
<b>Approvals and certificates</b>		
UL approval	E87056 , cULus Listed , class 2 power supply , type rating 1	
<b>Ambient conditions</b>		
Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)	
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)	
<b>Mechanical specifications</b>		
Degree of protection	IP67	
Connection	3-pin, M12 x 1 connector	
<b>Material</b>		
Housing	PC (Polycarbonate)	
Optical face	PMMA	
Connector	Plastic	
Mass	approx. 8 g per device	

## Connection





## Connection Assignment

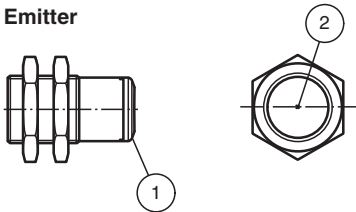


Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

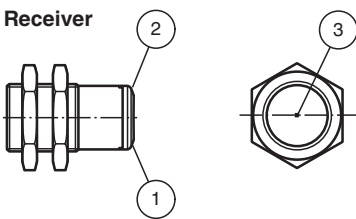
## Indication

### Emitter



1	Operating display	green
2	Emitter	

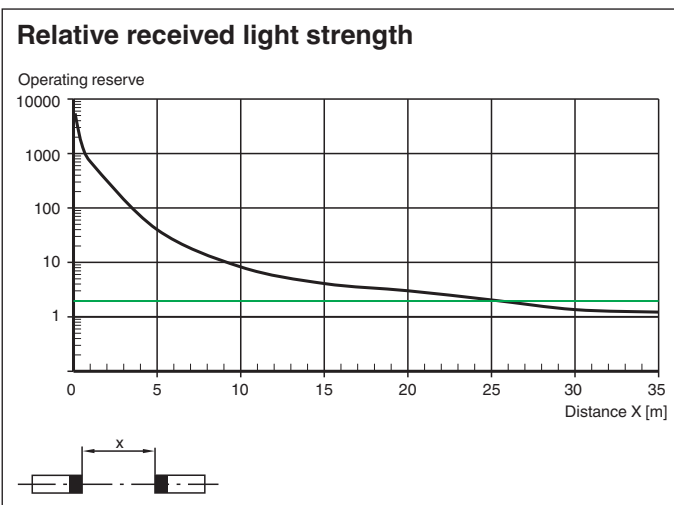
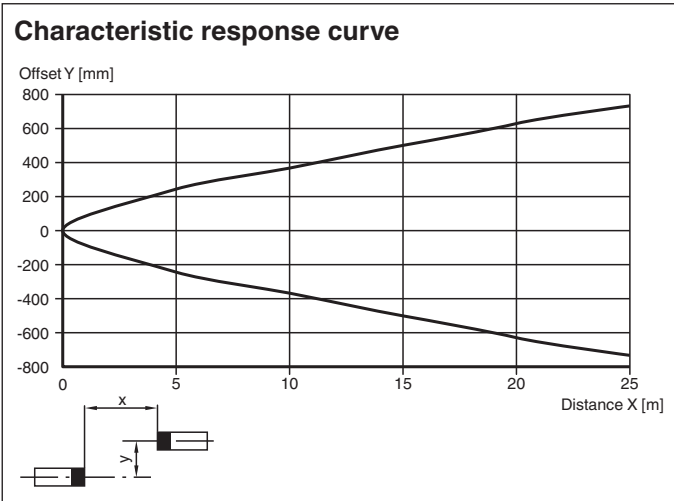
### Receiver



1	Operating display	green
2	Signal display	yellow
3	Receiver	

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**Characteristic Curve**



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