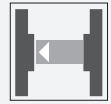




## Thru-beam sensor (pair)

### OBE25M-18GM40-SE0



- Strong metallic housing in cylindrical shape M18 x 1
- Not sensitive to ambient light
- Degree of protection IP67
- Very high detection range

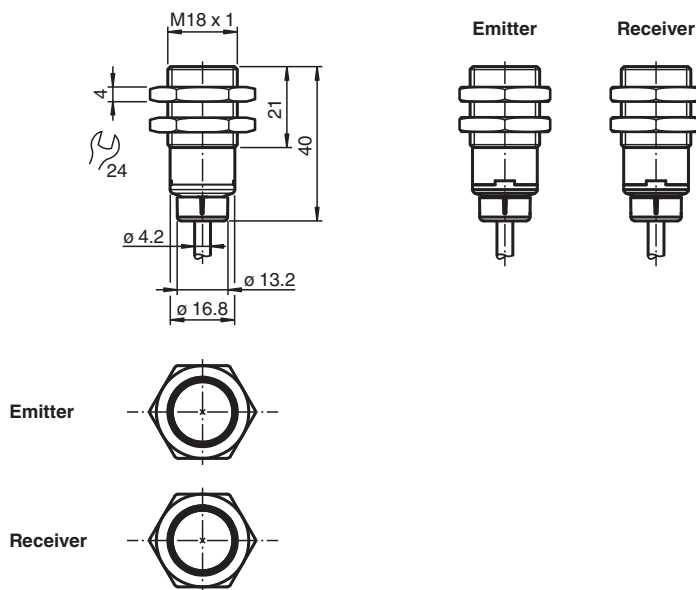
## Thru-beam sensor (pair)



## 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

### System components

Emitter	OBE25M-18GK40-S-V1
Receiver	OBE25M-18GM40-E0

### General specifications

Effective detection range	0 ... 25 m
---------------------------	------------

Release date: 2021-06-28 Date of issue: 2021-06-28 Filename: 70127723\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

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

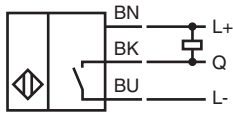
**pf** PEPPERL+FUCHS

## Technical Data

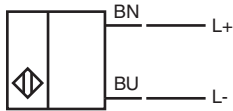
Threshold detection range		35 m
Light source		LED
Light type		modulated visible red light
Diameter of the light spot		approx. 110 mm at 1 m
Angle of divergence		approx. 2.9 °
Optical face		frontal
Ambient light limit		EN 60947-5-2 10000 Lux
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		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		2 m fixed cable
Material		
Housing		brass, nickel-plated
Optical face		PMMA
Cable		PVC
Mass		approx. 60 g per device

Release date: 2021-06-28 Date of issue: 2021-06-28 Filename: 70127723\_eng.pdf

## Connection

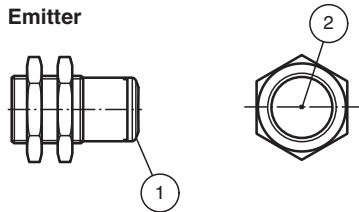


## Connection Assignment



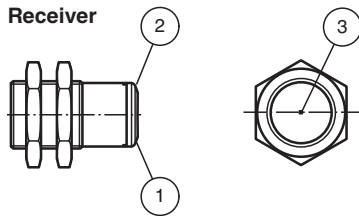
## Indication

### Emitter



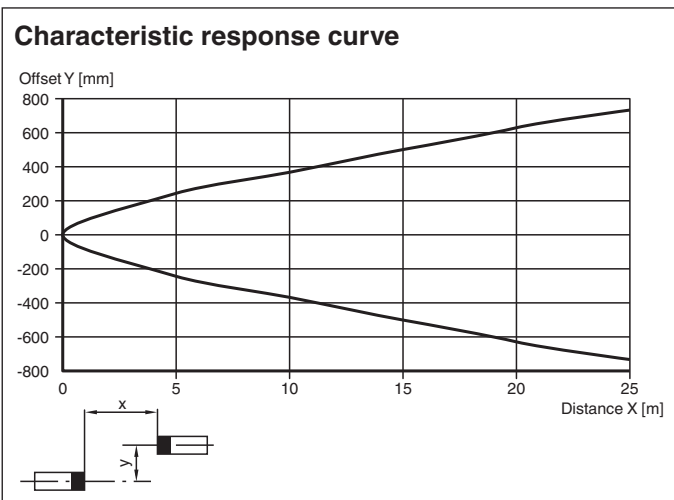
1	Operating display	green
2	Emitter	

### Receiver

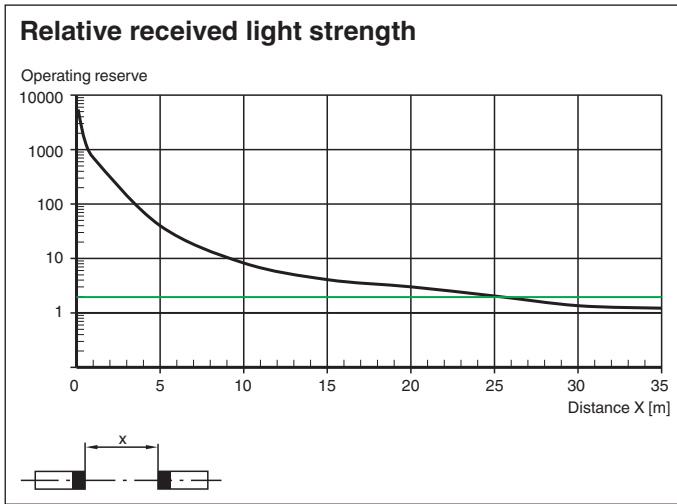


1	Operating display	green
2	Signal display	yellow
3	Receiver	

## Characteristic Curve



Release date: 2021-06-28 Date of issue: 2021-06-28 Filename: 70127723\_eng.pdf



Release date: 2021-06-28 Date of issue: 2021-06-28 Filename: 70127723\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

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