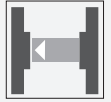




Thru-beam sensor (pair)

OBE15M-18GM40A-SE0-V1



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

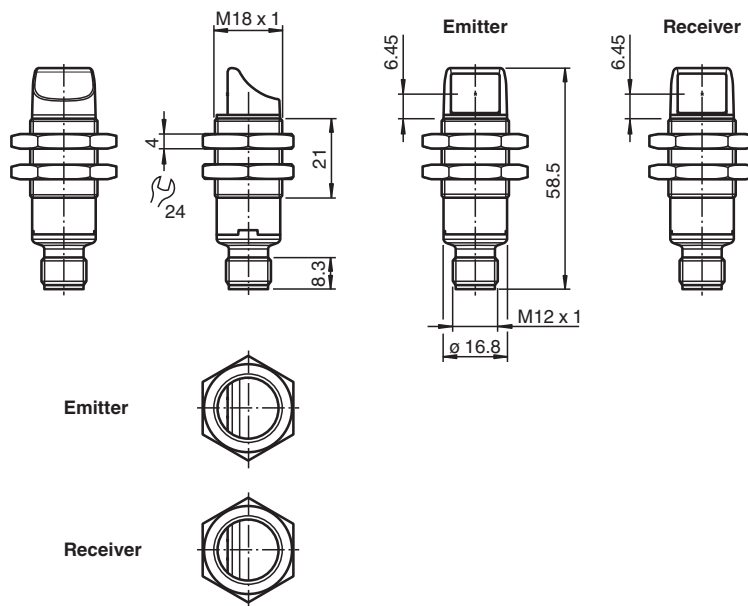
Thru-beam sensor (pair)



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	OBE15M-18GM40A-S-V1
Receiver	OBE15M-18GM40A-E0-V1

General specifications

Effective detection range	0 ... 15 m
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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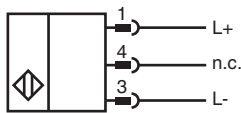
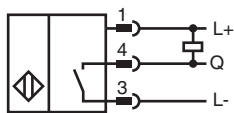
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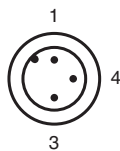
Technical Data

Threshold detection range	21 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	lateral
Ambient light limit	EN 60947-5-2 10000 Lux
Functional safety related parameters	
MTTF _d	838 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	Receiver: 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 - 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 _d ≤ 1.5 V DC
Switching frequency	f 500 Hz
Response time	≤ 1 ms
Conformity	
Product standard	EN 60947-5-2
Approvals and certificates	
UL approval	E87056 , cULus Listed , class 2 power supply , type rating 1
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	3-pin, M12 x 1 connector
Material	
Housing	brass, nickel-plated
Optical face	PMMA
Connector	plastic
Mass	approx. 16 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

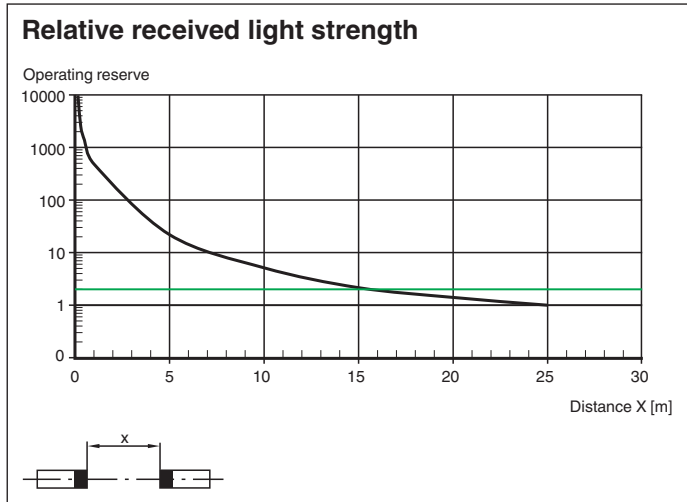
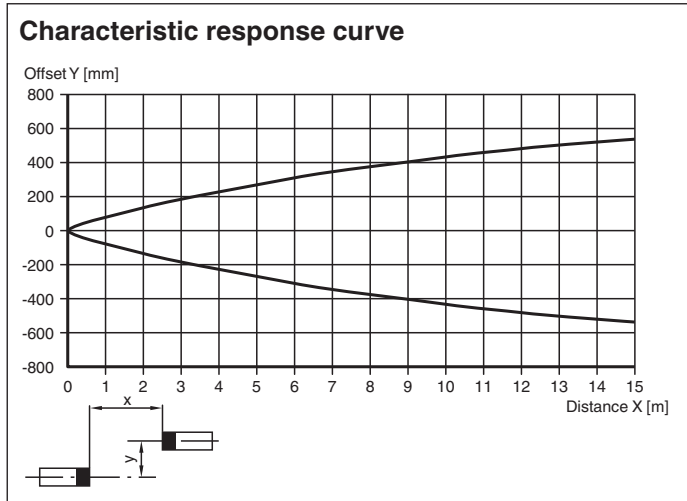
1	Operating display	green
2	Emitter	

Receiver

1	Operating display	green
2	Signal display	yellow
3	Receiver	

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Characteristic Curve



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