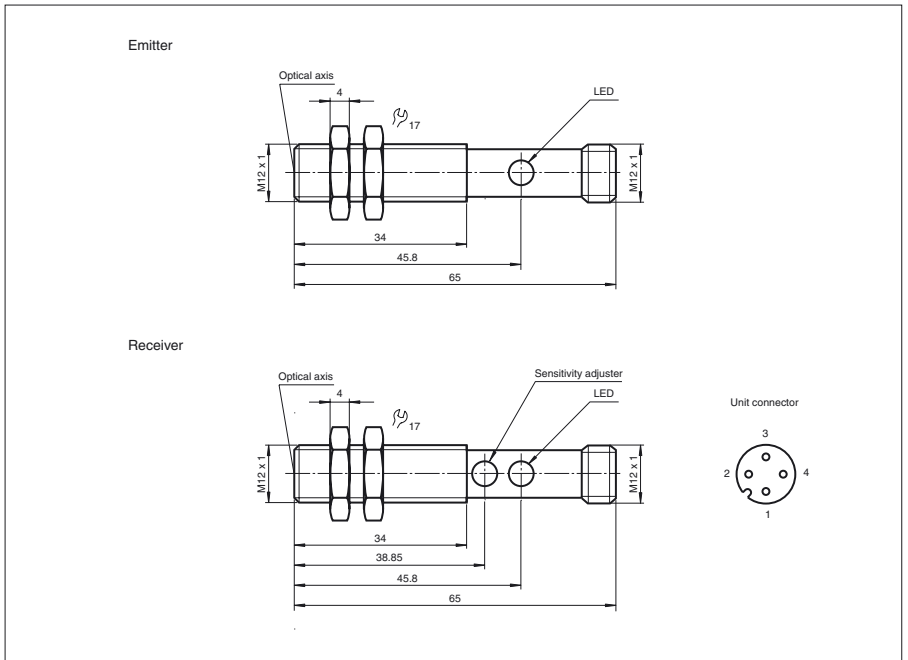## Dimensions

Emitter

Receiver

Model Number

G12/GV12/37/40b/92

Thru-beam sensor
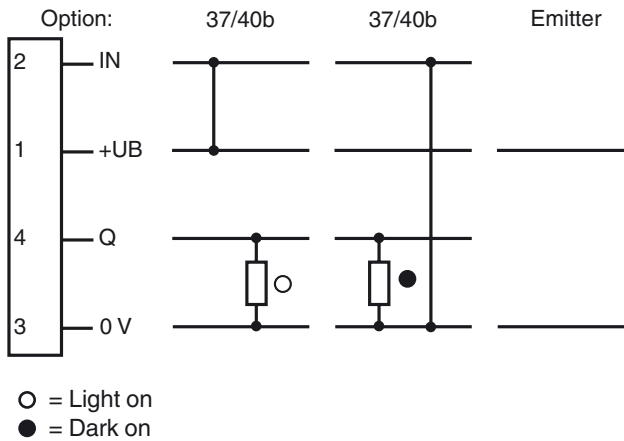with 4-pin, M12 x 1 connector

Features

- Basic Series with M12 metal housing for standard applications
- Robust M12 threaded housing
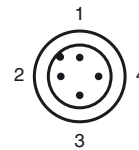- Visible red light
- Light/dark ON, programmable

Electrical connection

Option:	37/40b	37/40b	Emitter
2 — IN			
1 — +UB			
4 — Q			
3 — 0 V			

○ = Light on
● = Dark on

Pinout

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 4411
fa-info@de.pepperl-fuchs.com

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

PEPPERL+FUCHS
SENSING YOUR NEEDS

Technical data

System components

Emitter	G12/92
Receiver	GV12/37/40b/92

General specifications

Effective detection range	0 ... 5000 mm
Adjustment range	250 ... 5000 mm
Reference target	receiver
Light source	LED
Light type	modulated visible red light , 660 nm
Optical face	frontal
Ambient light limit	20000 Lux

Indicators/operating means

Function indicator	LED yellow: switching state
Control elements	sensitivity adjustment , receiver

Electrical specifications

Operating voltage	U_B	10 ... 30 V DC
Ripple		10 %
No-load supply current	I_0	≤ 20 mA
Time delay before availability	t_v	≤ 25 ms

Input

Control input	light on +UB dark on: 0 V

Output

Switching type		light/dark on
Signal output		1 PNP output, short-circuit protected, reverse polarity protected, open collector
Switching voltage		max. 30 V DC
Switching current		max. 300 mA
Voltage drop	U_d	≤ 3 V
Switching frequency	f	≤ 500 Hz
Response time		≤ 1 ms

Standard conformity

Standards	EN 60947-5-2

Ambient conditions

Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

Protection degree	IP67
Connection	connector M12 x 1, 4-pin
Material	
Housing	brass, nickel-plated
Optical face	PMMA
Mass	15 g (device)

Approvals and certificates

CCC approval	CCC approval / marking not required for products rated ≤36 V
Approvals	CE
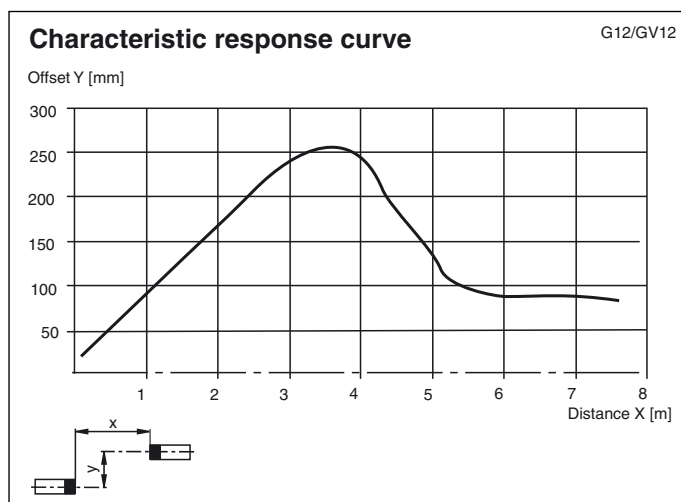
Accessories

BF 12
Mounting flange, 12 mm

BF 12-F
Mounting flange with dead stop, 12 mm

BF 5-30
Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm
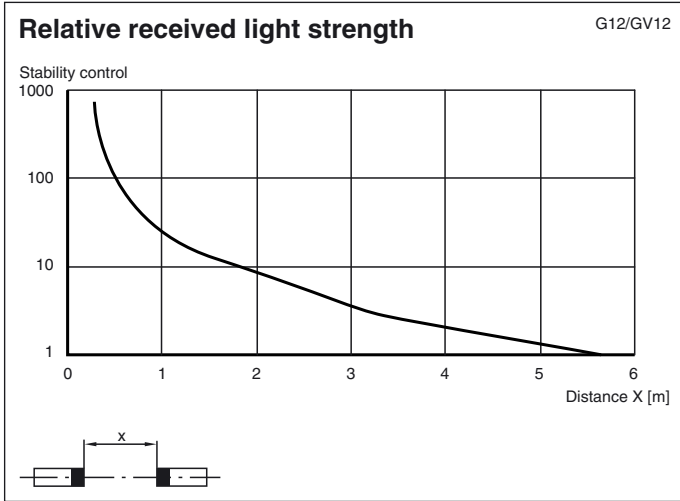
V1-G-2M-PUR
Female cordset, M12, 4-pin, PUR cable

V1-W-2M-PUR
Female cordset, M12, 4-pin, PUR cable

Additional accessories can be found in the Internet.

Curves/Diagrams

Characteristic response curve

G12/GV12

Offset Y [mm] vs Distance X [m]

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Relative received light strength　　　　　G12/GV12

Stability control

Distance X [m]

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