



**Model Number**

**G12/GV12/36/40b/115**

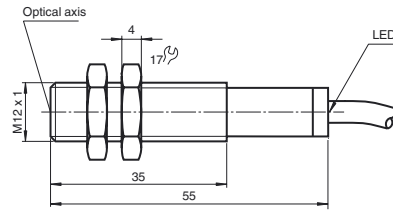
Thru-beam sensor  
with 2 m fixed cable

**Features**

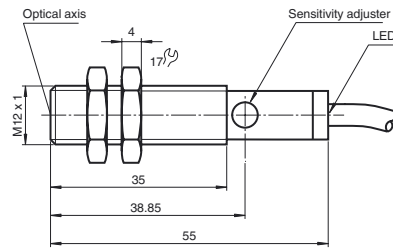
- Basic Series with M12 metal housing for standard applications
- Robust M12 threaded housing
- Visible red light
- Light/dark ON, programmable

**Dimensions**

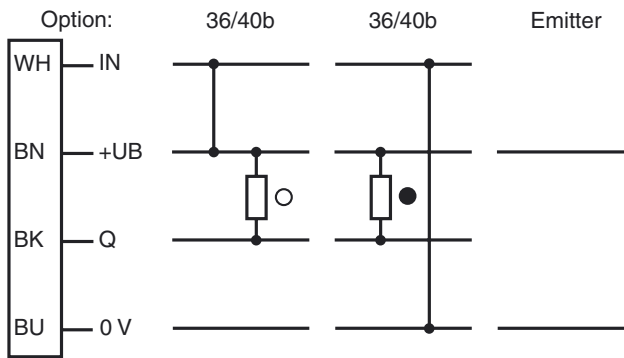
Transmitter



Receiver



**Electrical connection**



○ = Light on  
● = Dark on

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

**Technical data****System components**

Emitter	G12/115
Receiver	GV12/36/40b/115

**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	$I_0$	$\leq 20$ mA
Time delay before availability	$t_v$	$\leq 25$ ms

**Input**

Control input	light on +UB dark on: 0 V
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**Output**

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

**Standard conformity**

Standards	EN 60947-5-2
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**Ambient conditions**

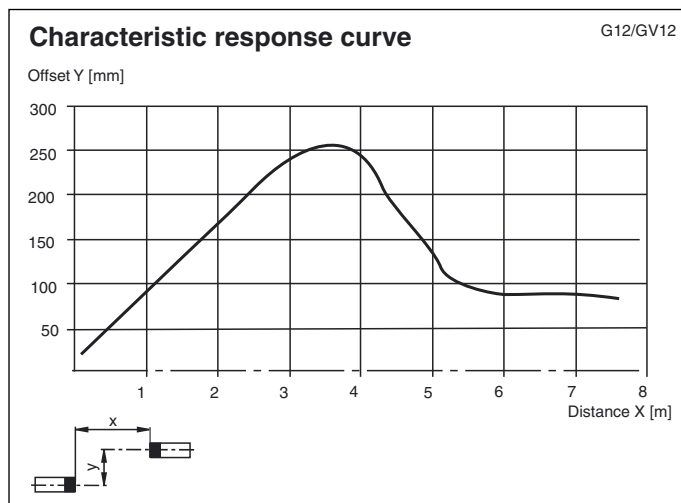
Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

**Mechanical specifications**

Protection degree	IP67
Connection	2 m fixed cable
Material	
Housing	brass, nickel-plated
Optical face	PMMA
Mass	45 g (device)

**Approvals and certificates**

CCC approval	CCC approval / marking not required for products rated $\leq 36$ V
Approvals	CE

**Curves/Diagrams****Accessories****BF 12**

Mounting flange, 12 mm

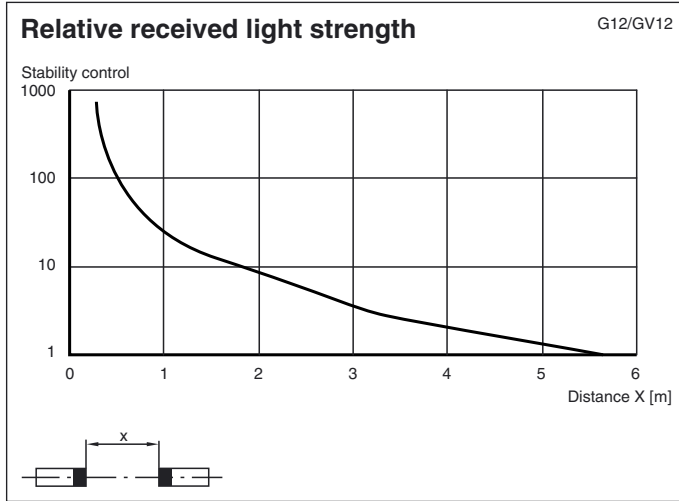
**BF 12-F**

Mounting flange with dead stop, 12 mm

**BF 5-30**

Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

Additional accessories can be found in the Internet.



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