







# **Model Number**

#### GD18-S/GV18-S/59/102/115

Thru-beam sensor with 2 m fixed cable

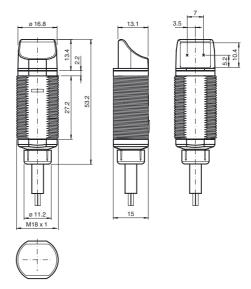
### **Features**

- Efficient Line in a short M18 plastic housing for standard applications
- · Very high detection range
- 4 LEDs indicator for 360° visibility
- Sidelookerversion
- DC voltage version

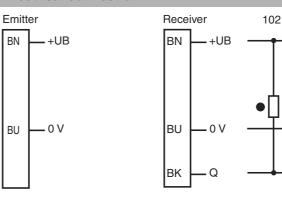
#### **Product information**

The GLV/GLK18 series sensors help improve the efficiency of machines and systems. The design of the M18 plastic housing, the connection technology, and sensor properties are highly standardized. Concentrating on the key sensor requirements has produced a robust and reliable product series for DC and AC/DC voltage systems without any overengineering. The mounting set included in the scope of delivery and the optimized potentiometer design ensure fast assembly and easy configuration.

### **Dimensions**

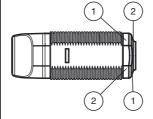


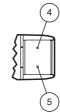
### **Electrical connection**



- O = Light on
- = Dark on

# Indicators/operating means





1	Operating display	green	
2	Signal display	yellow	
4	Emitter		
5	Receiver		

	Thru-beam	sens
	Till a bealli	30113

Technical data		
System components		
Emitter		GD18-S/115
Receiver		GV18-S/59/102/115
General specifications		
Effective detection range		0 12 m
Threshold detection range		17.5 m
Light source		LED
Light type		modulated visible red light, 640 nm
Diameter of the light spot		approx. 650 mm at 17.5 m
Angle of divergence		approx. 2 °
Optical face		lateral
Ambient light limit		30000 Lux
Functional safety related par	ameters	
MTTF <sub>d</sub>		630 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operating display		LED green, statically lit Power on
Function display		Receiver: LED yellow, lights up when light beam is free, flashes when falling short of the stability control; OFF when light beam is interrupted
Electrical specifications		
Operating voltage	$U_B$	10 30 V DC
No-load supply current	I <sub>0</sub>	< 20 mA
Output		
Switching type		dark on
Signal output		1 NPN, short-circuit protected open collector
Switching voltage		max. 30 V DC
Switching current		max. 100 mA
Voltage drop	$U_d$	≤ 1.5 V DC
Switching frequency	f	500 Hz
Response time		≤ 1 ms
Ambient conditions		
Ambient temperature		-25 60 °C (-13 140 °F)
Storage temperature		-40 70 °C (-40 158 °F)
Mechanical specifications		
Protection degree		IP67
Connection		2 m fixed cable
Material		
Housing		PC
Optical face		PMMA
Mass		approx. 75 g per device
Compliance with standards a ves	and directi	i.
Standard conformity		
Product standard		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
Protection class		II, rated insulation voltage $\leq$ 250 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval		cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval		Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

### **Accessories**

### CPZ18B03

Mounting Bracket with swivel nut

#### **BF 18**

Mounting flange, 18 mm

### BF 18-F

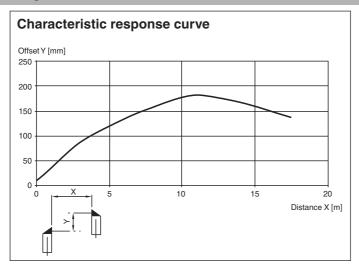
Mounting flange with dead stop, 18 mm

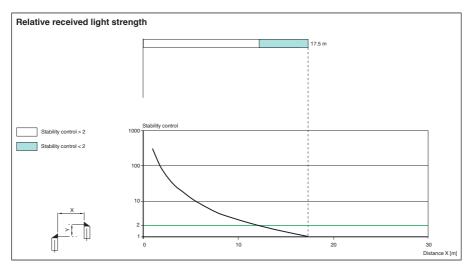
Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

Other suitable accessories can be found at www.pepperl-fuchs.com

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# **Curves/Diagrams**





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