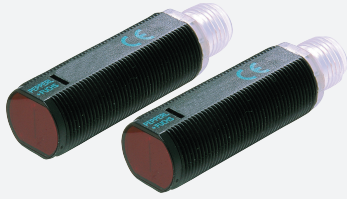
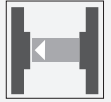


Thru-beam sensor

GA18/GK18/59/161/166



- Efficient Line in a short M18 plastic housing for standard applications
- Very high detection range
- 4 LEDs indicator for 360° visibility
- Version with front optical face
- Universal usage at different power supplies

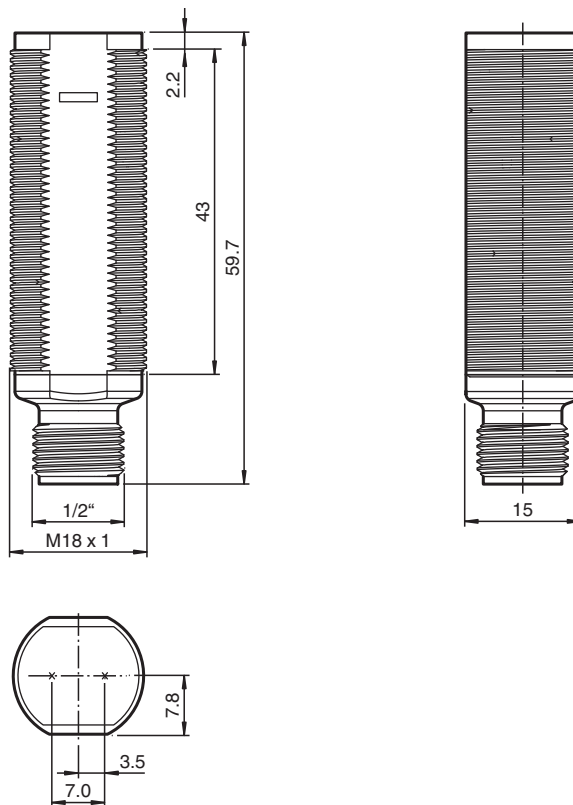
Thru-beam sensor, M18 threaded housing design, plastic housing, front optical face, 20 m detection range, red light, dark on, AC/DC version, NPN-FET output, micro plug



Function

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 over-engineering. The mounting set included in the scope of delivery and the optimized potentiometer design ensure fast assembly and easy configuration.

Dimensions



Release date: 2020-12-10 Date of issue: 2020-12-10 Filename: 199778_eng.pdf

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

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PEPPERL+FUCHS

Technical Data

System components

Emitter	GA18/166
Receiver	GK18/59/161/166

General specifications

Effective detection range	0 ... 20 m
Threshold detection range	25 m
Light source	LED
Light type	modulated visible red light , 640 nm
Diameter of the light spot	approx. 1000 mm at 25 m
Angle of divergence	approx. 3 °
Optical face	frontal
Ambient light limit	30000 Lux
Accessories provided	Mounting aids

Indicators/operating means

Operation indicator	LED green, statically lit Power on
Function indicator	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	20 ... 250 V AC/DC
No-load supply current	I_0	< 2.5 mA per device

Output

Switching type		dark on
Signal output		N-channel MOSFET, short circuit protected
Switching voltage		max. 250 V AC/DC
Switching current		max. 200 mA
Voltage drop	U _d	≤ 3.5 V AC/DC
Switching frequency	f	50 Hz
Response time		≤ 10 ms

Conformity

Product standard	EN 60947-5-2
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Compliance with standards and directives

Standard conformity	
Standards	UL 508

Approvals and certificates

EAC conformity	TR CU 020/2011 TR CU 004/2011
Protection class	II, rated insulation voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval	cULus Listed, Type 1 enclosure
CCC approval	Certified by China Compulsory Certification (CCC)

Ambient conditions

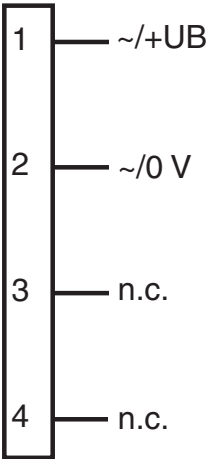
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

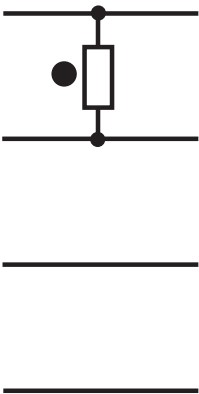
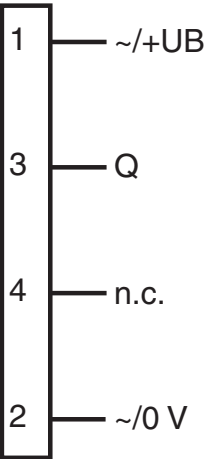
Degree of protection	IP67
Connection	Micro AC connector, 1/2" V124 ; 4-pin
Material	
Housing	ABS / PBT
Optical face	PMMA
Mass	approx. 10 g per device

Connection Assignment

Transmitter

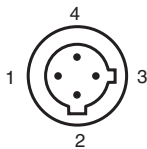


Receiver

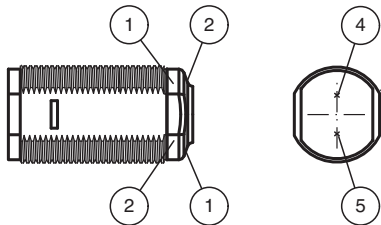


○ = Light on
● = Dark on

Connection Assignment



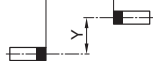
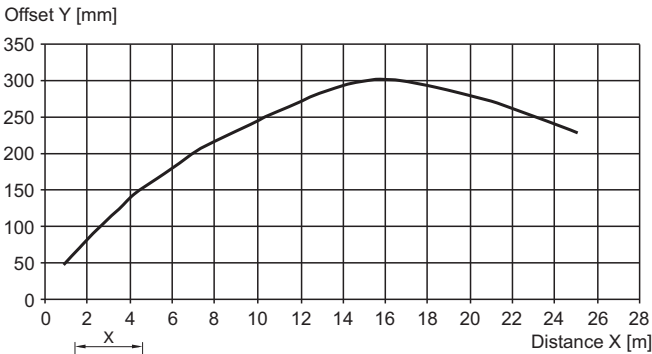
Assembly

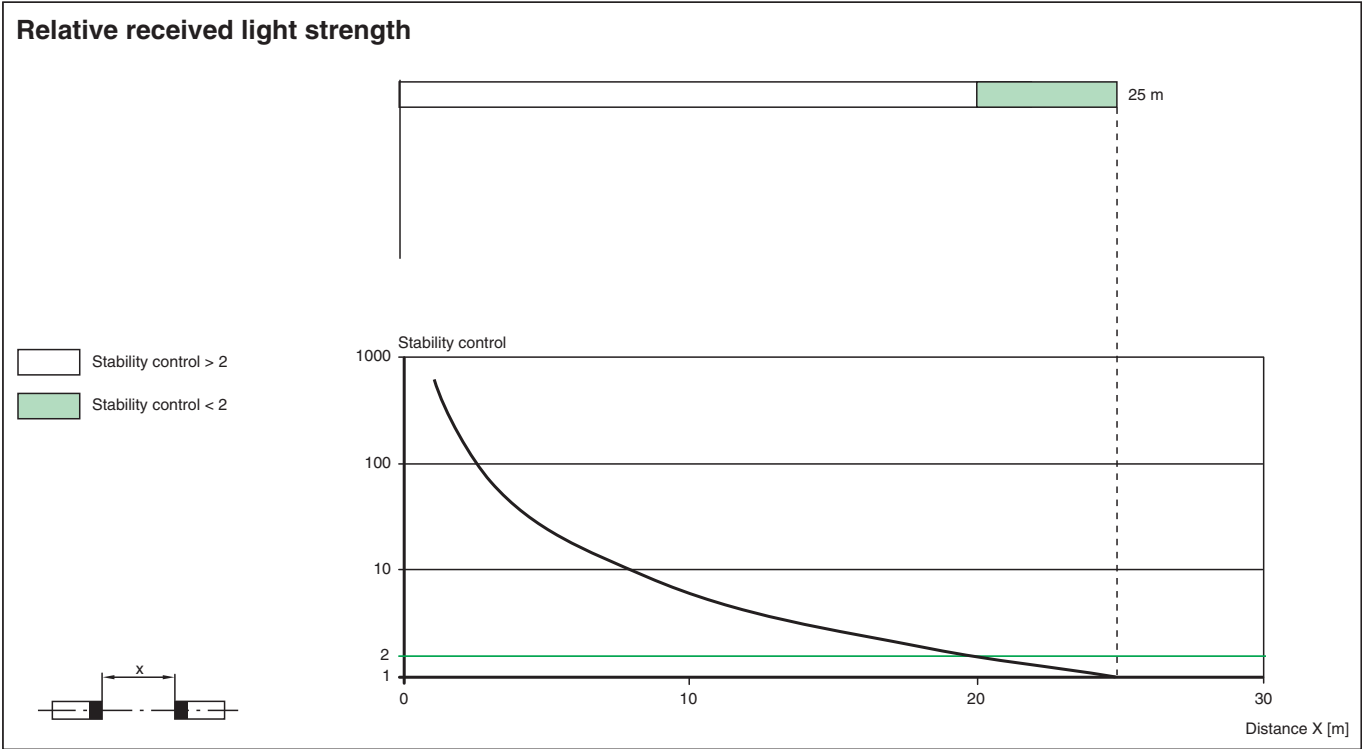


1	Operating display	green
2	Signal display	yellow
4	Emitter	
5	Receiver	

Characteristic Curve

Characteristic response curve





Application



Accessories

	CPZ18B03	Mounting Bracket with swivel nut
	BF 18	Mounting flange, 18 mm
	BF 18-F	Plastic mounting adapter, 18 mm
	BF 5-30	Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm
	V124-G-YE2M-PVC	Connecting cable, 1/2" - 20 UNF, 4-pin, PVC cable

Accessories

	V124-W-YE2M-PVC	Connecting cable, 1/2" - 20 UNF, 4-pin, PVC cable
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Accessories

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

Application

Packaging industry:

- Presence checks, track loading, completeness checks, stack height control

Material handling

- Presence checks, target sensor, profile checks, trigger sensor

Automatic doors, gates and access systems, elevator:

- Secure detection for automatic door and gate systems
- Monitoring function in turnstiles
- Closing edge monitoring in elevators