Model Number

GLK18-8-450/25/115/161

Diffuse mode sensor
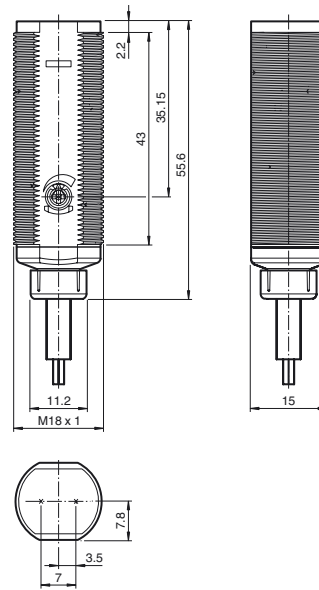
with 2 m fixed cable

Features

- Efficient Line in a short M18 plastic housing for standard applications
- Very high detection range
- 4 LEDs indicator for 360° visibility
- Optimized potentiometer design for a clear control button layout in the application
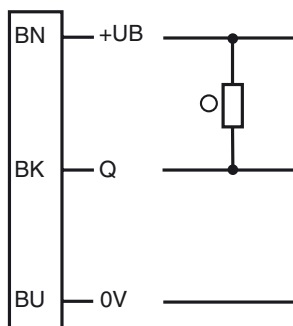- Universal usage at different power supplies

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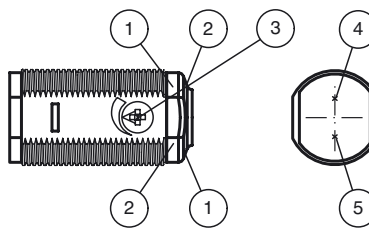
Dimensions

Electrical connection

○ = Light on
● = Dark on

Indicators/operating means

1	Operating display	green
2	Signal display	yellow
3	Sensitivity adjustment	
4	Emitter	
5	Receiver	

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

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Technical data

General specifications

Detection range		50 ... 450 mm adjustable
Detection range max.		0 ... 450 mm
Reference target		100 mm x 100 mm Kodak white
Light source		LED
Light type		modulated visible red light , 640 nm
Diameter of the light spot		approx. 15 mm at 400 mm
Angle of divergence		approx. 2 °
Optical face		frontal
Ambient light limit		30000 Lux ; according to EN 60947-5-2:2007
Hysteresis	H	< 15 %
Accessories provided		Mounting aids

Indicators/operating means

Operation indicator	LED green, statically lit Power on
Function indicator	LED yellow: lights when object is detected ; flashes when falling short of the stability control
Control elements	sensitivity adjustment

Electrical specifications

Operating voltage	U_B	20 ... 250 V AC/DC
No-load supply current	I_0	< 2.5 mA

Output

Switching type		light 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

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	2 m, 3 x 0.34 mm^2, PVC cable
Material	
Housing	PC-PBT
Optical face	PMMA
Mass	approx. 100 g

Compliance with standards and directives

Standard conformity	
Product standard	EN 60947-5-2:2007 ; IEC 60947-5-2:2007
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 For overcurrent protection, install a fuse with a rated current of max. 3 A 250 V AC/DC
CCC approval	Certified by China Compulsory Certification (CCC)
Approvals	CE

Accessories

CPZ18B03
Mounting Bracket with swivel nut

BF 18
Mounting flange, 18 mm

BF 18-F
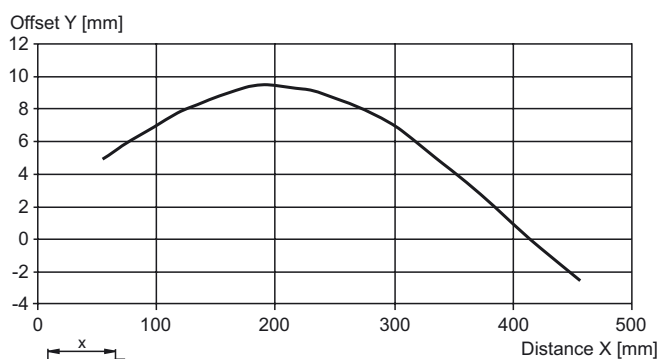Mounting flange with dead stop, 18 mm

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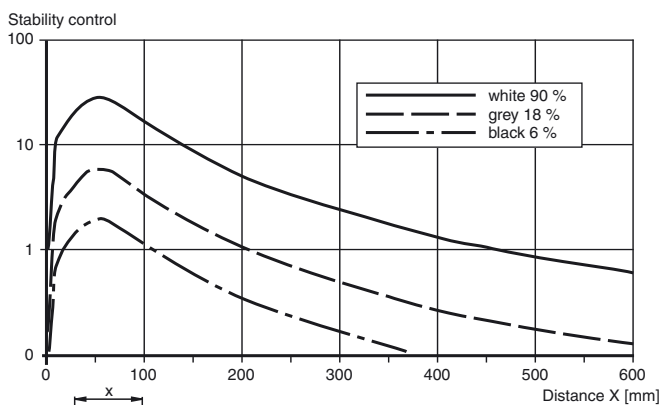Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

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

Curves/Diagrams

Characteristic response curve

Offset Y [mm]

Distance X [mm]

Relative received light strength

Stability control

white 90 %
grey 18 %
black 6 %

Distance X [mm]

Detection ranges

Object colour

black
grey
white

Detection range [mm]

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