



Model Number

GD18/GV18-S/115/120-KIT

Thru-beam sensor
with fixed cable

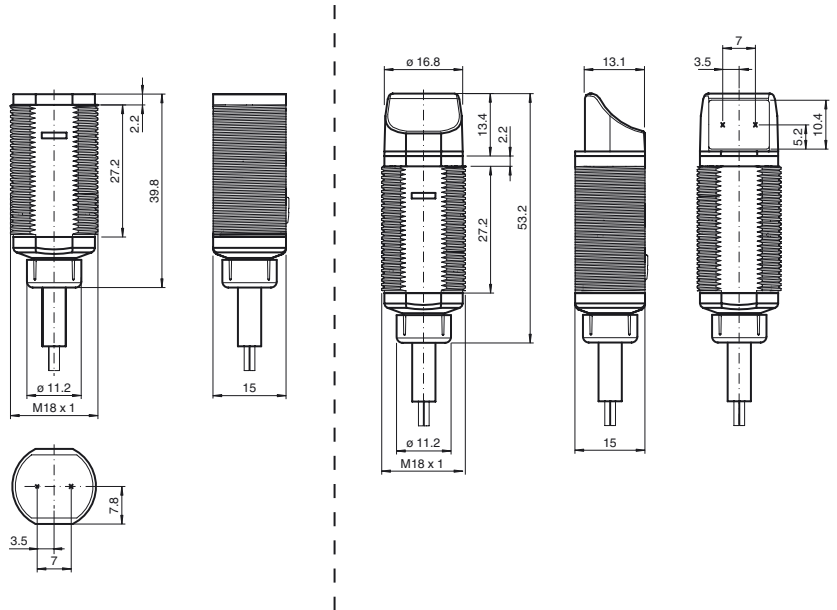
Features

- Thru-beam sensor:
- Short design in M18 plastic housing
- Optical face frontal, optical face lateral
- 4 LEDs indicator for 360° visibility
- Splitter Box:
- Fixing component with captive screw
- Gold plated and solid contact pins
- Precise position contacting using mechanical pivoting system
- Housing made of fiberglass reinforced plastic

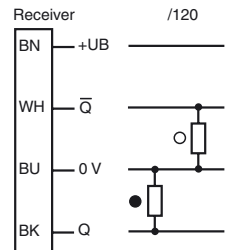
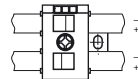
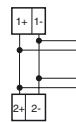
Product information

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

Release date: 2012-05-31 13:46 Date of issue: 2012-05-31 2:19937_eng.xml

Technical data**System components**

Emitter	GD18/115
Receiver	GV18-S/115/120

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	frontal
Ambient light limit	30000 Lux

Functional safety related parameters

MTTF _d	630 a
Mission Time (T _M)	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 ₀	< 20 mA

Output

Switching type	light/dark on	
Signal output	2 PNP, complementary, short-circuit protected, open collectors	
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	-25 ... 70 °C (-13 ... 158 °F)
Pollution Degree	3

Mechanical specifications

Protection degree	Thru-beam sensor: IP67 Splitter Box: IP20
Connection	Thru-beam sensor: 2 m fixed cable Splitter Box: Connection terminals, max. conductor cross-section flexible/rigid: 0.2 ... 1.5 mm ² (AWG24 ... AWG16) with connector sleeves for flexible ends: 0.25 mm ... 0.75 mm ² stripped insulation length 10 mm

Material

Housing	Thru-beam sensor: PC Splitter Box: PA 66-GF25 Ultramid
Optical face	PMMA
Mass	< 100 g
Tightening torque, fastening screws	1.65 Nm

General information

Scope of delivery	GD18/115 GV18-S/115/120 VAZ-T1-FK-CLAMP1
-------------------	--

Compliance with standards and directives

Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates

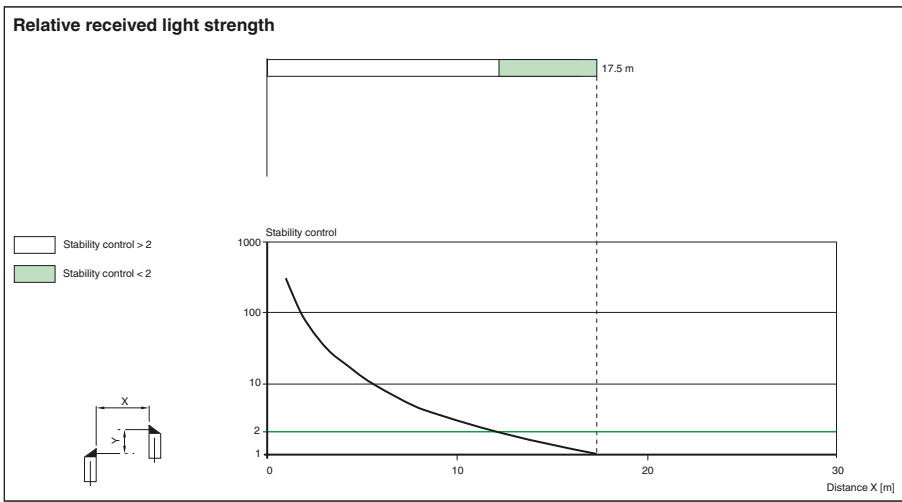
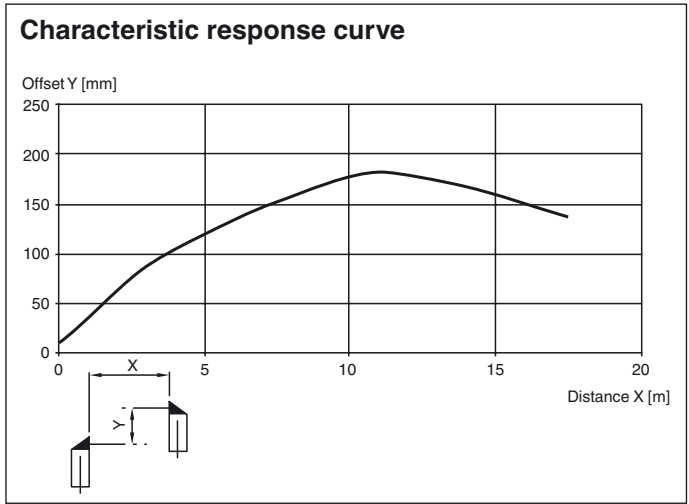
Protection class	II, rated insulation voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval	cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

Accessories**VAZ-T1-FK-CLAMP1**

Splitter box flat cable to flat cable and 2 double terminals

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

Curves/Diagrams



Release date: 2012-05-31 13:46 Date of issue: 2012-05-31 2:19937_eng.xml