

Diffuse mode sensor

GLV18-8-600-IR/115/120



- 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
- Version with front optical face
- DC voltage version

Diffuse mode sensor, M18 threaded housing design, plastic housing, front optical face, 600 mm sensing range, red light, light/dark on, DC version, 2 PNP outputs, fixed cable



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.

Application

Packaging industry:

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

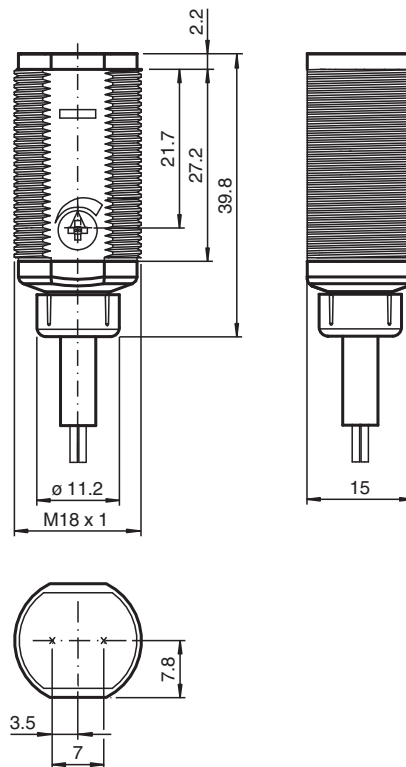
Material handling:

- 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

Dimensions



Technical Data

General specifications

Detection range	50 ... 600 mm adjustable
Detection range max.	0 ... 600 mm
Reference target	100 mm x 100 mm Kodak white
Light source	LED
Light type	modulated infrared light , 850 nm
Diameter of the light spot	approx. 60 mm at 600 mm
Opening angle	approx. 6 °
Optical face	frontal
Ambient light limit	30000 Lux
Hysteresis	H < 15 %

Functional safety related parameters

MTTF _d	920 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

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 operating reserve
Control elements	sensitivity adjustment

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
No-load supply current	I ₀	< 20 mA

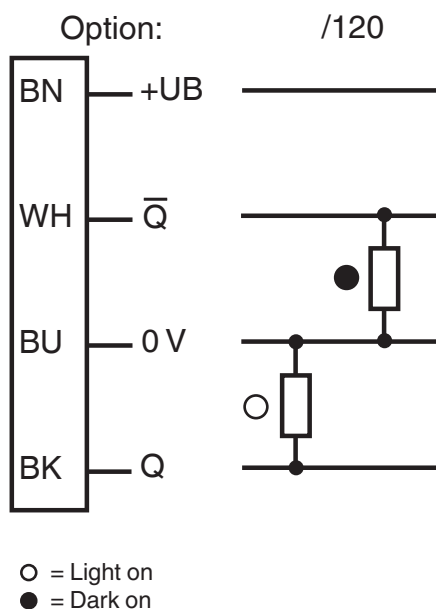
Output

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Technical Data

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
Conformity		
Product standard		EN 60947-5-2
Approvals and certificates		
Protection class		II, Rated insulation voltage ≤ 50 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval		cULus Listed, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 60 °C (-13 ... 140 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Degree of protection		IP67
Connection		2 m fixed cable
Material		
Housing		PC
Optical face		PMMA
Cable		PVC
Mass		approx. 75 g

Connection Assignment

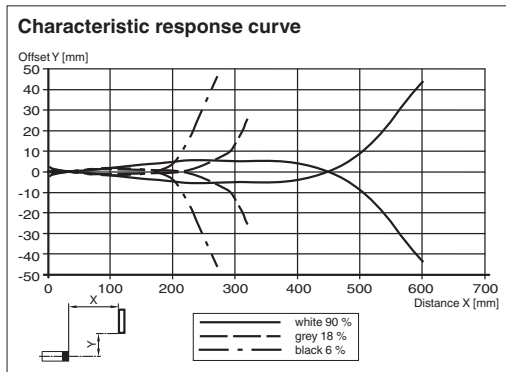


Assembly

Diagram showing the front and side views of the sensor. The front view shows the operating display (1), signal display (2), sensitivity adjustment (3), emitter (4), and receiver (5). The side view shows the sensor's profile.

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

Characteristic Curve



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