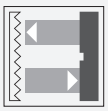
Retroreflective sensor

GLV18-6/73/120



- 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

Retroreflective sensor, M18 threaded housing design, plastic housing, front optical face, 6.5 m detection range, red light, light/dark on, DC version, 2 PNP outputs, M12 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.

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

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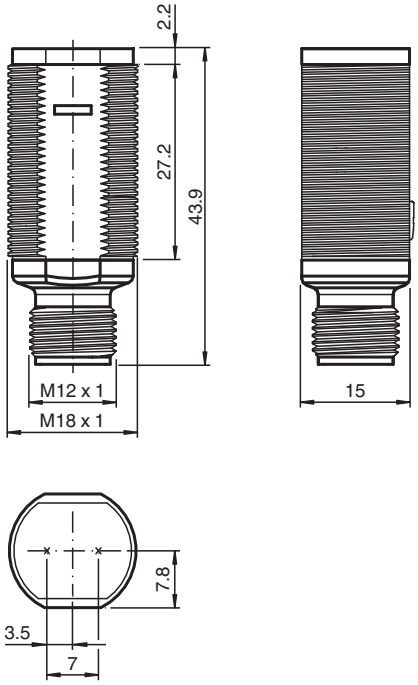
Dimensions



Technical Data

General specifications		
Effective detection range		0 ... 6.5 m
Reflector distance		0.05 ... 6.5 m
Threshold detection range		8 m
Reference target		reflector C110-2
Light source		LED
Light type		modulated visible red light , 640 nm
Polarization filter		no
Diameter of the light spot		approx. 300 mm at 8 m
Opening angle		approx. 2 °
Optical face		frontal
Ambient light limit		30000 Lux
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 up when receiving the light beam ; flashes when falling short of the operating reserve; 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		

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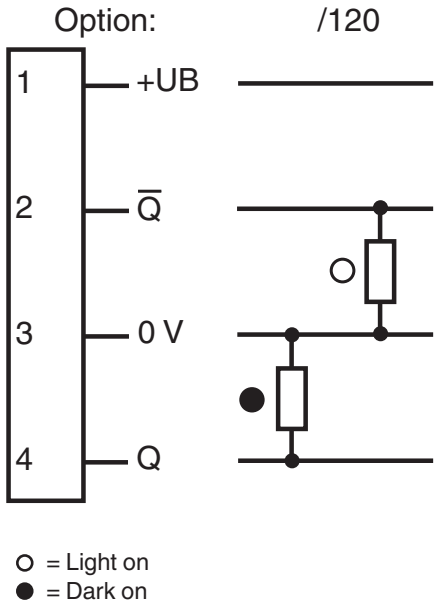
Technical Data

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		4-pin, M12 x 1 connector
Material		
Housing		PC
Optical face		PMMA
Connector		plastic
Mass		approx. 10 g

Connection



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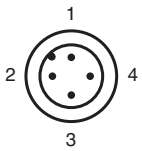
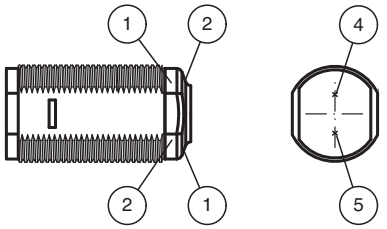
Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Assembly

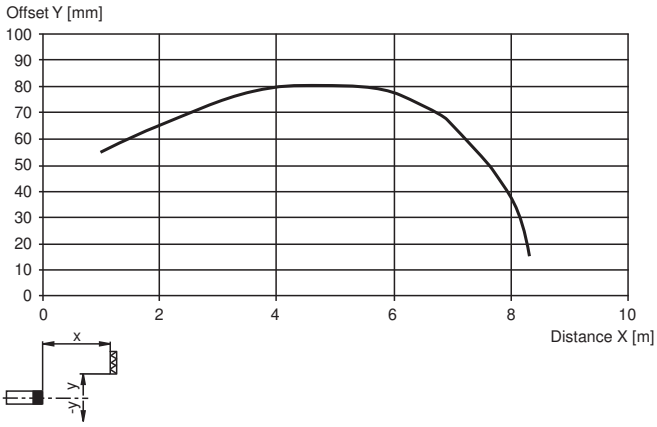


1	Operating display	green
2	Signal display	yellow
4	Emitter	
5	Receiver	

Characteristic Curve

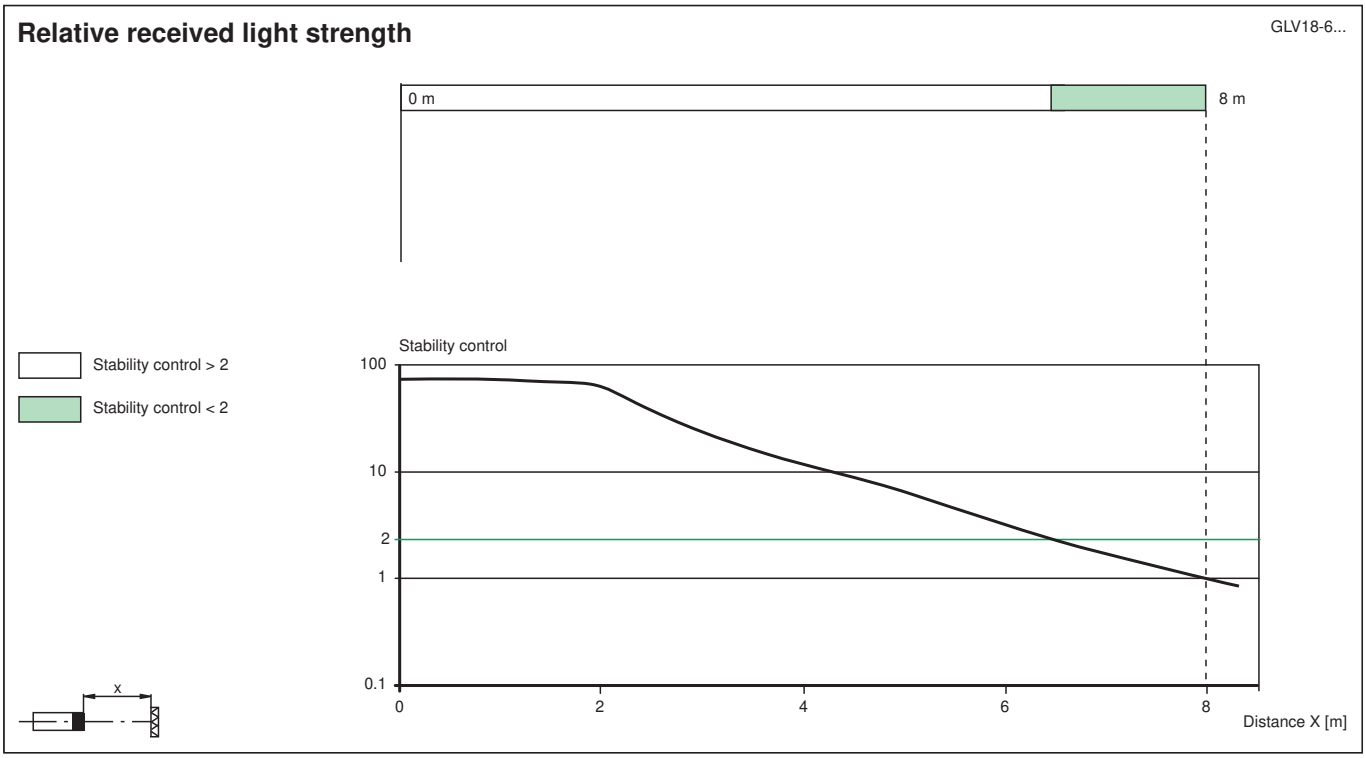
Characteristic response curve

GLV18-6...



Characteristic Curve

Relative received light strength



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
	**V1-G-2M-PUR**	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	**V1-W-2M-PUR**	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey

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