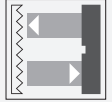


Retroreflective sensor OBS4000-18GM60-E4-V1

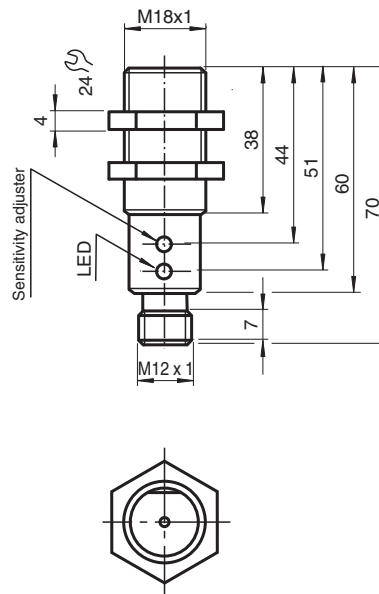


- Dual color indication LED
- Glare protected with polarization filter
- Light-on/dark-on, programmable
- Sensitivity adjuster for optimal adaptation to the application
- Degree of protection IP67
- Strong metallic housing in cylindrical shape M18 x 1

Retroreflective sensor with polarization filter



Dimensions



Technical Data

General specifications

Effective detection range	0 ... 4 m
Threshold detection range	4.5 m
Reference target	H50 reflector
Light source	LED
Light type	modulated visible red light , 660 nm
Polarization filter	yes
Diameter of the light spot	approx. 200 mm at detection range 4 m
Opening angle	3 °
Optical face	frontal
Ambient light limit	10000 Lux

Indicators/operating means

Operation indicator	LED green
Function indicator	Dual color-LED, yellow/green yellow: switch state green: power on flashing: stability control
Control elements	sensitivity adjustment

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC , class 2
Ripple		10 %
No-load supply current	I ₀	≤ 25 mA
Time delay before availability	t _v	≤ 25 ms

Output

Switching type	light/dark on electrically switchable	
Signal output		1 NPN output, short-circuit protected, reverse polarity protected, open collector
Switching voltage	max. 30 V DC	
Switching current		max. 100 mA
Voltage drop	U _d	≤ 2.5 V
Switching frequency	f	500 Hz
Response time	1 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
UL approval	cULus Listed, Type 1 enclosure
CCC approval	CCC approval / marking not required for products rated ≤36 V

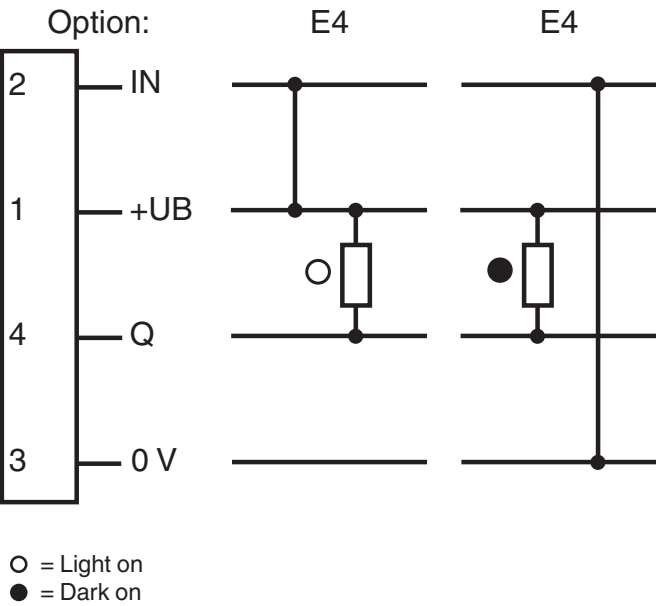
Ambient conditions

Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

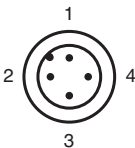
Mechanical specifications

Degree of protection	IP67
Connection	4-pin, M12 x 1 connector
Material	
Housing	brass, nickel-plated
Optical face	PMMA
Mass	45 g

Connection Assignment



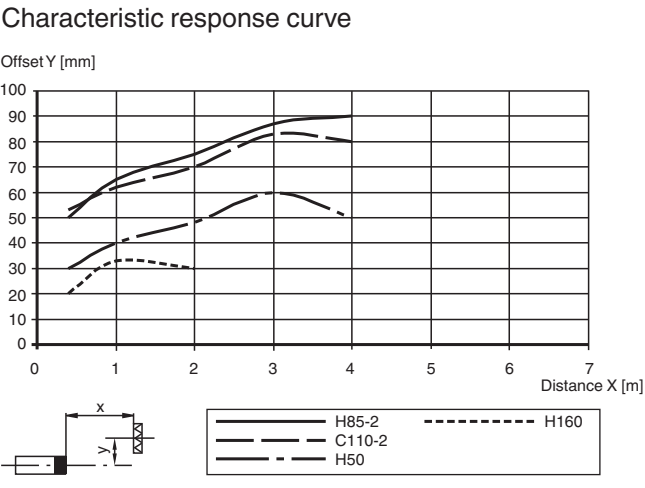
Connection Assignment



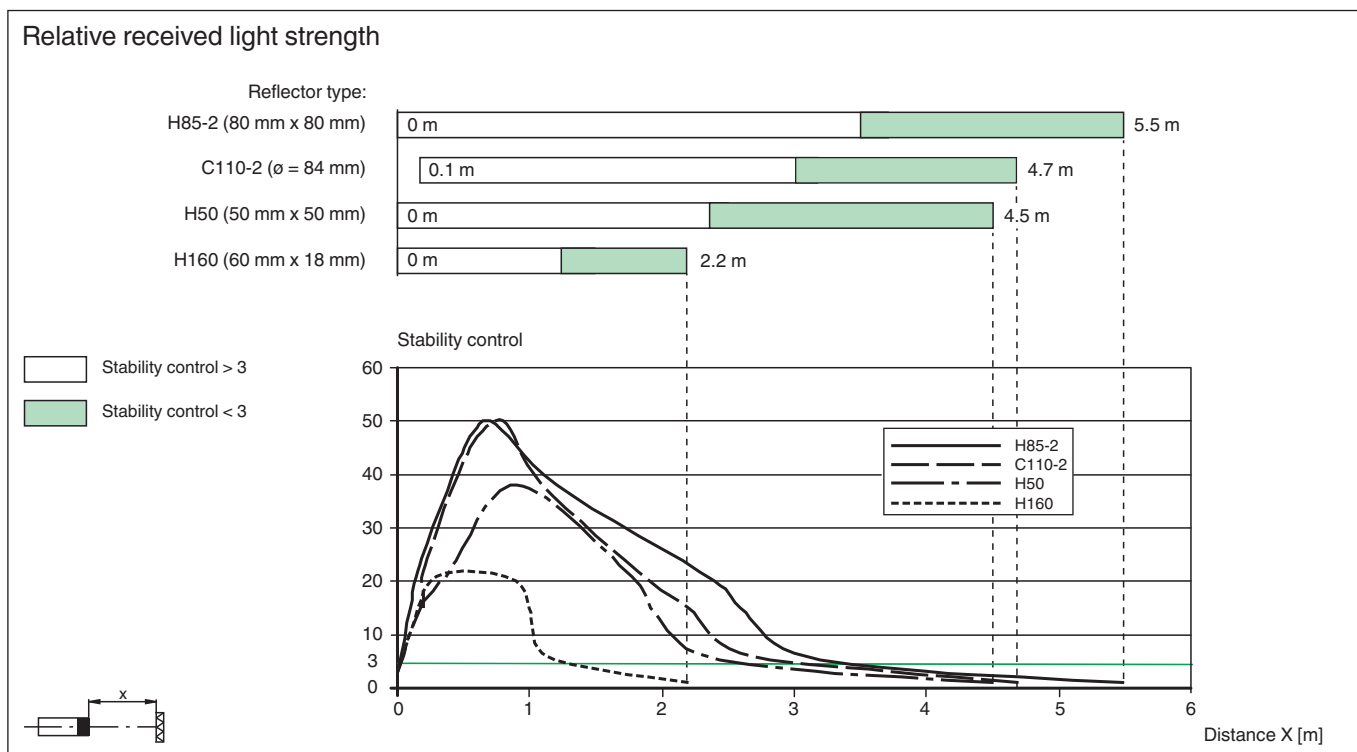
Wire colors in accordance with EN 60947-5-2

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

Characteristic Curve



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
	REF-H85-2	Reflector, rectangular 84.5 mm x 84.5 mm, mounting holes
	REF-H50	Reflector, rectangular 51 mm x 61 mm, mounting holes, fixing strap
	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