Retroreflective sensor with polarisation filter

VL18-54-MS/40a/118/128

with M12, 4-pin metal connector



- Clearly aranged control panel with very light LED display
- Flashing power on LED in case of short-circuit
- Optical face lateral, embeddable to the housing
- Multiple device installation possible, no mutual interference
- Not sensitive to ambient light, even with switched energy saving lamps
- Protection class II

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General specifications		
Effective detection range		0 ... 3.5 m
Threshold detection range		4 m
Light source		LED, Red light 660 nm
Approvals		CE, cULus
Light type		red, modulated light
Diameter of the light spot		160 mm at a distance of 3500 mm
Angle of divergence		3 °
Optical face		lateral
Ambient light limit		30000 Lux
Hysteresis	H	< 15 %
Indicators/operating means		
Operating display		LED green, flashes in case of short-circuit
Function display		LED yellow, light with free light beam , flashes when falling short of the stability control , OFF when light beam is interrupted
Operating elements		Sensitivity adjuster, light/dark switch
Electrical specifications		
Operating voltage		10 ... 30 V DC , class 2
Protection class		II , rated voltage ≤ 300 V AC with degree of pollution 1-2 according to IEC 60664-1
Ripple		10 %
No-load supply current	I_0	< 35 mA
Output		
Switching type		light/dark ON, switchable
Signal output		Push-pull output short-circuit proof overvoltage protected
Switching voltage		30 V DC
Switching current		max. 200 mA
Switching frequency	f	500 Hz
Response time		1 ms
Standard conformity		
Standards		EN 60947-5-2
Ambient conditions		
Ambient temperature		-25 ... 70 °C (248 ... 343 K)
Storage temperature		-30 ... 70 °C (243 ... 343 K)
Mechanical specifications		
Protection degree		IP67
Connection		M12 connector, 4-pin
Material		
Housing		brass, nickel-plated
Optical face		plastic
Mass		60 g

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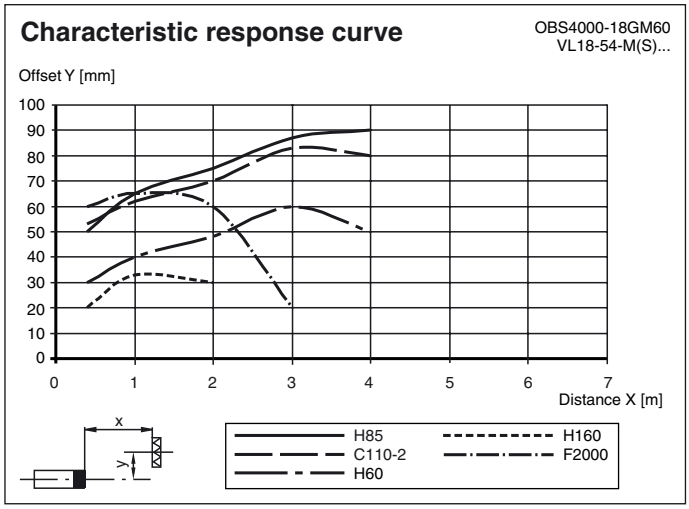

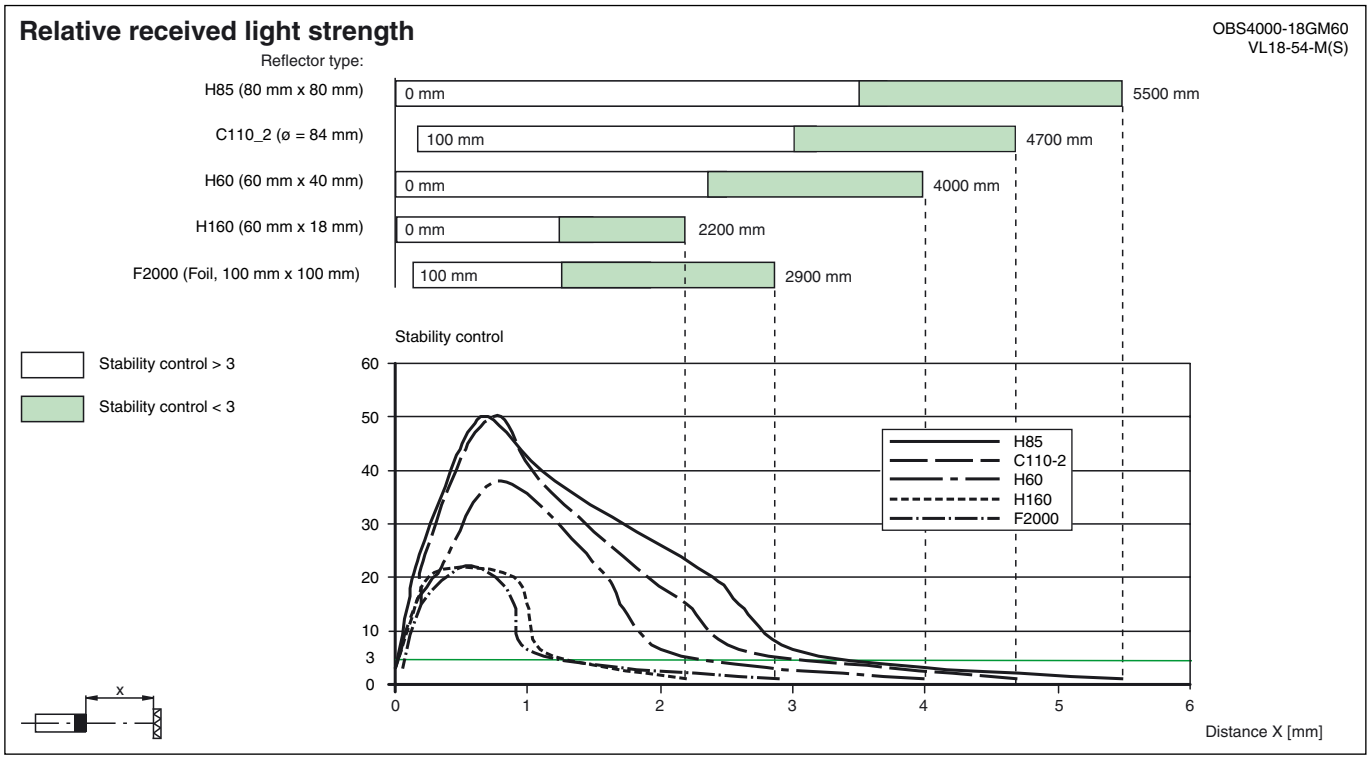

Additional information



Visible laser light.

Laser class 2.

Do not look into the laser beam!

Intended use

A retro-reflexive photo-electric sensor contains a transmitter and a receiver together in a housing. The light from the sender is beamed back to the transmitter by a reflector. If the beam of light is interrupted by an object, the switching function is triggered.

Mounting instructions

Using the M18x1 threaded screw hole and two nuts included with delivery (SW 24 mm / max. torque 1.5 Nm), units can be mounted with a simple drill hole (Ø 18 mm) or with a support bracket (not included with delivery).

Please make certain the operating panel or LED displays are in the right position and visible.

Adjustment

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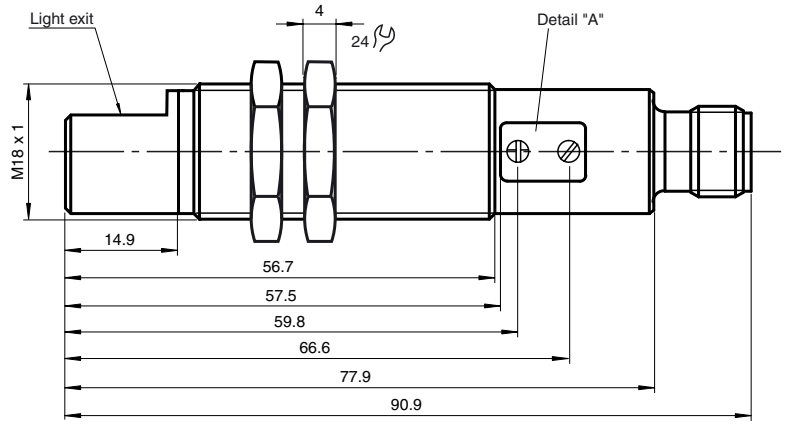
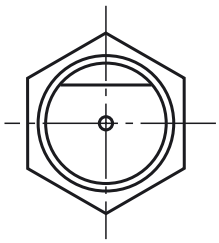
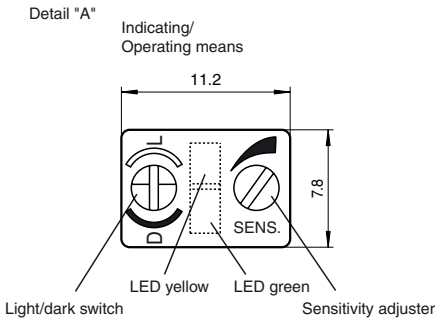
Dimensions



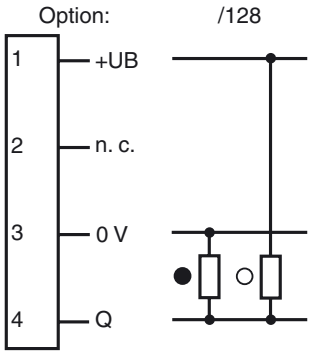




Unit connector



Electrical connection



❍ = light on, ● = dark on

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